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## Aim of the Society

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



*Farmers winnowing paddy at Srirangapur village in Andhra Pradesh, one of the villages under the programme on Vulnerability Assessment & Enhancing Adaptive Capacity to Climate Change in Semi-Arid Regions of India*

There is a great need for capacity building of all stakeholders in sustainable water resource development and management. Institutional level capacity building and repositioning to face emerging challenges with necessary contextual changes are important aspects for addressing rural livelihood issues.

## Executive Director's Note

The world order changed during the last 12 months. Countries across the world have been severely impacted by the global economic slowdown, fuelled by global liquidity. This has adversely impacted millions of livelihoods. We in India could ward off this crisis because of our predominant rural agricultural livelihood base. However abnormal rise in food prices, and conflicts and terrorism have added new dimension to this complex situation. However there is immense scope for voluntary sector to work with the Government for making this crisis situation into an opportunity for rural communities.

According to a UNDP report, 10% of the world's richest adults own around 85% of the world's household wealth, while 50% who occupy the bottom own only 1%. This great disparity in household income levels is the eye of a storm which manifests itself in terms of social unrest and extremist acts of protest violence. The symptom is a clear indication that the marginalized are likely to sink into further distress unless state and civil societies join in partnership to save the situation. Would plan of action as envisaged in the adaptation to climate change make any difference?

AFPRO has been addressing these issues but the future is imposing further challenges. Faced with increasing complexities of the challenges, AFPRO along with others have to collectively adopt all possible innovations and deploy varietal skills for effective solutions. Additionally key lessons from the past interventions need to be integrated into policies as long term strategies. Indeed the task will not be easy and require cumulative efforts of all stakeholders through participatory partnerships and maintaining principles of sustainability.

Water resource management is one of the most important keys to sustainable development. From experiences, AFPRO finds that there is a great need for capacity building of all stakeholders in sustainable water resource development and management.

Institutional level capacity building and repositioning to face emerging challenges with necessary contextual changes are important aspects for addressing these issues. AFPRO has been involved in national level policy advocacy on these lines with Ministries of Water Resources, Rural Development, Agriculture, Environment & Forests, and Panchayati Raj, and also with line departments of the State governments. In addition, AFPRO's involvement in projects supported by NABARD, World Vision and other international and multilateral partners provide a wealth of learning from grassroots participatory approaches on water-resource management.

Abnormal spurt in agricultural prices of staple food items such as wheat, rice, pulses and vegetables, have severe impact on food security of the poor. AFPRO's interventions in sustainable agriculture and water resource management are supporting communities through enhanced agricultural incomes as well as improved food availability and nutritional intake. Programmes of special note are those being undertaken with support of World Vision, M/s Lutheran World Relief and United Way, among others.

Backward Regions Grant Fund of Ministry of Panchayati Raj, Govt of India has introduced AFPRO to greater levels of coordination with the Governmental agencies especially at grassroots level planning. AFPRO's long standing experience in participatory approaches and capacity building has enabled to support *Panchayats* at all levels, block and district officials to undertake the process of planning according to the guidelines laid down for participatory, bottom-up approaches. Systems being practiced at the District level planning need to be reviewed and altered according to changing scenario. For all these, the government has to be convinced to develop linkages with socio-technical NGOs and academic institutions for various capacity enhancement training modules. This needs to be pursued to make this process people participatory.

New dimensions of partnerships for rural development in terms of Corporate Social Responsibility are emerging because of all round pressure being experienced to alleviate poverty, environmental degradation and climate change. There is a surge in demand from private and public sector enterprises for bringing in technologies for land and water resource development and rainwater harvesting. During the year of reporting AFPRO has worked with ITC, Bharat Forge and Ultra Tech and others for environment friendly Natural Resource Management.

Addressing the issue of adaptation to climate change, the SDC supported programme titled "Vulnerability Assessment and Enhancement of Adaptive Capacity to Climate Change in Semi-Arid Regions of India" is in its final stage sharing learnings, outcomes and finally policy advocacy. The programme has been a very successful effort and provides a realistic model for promoting community level capacity strengthening and preparedness for climate change. An interesting observation is that rural youth are very quick in understanding, absorbing and application of technological interventions. They have been identified as most responsive grassroot resource who provide big impetus to the efforts.

Thematic areas - water, soil, agriculture, animal husbandry and rural energy under adaptation to climate change experienced with endowments of valuable learnings were shared during the National Policy Dialogue held in November 2008, New Delhi. The National dialogue noted that the outcome indicators amply demonstrate that grassroot level communities and PRI are quick in absorbing various adaptation to climate change technologies and participatory processes. NAPCC (National Action Plan for Climate Change) is a mission mode where outcome results could be used for replications. Capacity building and knowledge base expansion of all stakeholders is essential for anchoring adaptation.

Before concluding, I would like to mention that AFPRO is grateful to the Governing Body Members for their valuable guidance and encouragement. AFPRO thanks partner organizations, both resource support and the project implementation partners for their cooperation and support for implementation of programmes. Lastly, AFPRO acknowledges the whole-hearted participation and sincere contributions of the rural communities with whom it engages to earn their trust and confidence.

**D K Manavalan**  
Executive Director



# Water and Sanitation

## Water Balance Study in Bangalore Rural District

State	Karnataka
Location	21 revenue villages under 4 <i>Gram Panchayats</i> in Doddaballapur <i>Taluk</i> of Bangalore Rural District, Karnataka
Resource Support	USAID
Collaborating Agency	PA Government Services, Inc

With modernization of agriculture, the use of water for irrigation has become a highly energy intensive operation. Groundwater sources are an easy option for exploitation through the use of high-power motorized pumps. However, with the decline in surface water sources, this practice has reached unsustainable levels. Further exacerbating the situation, many State governments provide free or subsidized electricity for irrigation. Thus, this widespread 'nexus' between water and energy is fast eroding the country's resource base, and needs to be addressed through sound policy.

A programme supported by USAID titled "Water and Energy Nexus Activity – Phase-II" is undertaking a detailed study of varied linkages between these two sectors in India and will eventually make policy recommendations on the basis of the outcome of this study.

AFPRO Field Unit-II partnered with PA Government Services, Inc to conduct a Water Balance Study to support this initiative.

The project sought to estimate

(a) quantities of water available in micro-watersheds considering evaporation losses, runoff and other wastage,

- (b) use of water for irrigation from groundwater resources, and to what extent crops are over/under-irrigated,
- (c) potential for groundwater recharge in each micro-watershed,
- (d) potential for savings in water use in the project area.

AFPRO found that approaches adopted for groundwater utilization in the study area were unsustainable and had resulted in decline in groundwater resources. Key findings provide significant indicators for adopting sound policies in groundwater management. These are:

- Groundwater in the area was overexploited and a significant long term decline was observed in pre and post-monsoon groundwater levels.
- Future groundwater development needs to be linked with water conservation measures; in fact, the area could be totally treated with water conservation measures for increased intensity of recharge.
- Self-regulatory and monitoring measures are a must in the study area for governing groundwater use in order to ensure its sustainability. This requires the adoption of demand-led approaches according to which farmers should be equipped with necessary data, knowledge and skills for managing and monitoring their own demand.

## Verification of PRI applications for Nirmal Gram Puraskar

State	Madhya Pradesh
Location	512 <i>Gram Panchayats</i> in 20 districts
Collaborating Agency	MoRD

AFPRO supported the Ministry of Rural Development, Government of India for verification of applications received by it for the Nirmal Gram Puraskar (NGP) from 20 districts of Madhya Pradesh. AFPRO Field Unit-V, Gwalior, along with specialists drawn from AFPRO Head Office and other Field Units undertook the detailed verification process and recommended 85 *Gram Panchayats* for the award.

AFPRO has drawn crucial learning about the rural sanitation sector from its involvement in NGP exercises over the past two years. These are presented below:

- An effective district level mechanism is vital for the success of the programme. Better coordinated efforts on the part of district officials, block teams and elected representatives are required to facilitate effective community processes.

Lack of proper water facilities at schools result in unhygienic conditions. This eventually leads to the neglect of sanitary blocks.

- Although the approach is successful in creating the demand for better sanitation in communities, there is a need to introduce credit facilities at local level to meet demand from poor families.
- Lack of proper water facilities at schools result in unhygienic conditions. This eventually leads to the neglect of sanitary blocks.
- Disposal of garbage and animal waste, and maintaining cleanliness around water sources, especially near hand pumps/wells, should be given equal importance when deciding on 'Nirmal' villages.
- Sanitation interventions need to look beyond the management of human excreta. Unless animal excreta management, solid and liquid waste management are taken care of, environmental sanitation conditions cannot be improved.
- Construction of drains has been observed to be the preferred option for liquid waste disposal, chosen over other options such as kitchen gardens or soak pits. However, the treatment of wastewater collected through this network of drains is not being given importance. There

is scope for introducing kitchen gardens or plantations at these terminal points for safe disposal of waste water.

## Wise Water Management

State	Madhya Pradesh
Location	District Guna
Collaborating Agency	UNICEF

AFPRO Field Unit-V, Gwalior, partnered with the Wise Water Management & Total Sanitation Campaign (WWM & TSC) programme implemented in district Guna, Madhya Pradesh.

Wise Water Management (WWM), which is a concept developed by UNICEF, is defined as the equitable use, management and allocation of water for domestic purposes. The innovative



*The play pump or Jhula pump when rotated by children, lifts water from the rainwater harvesting structure (seen in the background) to the rooftop.*

system includes the harvesting of rainwater, lifting of water using a unique approach that involved a children's roundabout play pump, and recycling of greywater, alongwith other location specific plans if required, such as dilution of fluoride contaminated water. Dilution technique was not included under this project as the fluoride contamination was found within the permissible limits.

AFPRO implemented the WWM model in Girls Ashram, Aron. At another location, Girls Ashram, Ruthiyai, AFPRO has renovated the existing WWM structures that had become defunct. The engagement with hostel children and wardens to introduce this concept was very satisfying.

The WWM implemented in Aron included a rooftop rainwater harvesting system linked with a play pump (jhula pump), and recycling of greywater for re-use as toilet flush. Water from the roof collects in the newly constructed 50000 litre surface tank. This is connected to the roundabout play pump, which when rotated by children during play, lifts water to a rooftop tank for distribution. The collection of greywater is even more ingenious. Greywater from the bathroom drainage is collected and filtered through a specially constructed filtration unit that comprises a system of horizontal roughing filtration followed by inclined fine filtration. This filtered water is lifted to the roof using a 0.5hp pump to be supplied for toilet flush.

AFPRO also facilitated TSC in two Panchayats—Khutiabad and Sagoria comprising three villages Khutiabad, Jamra and Sagoria. Rigorous awareness building, distribution of IEC material and institutional building exercises were carried out. School children were made aware and trained to communicate message at their households.

## Water and Democracy in South Asia

State	Maharashtra
Location	Village Pahapal, Pandarkawada block, Yavatmal Dist
Collaborating Agency	EED, Germany

As part of its South Asian initiative, EED, Germany conducted a South Asia Partner Consultation on water issues in 2006 at Hyderabad, India. Subsequently, a two-year programme on “Water and Democracy in South Asia” was launched as a collective effort for policy advocacy on water resource management.

The programme is divided into four components,

- i) the development of a data and media base for future campaigns,
- ii) action on participatory people’s monitoring of water and groundwater governance,
- iii) capacity building on water monitoring and water policies and governance,
- iv) networking, campaigning, lobbying and advocacy in South Asia and in Germany and the European Union.

AFPRO and three other organizations, Lok Jagruti Kendra, CROPS and Action Fraterna have taken responsibility for the participatory water monitoring component. The project objectives were three-fold, (a) to aid proper understanding of



*The indicator set up in this observation well enables the villagers to periodically monitor changes in water levels for improved decisions regarding water use efficiency*

local water resource availability by developing a simplified water monitoring tool, (b) to capacitate community with knowledge, data and skills related to groundwater management, (c) to involve farmers in collection and utilization of groundwater data by demystifying hydrological science.

The primary approach adopted by the project is Demand Side Water Management, which focuses on improving water use efficiency. This includes educating farmers about the consequential impact of lowering of groundwater levels and adopting changes in cropping practices.

Processes involved community mobilization and data collection, setting up of observation wells and installation of rain gauge and water level indicators. Farmers were trained on data collection by periodical monitoring of water levels as well as on water quality analysis. Water budgeting exercises were taken up to help farmers plan out ways to save water, regulate and manage own water demand as also to improve water-use efficiency in agricultural practices.

## Rural Water Supply & Sanitation (Aaple Pani) Project

State	Maharashtra
Location	District Ahmednagar
Collaborating Agency	Govt. of Maharashtra and KfW, Germany

The State of Maharashtra has been in the forefront of adopting reform initiatives for the water supply and sanitation sector. "Rural Water Supply & Sanitation (Aaple Pani)" project is a part of these state level efforts and is being undertaken by the Maharashtra government with the help of KfW, Germany and is being implemented in 3 districts viz. Pune, Ahmednagar, and Aurangabad.



AFPRO is partnering project stakeholders as a capacity building organization for Ahmednagar district. It is training and capacitating stakeholders at different levels on functional and operational aspects related to the project.

Aaple Pani's objectives are also similar to those of the *Jalswarajya* project. The project seeks to establish sector reform through a demand led approach for providing rural households increased access to improved and sustainable water and sanitation services. This is being ensured through an institutionalized decentralization of service delivery at the rural level to local governments and communities.

State level responsibility for implementation and management of the project lies with the Reform Support & Project Management Unit (RSPMU), Water Supply & Sanitation Department. The District Project Management Unit (DPMU), a wing of *Zilla Parishad* is the nodal agency at the district level.

Processes have been specially programmed into activities for social mobilization, social action and technical activities. The Village Water Supply and Sanitation Committee (VWSC) coordinates village level activity supporting the *Gram Panchayat* and the *Gram Sabha*. Support Organizations and Technical Service Providers have been engaged to support each village to facilitate social and technical processes respectively.

Village communities are being empowered and capacitated to plan, design, implement, manage, operate and maintain their own water and sanitation facilities on a sustainable basis. The participatory planning exercise conducted at the community level is central for effectiveness of this approach. There is a special emphasis being laid on ensuring equity in participation through the inclusion of women and weaker sections of society in decision-making processes.

## Water Quality Monitoring & Surveillance Programme

State	Chhattisgarh
Location	4 Relief Camps Viz., Dornapal, Errabore, Ejam, Konta and 30 villages from Sukma and Chhindgarh blocks in Dantewada District, Chhattisgarh.
Collaborating Agency	UNICEF, Raipur

This project was initiated based on the model for water quality monitoring and surveillance followed last year under the M-DAWS project in Rajnandgaon District by UNICEF, Raipur, PHED Rajnandgaon and AFPRO Task Force, Raipur.

Sanitary surveillance and pre-monsoon tests were conducted in the 4 relief camps (as mentioned in the table above) last year in the first phase of the project. The remaining activities were undertaken during the year of reporting. Apart from UNICEF Raipur and AFPRO, the Tribal Welfare Department and Vanwasi Chetna Ashram (VCA) Dantewada were involved in the project.

Programme objectives include analysis of drinking water quality available in the project area and filling the capacity gap by linking testing and sanitary surveillance scores to action for improving water quality.

Sanitary surveillance refers to an on-sight inspection and assessment of all sanitary conditions, applications and practices in the water supply system with special reference to those causing health hazards for the users. It does not obviate

actual water quality analysis but is an important component of analysis in an overall quality control programme.

The process followed during the project is outlined below.

1. Sanitary surveillance of 522 drinking water sources based on WHO guidelines along with site-based indexing for identification and record.
2. Analysis of the surveillance scores for identification of high risk scores followed by sharing risk scores with the community. 190 sources were found to be having high risk scores.
3. Collection of samples followed by field and lab tests for these high risk sources. All the samples were collected as per WHO norms and lab testing was done within six hours of collection of water samples. Tests were conducted based on physical, chemical, and microbial parameters.



*The WAGTECH POTA test kit used for water sample collection, testing and analysis*

Sanitary surveillance refers to an on-sight inspection and assessment of all sanitary conditions, applications and practices in the water supply system with special reference to those causing health hazards for the users.

4. Seasonal (post monsoon) water quality tests were conducted on 48 high risk sources that had already been tested in 2007-08.
5. Assessment of Hand Pump sources based on state of functionality and sanitary condition was done. A response plan was prepared for those hand pumps needing immediate repair and maintenance and coming under high risk scores, and shared with the community. For demonstration purposes, some hand pumps were repaired and improved upon by involving the local community.
6. Submission of separate lists based on the above assessment to the district authorities including District Collector, Dantewada and PHED Sukma. PHED Sukma undertook chlorination of all hand pumps based on the lists provided.
7. 6 random samples were collected from Dornapal camp and tested for confirming impact of chlorination undertaken by PHED, Sukma. These tests have revealed that the level of microbial contamination had indeed reduced after chlorination.

PHED Sukma and district authorities are convinced about the simple and systematic participatory approach adopted by AFPRO for assessment of water quality and capacity building of rural youth. Based on the experiences, UNICEF and PHED are planning to disseminate information regarding the learnings and expand this programme to other regions as well.



*A view of the water harvested at Borpani, ADP - Ratlam, World Vision, after the construction of an Anicut*



# Watershed Management

## Integrated Natural Resource Management Project

State	Maharashtra
Location	Tribal villages of Chikaldara Block, Amravati District
Resource Support	EFICOR

EFICOR and AFPRO Field Unit-I are undertaking livelihood development activities in tribal villages of Chikaldara Block, Amravati District, Maharashtra. EFICOR is being funded by Tear Fund, New Zealand from 2007 to 2012 for supporting tribal communities.

Project interventions have been planned on an integrated approach for land and water resource development. AFPRO Field Unit-I, Ahmednagar had earlier conducted a reconnaissance visit to recommend possible approaches and interventions based on the potential of the area. Subsequently AFPRO provided socio-technical and capacity building support for soil and water conservation components of the programme. Project objectives included capacity building of the staff EFICOR and local village institutions, conducting participatory exercises for planning interventions, preparation of detailed report for implementation, and extending timely guidance and back-up support for effective execution of the project.

Participatory Net Planning (PNP) was carried out for 7 villages under the project and covering a total area of 270 ha. PNP involves site-specific, farmer-friendly choice of treatment options and detailed estimation. A three day workshop on watershed management was organized for the villagers. AFPRO has periodically provided technical hand holding support and inputs for field level implementation to the community as well as EFICOR staff.

Apart from the capacity enhancement, 87.27 ha. were treated with in situ soil and moisture conservation measures. These measures include continuous contour trenches, water absorption trenches, farm bunding, stone bunding, gully and earthen nala plugging, and digging pits for plantation of 3000 saplings. 75 small and marginal farmers in 3 villages will derive benefits from these interventions.

## NABARD SUPPORTED WATERSHED PROGRAMMES

AFPRO Field Unit-I, Ahmednagar, has partnered with NABARD in three watershed programmes in Maharashtra, as given below:

- A. Indo-German Watershed Development Programme (IGWDP) (Phase-III)
- B. NABARD Supported Holistic Watershed Development Programme (Phase-II)
- C. Impact Evaluation Study of NABARD Supported IGWDP in Maharashtra

NABARD projects are generally administered in two phases – the Capacity Building Phase (CBP) and Full Implementation Phase. CBP is meant for village communities and implementing agencies to develop necessary skills and competencies required, through actual on-the-job involvement in small scale watershed interventions. They are thus exposed to processes and approaches involved in watershed projects including mobilization, planning, implementation and supervision. In addition, CBP also requires a “*shramdan*” (contributory labour from the community) for qualifying for the main phase This prepares and qualifies them for the Full Implementation Phase (FIP), where the project is implemented in its entirety.

AFPRO is the Program Implementing Agency in the first two programmes. Separate field offices are being set up with multidisciplinary teams to coordinate and support the project villages. In the third project, AFPRO supported NABARD for evaluation of watershed development programmes undertaken by it in earlier phases. Details about each of the interventions is provided below.

### A. Indo-German Watershed Development Programme (Phase-III)

State	Maharashtra
Location	3 tribal villages of Beed District, of Maharashtra
Collaborator	NABARD

92.32 ha. These included construction of continuous contour trenches, water absorption trenches, farm bunding, gully plugging and tree plantation. Qualifying 'Shramdan' has also been provided by the community for a total amount of Rs. 78515.90/-.

### B. NABARD supported Holistic Watershed Development Programme (Phase-II)

State	Maharashtra
Location	Two watershed clusters in Karanja taluka, Washim district.
Collaborator	NABARD

AFPRO is the Program Implementing Agency in both the programmes. Separate field offices will be set up with a multidisciplinary team to coordinate and support the project villages.

The project area covering around 1250 ha. area in Beed District, of Maharashtra, comprises 3 tribal villages Surnarwadi, Repewadi, and Jaibhaiwadi.

Programme objectives comprise sustainable development of micro-watersheds in a participatory approach involving the village communities. This will be achieved by addressing the agricultural and allied production systems for sustainable, long term improvement through natural resource management principles. As a result livelihood opportunities in the area will be strengthened, enabling the community to withstand drought situations.

Project activities undertaken so far come under the CBP and will be completed at the end of July 2009. Community level activities have included mobilization through various IEC activities and exposure visits, conduct of a socio-economic survey for setting project baselines, and the formation of village level institutions such as Village Watershed Committee (VWC) and Samyukta Mahila Samiti (SMS) for effective project management.

Area treatment of a portion of the project area as on-the-job exposure has been completed on 40 ha. out of the proposed

'Sarvangin Panlot Vikash Karyakram', the Marathi name of the NABARD supported Holistic Watershed Development Programme (NHWDP). The programme is being implemented in Vidarbha region that has been plagued for over a decade by a great number of farmer suicides on account of severe crop failures and losses in agricultural production.

All the 6 affected districts in the region viz. Akola, Amaravati, Buldhana, Wardha, Wasim and Yavatmal will be developed using the watershed management approach. A cluster based approach is being adopted under the programme to ensure efficiency in delivery and optimization of impact. Similarly convergence with existing governmental schemes is also being pursued to maximize benefit and address critical gaps.

AFPRO Field Unit-I is working on development of two watershed clusters, Poha and Manabha, of 2500 ha. each in Karanja Taluka, Washim district. Activities of AFPRO during the reporting year addressed the pre-preparatory requirements prior to the start of CBP. These have included the identification of watershed clusters, social mobilization and preparation of the CBP proposal.

## C. Impact Evaluation Study of NABARD Supported IGWDP in Maharashtra

State	Maharashtra
Location	Districts Shenit and Ladgaon in the Western Ghats, Gunjalwadi in Central Maharashtra, Dongaon, Ambewadi, Kachchighati and Aasarkheda in Marathwada and Nandra, Mandwa & Rampur Hiwra in Vidarbha.
Collaborator	NABARD

In a very important project providing immense learning for the watershed development sector and substantiating its efforts, AFPRO Field Unit-I Ahmednagar undertook an evaluation study of selected projects of Phase-I and-II of the NABARD supported Indo-German Watershed Development Programme (IGWDP), in Maharashtra.

The evaluation sought to draw out the effectiveness and sustainability of the ten selected projects. These were undertaken in Districts Shenit and Ladgaon in the Western Ghats, Gunjalwadi in Central Maharashtra, Dongaon, Ambewadi, Kachchighati and Aasarkheda in Marathwada and Nandra, Mandwa & Rampur Hiwra in Vidarbha.

Objectives of the study were:

- Assess the project implementation and management process.
- Assess the process of change due to programme intervention.
- Study the impact of the programme, viz. Project related, socio-economic and institutional aspects.
- Evaluation of indirect impacts due to project intervention.

The methodology adopted for the study was a combination of various participatory tools and techniques for gathering the information and arriving at a better understanding of the project interventions, its stakeholders and the benefits drawn by the community. The data/information required for the study was collected through primary and secondary sources of information.

Besides this the study has also utilized geo-referencing and satellite data to assess the impact of project interventions based on the analysis of pre and post-satellite images of respective watershed area. This use of satellite imageries and GIS tool has

helped to identify the improvement in degraded lands, which have now been brought under vegetative cover.

For assessment of the impact, pre and post-watershed situations were analyzed based on the secondary data and finding of the field level exercises as well as interpretation of the satellite imageries.

The study findings clearly reflect that IGWDP has visible impacts in the domain of regeneration of natural resources and stabilization of soil leading to enhancement of land based livelihoods of the inhabitants of the project area. The main



*Glimpses from soil and water conservation activities undertaken at different locations*

impacts of IGWDP have been in the areas of natural resources regeneration and conservation, biomass production, agricultural productivity, employment generation and overall income levels of the community. The impact evaluation study assessed these changes in qualitative and quantitative terms. Physical impacts studied included reduced runoff & soil loss, increased water availability, land utilization pattern, and vegetative cover. Socio-economic impacts studied included cropping pattern, productivity, livestock holding, income sources, employment generation, and changes in credit activities. Institutional impacts were studied by looking at community institutions, management of funds through proper accounting practices, and linkages established for networking with others.

The findings have brought out the fact that IGWDP is an important example of effective regeneration of natural resources and stabilisation of land-based livelihoods of the community towards the larger goal of drought proofing. IGWDP demonstrated effective approach of community mobilization, formation of village institutions and their capacity building, planning land and water resource development measures, thereby improving land productivity and increased incomes of watershed dwellers. Strategies adopted for ensuring institutional sustainability need to be further developed for ensuring effectiveness and continuity of community level initiative. However, IGWDP is among the most effective programmes of watershed development in Maharashtra.

### Soil and Moisture Conservation for Bharat Forge Limited

State	Maharashtra
Location	Khed Taluka in Pune District
Collaborator	Bharat Forge Limited

Bharat Forge Limited (BFL), Pune is developing a Special Economic Zone covering a total area of about 4500 ha. at Khed Taluka in Pune District, Maharashtra. BFL has planned to undertake Soil and Moisture Conservation works eventually aiming at specific socio-environmental benefits including community building, augmentation of water resources, control of soil erosion and development of greenery and forests.

AFPRO Field Unit-I Ahmednagar, is providing support to these objectives of BFL as a consultant. The project has been divided into two phases based on the area to be covered. Phase I areas measure to 1705 ha. while Phase-II areas are 2795 ha.

Activities carried out during the reporting period include detailed appraisal study of SEZ area under both phases in order to outline potential interventions for Soil and Moisture Conservation and Rain Water Harvesting (SMC and RWH). However, as the process of land acquisition at Phase-II was not accomplished, potential interventions could be identified only for Phase-I areas and a technical and financial proposal for SWC and RWH was submitted to BFL. The approach and recommendations proposed by AFPRO have been accepted and the plan for Phase-I areas has been finalized. Detailed topographical surveys, designing and cost estimation of the structures proposed in Phase-I SEZ area are now being undertaken.

### Sunhera Kal Integrated Watershed Development Programme, Jhalawar

State	Rajasthan
Location	District Jhalawar
Collaborator	ITC & NABARD

AFPRO Field Unit-V, Gwalior, is implementing Sunhera Kal Integrated Watershed Development Programme in district Jhalawar, Rajasthan, a programme that is jointly funded by ITC and NABARD.

Two micro-watersheds namely Nayagaon-I and Nayagaon-II encompassing 10 villages covering 2200 hectares in Jhalra Patan Tehsil have been selected for interventions under the programme. In line with AFPRO's commitment to create sustainable livelihoods, Sunhera Kal initiative facilitates village based participation in building, reviving, and maintaining micro-water harvesting structures and management of water resources to reverse land degradation, ensure soil and water conservation, provide critical irrigation and raise agricultural productivity.

These goals have been streamlined under the following project objectives:

1. protection & increase surface and ground water availability through run-off control, soil moisture conservation and retention measures within watershed area,
2. improve agriculture production through sustainable farming practices and stabilize crop yield by adopting suitable cropping pattern and crop management system with community participation,
3. building capacity of community for strengthening village level institutions,

4. restoring ecological balance in the project area, and
5. to curtail/check migration of local community through improvement in overall livelihood opportunities.

Based on NABARD's programme approach, the project is being implemented in two phases, first the Capacity Building Phase (CBP), and second the Full Implementation Phase (FIP). The CBP includes activities for community level mobilization, development of basic skills for proper management of the project, on-the-job exposure to planning and implementation of physical interventions, development of village institutions and livelihood promotion.

The project was initiated in January 2009 and the first assignment under the present project was to complete the construction of 6 water harvesting structures, comprising ponds and masonry stop dams. AFPRO is engaged and fully

focused on successfully implementing interventions planned under CBP. These will lay the foundation for commencement of FIP.

Based on the successful implementation of the Sunhera Kal programme till date, ITC has requested AFPRO to take up few more watersheds in adjoining area covering approximately 2800 hectares. In this context, a joint visit was made by ITC-AFPRO team to the new watershed areas. ITC has taken up the matter with NABARD for final approval to start pre-preparatory activities.

### Partnership with World Vision India

Partnership between AFPRO and World Vision India is developing meaningfully and progressively. It is the common vision of poverty alleviation and promotion of sustainable

Sunhera Kal initiative facilitates village based participation in building, reviving, and maintaining micro-water harvesting structures and management of water resources to reverse land degradation, ensure soil and water conservation, provide critical irrigation and raise agricultural productivity.



*Community members involved in shramdaan towards excavation work for development of a pond at Rajpura under the Sunhera Kal programme*



*A large quantity of water harvested at a percolation tank in Village Choubara, Lalitpura District under ADP Aprajita, World Vision*

The common vision of poverty alleviation and promotion of sustainable livelihoods through community participation brings World Vision India and AFPRO to close cooperation.

livelihoods through community participation that brings both the entities to close cooperation.

World Vision India engages itself extensively on multi-sectoral interventions as an operational organization committed to community based sustainable transformational development. It has a special focus on social upliftment issues, such as those related to women and children. World Vision India addresses its goals through long-term engagements in specific geographical units known as Area Development Programmes (ADPs).

On the other hand, AFPRO is socio-technical support provider in the areas of land and water resource management and sustainable rural livelihoods with a pro-poor and social equity focus. Its socio-technical inputs, based on programme experiences gained across different geo-hydro-thermo regions across India, provide a thrust to food security and rural livelihoods through appropriate natural resource management.

Thus there are great complementarities of competencies between World Vision India and AFPRO this partnership serves the greater objectives of both organizations. As a result both organizations are working together to leverage holistic development interventions among many poor rural communities, facilitating an array of socio-economic and environmental benefits.

Six of AFPRO's field units and task forces were involved in providing socio-technical support to 17 Area Development Programmes of World Vision India. These included services for technical feasibility studies and surveys, preparation of activity plans for soil & water conservation and watershed management, livelihood assessment surveys and implementation of plans and development of infrastructures as well. The table on the adjoining page presents a summary of AFPRO's socio-technical inputs for land and water resource development interventions with World Vision India.

**Collaborative Interventions of World Vision - AFPRO**

Sr.	Field Unit	ADP	District	State	No. of Villages	Service Rendered
1)	AFU I	Daryapur	Amravati	Maharashtra	5	Technical proposal for Agricultural Development
2)	AFU I	Chikaldara	Amravati	Maharashtra	1	Socio-technical proposal for Integrated Watershed Management Programme
3)	AFU II	Manampathy	Kancheepuram	Tamil Nadu	36	Conducted a livelihood assessment study
4)	AFU III	Baroda	Baroda	Gujarat	11	Feasibility Study for improvement of irrigation project & survey for water harvesting structures
5)	AFU III	Banswara	Banswara	Rajasthan	2	Feasibility Study for installation of Lift Irrigation System
6)	AFU IV	Singhbhum	Singhbhum	Jharkhand	14	Feasibility Study for installation of Lift Irrigation System
7)	AFU IV	Godda	Godda	Jharkhand	16	Feasibility Study for development of irrigation wells, ponds/tanks and check dams
8)	AFU IV	Jamui	Jamui	Bihar	7	Feasibility Study for development of Ponds/tanks and monitoring/supervision in operational are of the project
9)	AFU IV	Duars	Jalpaiguri	West Bengal	8	Planning for sustainable development of irrigation potential and soil & water conservation activities to improve crop production
10.a.	AFU V	ADP Ratlam	Ratlam	Madhya Pradesh	38	Completed construction of check weirs, gabions, farm ponds, culverts, earthen and masonry dams, renovation of dug wells, and the formation of user groups and capacity building exercises
					33	Prepared proposal for Soil & Water conservation, water harvesting structures, irrigation & drinking water facilities, infrastructure development, agriculture and allied activities
10.b.	AFU V	ADP Ratlam: Ratlam Watershed Project supported by New Zealand Govt.	Ratlam	Madhya Pradesh	12	Ongoing work for construction of earthen field bunds, culverts and masonry stop dam.
					12	Prepared proposal for farm bunding, earthen and masonry stop dams, and culvert-cum-check weir
11)	AFU V	Lalitpur	Aparajita	Uttar Pradesh	11	Completed construction of Soil & Water Conservation Structures, toilets and reclamation of land
12)	AFU V	Jabalpur	Jabalpur	Madhya Pradesh	4	Completed construction of dugout ponds
13)	AFU V	Dewas	Dewas	Madhya Pradesh	9	Completed construction of culvert and drainage channel, check weirs, cement concrete road, ponds and toilets
14)	AFU V	Baran	Baran	Rajasthan	11	Work in progress in all villages for construction of anicut, renovation of ponds/canal, murrum roads and digging of new pond
15)	ATF R	Mahasamund	Mahasamund	Chhattisgarh	7	Feasibility Study & rendering technical support for land and water resource development
16)	ATF R	Rajnandgaon	Rajnandgaon	Chhattisgarh	3	Feasibility Study for water harvesting structures for irrigation & preparation of Detailed Project Proposal for water harvesting
17)	ATF R	Durg	Durg	Chhattisgarh	7	Feasibility Study for soil and water conservation activities



*Villagers from Chatelav, Pall District, Rajasthan, pose before the fodder storage they have developed as an adaptive response to the uncertainties they are experiencing on account of climate change*



# Food Security and Livelihoods

## Vulnerability Assessment and Enhancing Adaptive Capacity to Climate Change in Semi-Arid Regions of India

State	Rajasthan and Andhra Pradesh
Location	Rajasthan District Udaipur Village Amda in Jhadol <i>Tehsil</i> Village Kundai in Vallabh Nagar <i>Tehsil</i>  Andhra Pradesh Mahabubnagar District Village Srirangapur in Kondurg <i>Mandal</i> Village Kothur in Midjil <i>Mandal</i>
Resource Support	SDC Global Environment Fund
International Consortium	INFRAS IC, Switzerland
National Consortium	AFPRO (Field Units Udaipur and Hyderabad) MSSRF, Chennai MANAGE, Gol
Implementing Agencies	Rajasthan Vikas Sansthan, Village Amda Sahyog Sansthan, Village Kundai  Andhra Pradesh Eco-Club, Mahabubnagar

Vulnerability Assessment and Enhancing Adaptive Capacity to Climate Change in Semi-Arid Regions of India (V&A), which began in 2005, reached its concluding phase. Funded under the SDC Global Environment Fund, it was based on the outcomes and experiences gained from earlier projects related to mitigation and adaptation to climate change in India and other countries funded by SDC's Global Environment Fund.

V&A is a bold attempt at presenting a scientific argument for grassroots level empowerment on Climate Change, especially among resource poor communities in remote villages. Interestingly, V & A aimed at climate-resilient development as distinguished from development interventions that adapt livelihood systems to climate impacts (classical approach). \*

Looking back, the programme has left a model worthy to replicate. For assessing vulnerabilities and promoting adaptive capacities among the village communities, the programme adopted a learning approach envisaged on three objectives, as given below:

- (a) Build community level capacities on best practices and technologies in the agricultural, water, energy and livestock sectors.
- (b) Optimize service delivery systems at the selected villages.
- (c) Promote policy dialogue and advocacy at different levels.

The year 2008-09 was set apart under the project for communicating lessons learnt from the project at various levels. During the year, efforts were put in to sum up and streamline programme experiences. Programme findings were shared at workshops at various levels – from the neighborhood of project villages, up to a district level conference for farmers, the state level and finally culminated in a National Policy Dialogue on November 10-11, 2008 at New Delhi.

Various documentation exercises were also taken up and case studies formulated. As part of this, three video documentaries encapsulating the message of the programme were produced. MSSRF published a film titled 'When the Rains Came and the Cranes Flew Away' which was presented at the National Policy Dialogue. AFPRO produced two documentaries which presented local programme experiences in regional languages. "Dharti ki Orni" (Hindi) and "Kalasi Sadhinchagalam" (Telugu) are good resources for extension activities.

\* Community Level Adaptation to Climate Change: A Road Map for Policy Development



*Improved chullahs (thermal efficient stoves), such as this one, go a long way in providing a smoke-free kitchen in poor rural households*

In order to differentiate the scientific temperament of this programme from classical approaches, scientific hypotheses were developed for each of the thematic areas.

Programme experiences are summed up below for drawing up learnings and policy recommendations. These have been based on a specially adopted monitoring framework that was used throughout the programme.

As referred earlier, in order to differentiate the scientific temperament of this programme from classical approaches, scientific hypotheses were developed for each of the thematic areas. \*The experiences of the programme are presented as a broad overview of results obtained against each hypothesis.

**Hypothesis 1 (Energy):** *“Biomass based energy solutions are alternative coping strategy for households vulnerable to climate change impacts in semi-arid areas”.*

Under this hypothesis, activities focussed on promotion of improved *chullahs*, bio-energy crops and briquette making as alternative fuel and livelihood option.

Improved *chullahs* (thermal efficient stoves) were adopted at the community level and are being well-maintained. These are ensuring a smokeless kitchen reducing health hazards for women. Besides, the cumulative impact of efficiency reduces consumption of firewood thus contributing to environmental conservation. Local artisans have been trained for constructing

these stoves and these are being adopted by many others in the village.

**Hypothesis 2 (Water):** *“Community’s access to weather monitoring and prediction data combined with community managed water resource systems can lead to greater water use efficiencies and improve adaptive capacities”.*

Promotion of water resource management as an adaptive strategy included addressing field-based needs as well as new technologies. The activities taken up included lining of irrigation channels and tank renovations, reduction of irrigation intensity, groundwater monitoring, strengthening water harvesting structures, revival and restoration of traditional/community based water conservation measures and formation and revitalisation of water user groups.

Lining of channels for delivery of water to agricultural fields, renovation of existing water resources such as tanks, and other systems that promote efficient management and use of water provide immediate benefits. These can be seen in terms of quicker water delivery with lower losses due to soil erosion & runoff, improved storage capacities and compounding benefits including groundwater recharge. Farmers groups,

\* Community Level Adaptation to Climate Change: A Road Map for Policy Development

after being made aware of the perils of improper groundwater management, have developed norms for efficient use of water.

The concept of the water bank promotes the innovative use of simple technological approaches for circumventing arduous conditions which poor and marginal farmers live in. In the project, in order to overcome disadvantages of topographical location, wherein the only water source (a well) was lower than agricultural plots to be irrigated, water storage facilities were created at higher elevation and connected to the well through underground pipelines powered by suitable submersible pump. Underground pipelines further connected these tanks to agricultural plots based on gravity-flow technology. This is supported by a local institutional setup for operation and maintenance.

A new innovative technology, viz. agro-meteorological laboratories, has been set up in all the four villages equipped

to record maximum and minimum temperatures, dry bulb and wet bulb readings, wind velocities in the morning and afternoon, relative humidity on a daily basis, and rainfall. These are used for generating weather-based crop advisories for farmers. Weather managers have been trained to record daily data and share them with farmers. Smart Farmers Clubs were established and involved in data generation and interpretation. Many advisories have been prepared and communicated at critical crop stages.

**Hypothesis 3 (Land Use):** *“Updated village level land use maps and a basket of option sets for different rainfall scenarios (drought, normal, excessive) can provide information for appropriate agronomic practices that can stabilize yields from rain-fed farming thereby providing greater food and/or economic security”.*



*Lining of 'harren' (indigenous irrigation systems) at village Amda in Rajasthan have strengthened and improved the irrigation potential at the village as well as reduced wastage of water during delivery.*



*Paddy cultivated using the System of Rice Intensification (SRI) method at village Kothur, Andhra Pradesh*

Control of erosion losses, use of crop advisories for decision making, testing of option sets – System of Rice Intensification, mixed cropping, varietal trials, construction of GIS based digitized maps and promotion of kitchen gardens for nutritional security were the adaptive strategies undertaken in this hypothesis.

System of Rice Intensification (SRI), an improved agricultural approach provides higher levels of water-use efficiency in paddy cultivation as well as higher productivity. This was promoted and tested among 52 farmers who adopted SRI on 60 acres against 150 rice cultivators. In comparison with traditionally practiced submergence rice, the farmers attained a reduction of 30% in water usage with a simultaneous productivity increase of 20%.

Regular updates on weather patterns, as well as access to information on variety of crop options and agronomic practices adoptable under different climate scenario ensure that the farmers are in a state of readiness to respond to climatic variations. The basket of option sets provides a free hand in adapting to different rainfall scenario, be they of normal, drought, or excessive rainfall by applying the appropriate option.

**Hypothesis 4 (Livestock):** *Livestock rearing is an important coping strategy in the face of enhanced climate variability. Buffer stocks of fodder (including tree fodder) and good breeds of livestock can be important risk reduction strategies and can enhance adaptive capacities.*

The focus in this hypothesis was livestock management focusing on animal productivity and stocks, pastureland development and development of fodder banks.

Introduction of improved breeds of livestock will strengthen the ability of pastoral people to adapt to climate change. Breeds that are of hard species able to survive in extreme weather conditions, both cold and hot, need to be identified and promoted. The Sirohi breed of goats has been found to be suitable and promoted in project areas in Rajasthan.



*Breeding bucks from the Sirohi breed were introduced in villages Amda and Jhadol in Rajasthan, under the breed improvement component*

Pastureland development using approaches such as social fencing and protection, along with soil & water conservation measures, leads to a substantial improvement in fodder availability. In addition, the concept of fodder bank is another important component for survival of livestock and encourages storage for use in times of shortage. These elements consolidate and optimize fodder potential, which is highly important for survival of livestock and hence, pastoral people. The pastoral communities themselves manage the system and costs and benefits are shared in proportion to area and division of task.

#### **Recommendations from Regional Workshops**

As stated earlier, workshops were conducted during the reporting year at various levels for sharing V & A. Many recommendations were received for the National Policy Dialogue planned under the programme. These basically addressed the climate change concerns of farmers and participants. Important aspects reflected on in these workshops are summarized in the following paragraphs

Participants emphasized the importance of addressing issues of soil fertility and water conservation. There was also the demand for greater access to data and information as well as knowledge of improved agricultural practices. Importantly they stressed the need for a widened network of local knowledge centres that would integrate area-specific information that would enable farmers make timely and appropriate decisions.

Further, the participants were convinced of the need for collective use of water resources and community-based water management systems, as an appropriate mechanism to manage water resources in the scenario of climate change. In addition, they also reiterated the wisdom of conjunctive water management and regulation of groundwater exploitation.

Apart from conservation of water resources, regulation of groundwater exploitation also has a direct impact in terms

Action for Food Production (AFPRO) and other partners, on 10th – 11th November 2008 at Teen Murti Bhawan, New Delhi. Held for sharing outcomes of the programme “Vulnerability Assessment and Enhancing Adaptive Capacity to Climate Change in Semi-Arid Regions of India”, it was attended by many eminent personalities, scientists and environmentalists. Union Ministers for Science and Technology and Earth Sciences, Mr. Kapil Sibal, and for Panchayati Raj, Mr. Mani Shankar Aiyar, participated in the event.

Seminal discussions were held in the event, emphasizing the problem of climate change and its ill effects, bringing out the need for awareness building and education on climate change and adaptability for agricultural growth at grassroots level. The importance of scientific approaches for addressing climate change, and the significance of developing tested technologies

The importance of scientific approaches for addressing climate change, and the significance of developing tested technologies and approaches was raised. Discussions also suggested promoting greater participation from all sectors that would be impacted by climate change.

of savings in energy consumption. Participants expressed eagerness for new and affordable alternative systems of energy, especially for the agricultural sector.

On the subject of livestock, the need for prioritization of skill development of pastoral peoples, enhanced extension services for livestock management and adoption of integrated livestock production systems was highlighted by the participants. Equity for the sector through adequate incentives was also emphasized to enable pastoral people and livestock owners care for their livestock with the onset of climate change.

The participants at these workshops also stressed the need to develop marketing linkages and promotion of cooperative systems. The need for making the best of available social capital and improving on social cohesiveness was emphasized, as these would enable organized and coordinated responses to challenges thrown up by climate change.

### **National Policy Dialogue on Adaptation to Climate Change**

“National Policy Dialogue on Adaptation to Climate Change” was organized by the Swiss Agency for Development and Cooperation with the M.S.Swaminathan Research Foundation,

and approaches was raised. Discussions also suggested promoting greater participation from all sectors that would be impacted by climate change. There was also a strong focus on community-level adaptation to climate change through building coping capacities of local populations in technology, information, awareness and training.

### **Key Messages for Policy Consideration**

- Science and the ability to communicate science at various levels is vital in fighting climate change.
- Devising local level climate risk management strategies and building local capacities specifically, in implementing location specific best practices are fundamental to successful adaptation.
- One of the key approaches at the local level is to establish Water-seed-grain-fodder bank continuum and maintain them.
- Community consultation and participation in decision-making is key for successful adaptation measures.
- Strategic investments in small scale infrastructure is key for

effective adaptation; e.g. the establishment of mini agro-meteorology facilities at local level and training of ‘Climate Risk Managers’.

- There should be an assurance of at least one crop /area and cropping systems should be designed for different weather codes (normal, excessive and deficient) for a specific area.
- Village institutions like the *Gram Panchayat* have to be involved in a big way to guide and implement adaptation measures.
- Effective leveraging of Rashtriya Krishi Vikas Yojana (RKVY) for inclusion of climate strategies in district plans and sensitizing National Rural Employment Guarantee Scheme (NREGA) to take up work related

India being party to the United Nations Framework Convention on Climate Change, is required to submit the Second National Communication to UNFCCC furnishing information on the status, impact and lessons from implementation of UNFCCC guidelines. The initial National Communication to UNFCCC was done in 2004. NATCOM-SNC, under the Ministry of Environment and Forests (MoEF), responsible to make this submission, initiated various studies under these purposes.

AFPRO Field Unit-III, Udaipur, is contributing to these processes through a study on “Assessment of Vulnerability of the Livestock Associated Livelihoods Due To Climate Change and Adaptation Strategies in Rajasthan”. WINROCK International India, is the coordinator for the NATCOM under MoEF.

Efforts are being made to assess historical climate variations at these villages, including droughts and other hazardous climatic events as well as identify coping mechanisms which were adopted.

to natural resource management would help in managing climate risks.

- A national estimation of adaptation cost is essential to leverage external funds.
- The various national missions under the National Action Plan on Climate Change could consider the above suggestions and incorporate them.

### Studying Impact of Climate Change on Livestock Related Livelihoods for UNFCCC

State	Rajasthan
Location	6 villages in Pali, Jalor and Sirohi districts in the Arid region and Udaipur, Banswara and Dungarpur districts from Semi Arid region.
Collaborator	WINROCK International India, is the coordinator for the NATCOM under MoEF.

The project seeks to understand, firstly, the likely impacts of and vulnerability of livestock to climate change; secondly, the consequent impact on livestock dependent rural livelihoods; thirdly, consider the ongoing adaptation strategies adopted by communities to cope with the impacts of climate variability and extremes, such as droughts and floods; and finally, formulate adaptation strategies that take into account the institutional, policy, technical and risk-sharing needs.

Sample villages have been specifically selected from both the arid and semi-arid portions of Rajasthan so that data used for analysis be reliably representative of communities living in difficult climatic conditions and hence more likely to be badly affected by climate change. These villages, totally six in number, lie in Pali, Jalor and Sirohi districts in the Arid region and Udaipur, Banswara and Dungarpur districts from the Semi-Arid region.

Efforts are being made to assess historical climate variations at these villages, including droughts and other hazardous climatic events as well as identify coping mechanisms which were adopted. This field-based approach is also being correlated with existing regional and national literature on the subject for developing a cohesive understanding.

## Backward Regions Grant Fund

State	8 States
Location	15 Districts
Resource Support	Ministry of Panchayati Raj, Gol & the Planning Commission, Gol
Implementing Agency	Panchayats of the District, Intermediate and Village Levels

Backward Regions Grant Fund is one of Government of India's biggest reform efforts at ensuring equity in planned development. This strategy chalked out by the Planning Commission and the Ministry of Panchayati Raj, is an alternate route drawn out to reach regions where ordinary development activities have either not taken place at all or where these have not kept up with the planning goals set by the Gol.

BRGF has been initiated for preparing District development plans using the bottom-up approach. *Gram Panchayat* plans assimilated into Intermediate Panchayat plans, finally integrated into the District *Panchayat plan*, combined with Municipality plans, forms the wide framework for developing Comprehensive District Development Plan.

### Districts being Supported by AFPRO as TSI under BRGF

State	Districts
Maharashtra	Ahmednagar Nandurbar Yavatmal Nanded Hingoli Dhule
Karnataka	Davangere
Jharkhand	Gumla Latehar Hazaribag
Andhra Pradesh	Medak
Assam	Dhemaji
Meghalaya	Ri Bhoi
Chhattisgarh	Mahasamund
Orissa	Deogarh



AFPRO is one of the selected Technical Support Institutions providing facilitation and capacity building support to district stakeholders across 15 districts for successful conduct of the programme. The basic programme objective for AFPRO was the facilitation, including capacity building for preparation of *panchayat* plans at all three tiers viz. Gram, Intermediate and District *Panchayats*, and subsequently for integration of these plans into the District Plans for the purposes of the Eleventh Five Year Plan.

Overall BRGF objectives are reflective of the key strategic inroads that Gol wishes to make in development of backward districts. These focus on four aspects – bridge critical developmental gaps, capacity building of local governments for reflecting the community's felt needs, professional support to local bodies for undertaking these processes, and improve delivery of critical functions of local governance.

Taking the Governments' plans, intentions and approaches to rural communities through the auspices of district, block and local governments and elected village representatives sums up the body of the BRGF story. It's heart, however lies in returning with the hopes and aspirations of rural communities regarding development, chalked out in clearly defined plans.

AFPRO has organized its involvement in the BRGF as a Technical Support Institution in a systematic manner. In the light of the objectives of the programme, AFPRO's interventions focused on the following areas:



- Conducted orientation and sensitization workshops/meetings at the district, block and *Gram Panchayat* level for elected representatives and line department officials to inform them about the change process based on the decentralized planning being adopted for preparation of 11th five year plan under BRGF.
- Carried out Visioning Process for developing the District vision, setting up of objectives, work priorities on the long term and to address the key issues at the district level.
- Facilitating development of teams in different blocks who would support the planning exercises at the grassroots level.
- Facilitation in prioritization of needs in the plans and preparing need-based plans at Urban Local Bodies, *Gram Panchayat*, Intermediate *Panchayat* and District *Panchayat* levels.
- Organizing demonstration trainings for these block level teams on micro-planning and various participatory tools to help them develop village level plans. While conducting these exercises the vision of the district was used as the basis for developing the dialogue.
- Facilitation in consolidation of these plans at various levels to prepare District Plan for approval from District Planning Committee.
- Uploading of the plans into computerized forms using Plan Plus, a software developed by the National Information Centre.

A brief summary of the learnings is provided below:

- BRGF has provided a new orientation with respect to

interventions with stakeholders at various levels from the *Gram Sabha* to District levels. After initial level capacity building inputs, the technical support organizations had to further facilitate and demonstrate the planning exercise to carry forward the thrust of BRGF.

- There is a huge capacity building gap across all levels and institutions that are involved in the planning process in adapting to the changed planning process.
- Present development understanding based on top-down approach is a dominant factor. The change in the attitude of the *Panchayati Raj* system requires further orientation and guidance for strengthening the process.
- Vertical and horizontal integration of development has been incorporated to yield co-ordination among various line departments.
- At the *gram panchayat* and community levels, the participants usually had a short term vision and reflected on immediate needs. They had to be capacitated to develop a long term vision and objective.
- Development of common lands in villages which fall in the degraded category was usually not addressed. The development of such lands as well as degraded lands owned by individual farmers was introduced into planning exercises as a key component for increasing agricultural productivity.
- BRGF provided the opportunity to address cross-cutting issues such as poverty, local good governance, sustainability, equity, and gender through planning.

## Promoting Better Management Practices in Cotton

State	Maharashtra
Location	77 villages in Yavatmal District
Implementing Agencies	ART- Mohada Nisarg shree - Sawerkheda Antodaya Vichar Kendra - Ner Parsopant BDBGVS, Yavatmal - Pimpalgaon Vikasganga Sanstha – Ghatanji & Shiroli Gram Jyot Sanstha - Zadgaon Dilasa Sanstha - Pahapal GSMT, Jalka – Shirpur and Botani
Resource Support	IKEA, Sweden

A reduction in global cotton production influenced IKEA, a Swedish business firm to look for alternative methods of cotton cultivation. This initiative was undertaken as an approach to address their concerns regarding environmental degradation. In addition, recession had induced an increase in cost of cotton, and this project focused on low-input and environment-friendly approach to cotton cultivation.

Associating their social responsibility for climate change with business interests, IKEA promoted the idea of “Better Management Practices” in Cotton – cultivation of cotton in an environmentally sustainable manner. AFPRO’s experiences in Integrated Pest Management (IPM) in Cotton cultivation using a low-input approach in Maharashtra during the early years of this decade were found to be a similar and appropriate match for the BMP Concept.

Yavatmal in Vidharbha region in Maharashtra was chosen as the project area.

The maiden project results have left all the project partners enthused and reassured. The 6393 farmers having different sizes of landholdings over 77 villages who adopted the BMP module have big reasons to smile. Together they have harvested 96147.01 quintals from 12883 ha. This is approximately an average yield of 7.46 quintals per hectare and 15 quintals per farmer. Importantly more than 80% of the cultivated land was rainfed. This is indeed a good harvest based on sustainable practices and a worthy model.

By the end of the project period the farmers had sold nearly 87% of their produce. Most was sold to The Cotton Corporation of India Ltd at a price of INR 2850, and remaining at similar prices to cotton traders and federations. The overall cost benefit

The 6393 farmers having different sizes of landholdings over 77 villages who adopted the BMP module have big reasons to smile. Together they have harvested 96147.01 quintals from 12883 ha. This is approximately an average yield of 7.46 quintals per hectare and 15 quintals per farmer.

#### AFPRO's BMP Module

- Appropriate combination of IPM, INM and ICM
- Use of bio-fertilizers, bio-pesticides and organic manuring
- Soil health analysis and Soil and water conservation measures on need-basis
- Scouting for identification of pest and disease attacks, and identifying soil and water conditions
- Creation of farmers's groups
- Capacity building and dissemination of IEC material on technical elements of the BMP module
- Building linkages with institutions such as Krishi Vigyan Kendras, Colleges, Market linkages, etc.

AFPRO developed a BMP module which sought to simplify the techniques of IPM and other sustainable agricultural practices for easy technology transfer to small and marginal farmers.



*One of the project beneficiaries working on his cotton crop*

ratio was 1.49, while the cost-benefit ratio from rainfed areas was 1.35 and that from irrigated areas was 1.64.

IKEA engaged the services of KPMG, a professional auditing firm, for process monitoring and making an assessment of the project. The outcome of this exercise is suggesting a thrust on defining the roles and responsibility of various institutions involved in the project. It has also recommended creating a data base of farmers who are taking up BMP Cotton cultivation. Another important suggestion was to increase the frequency of interaction with farmers, so that they remember the nuances of BMP Cotton and adopt them in practice.

## Ensuring Food Security through Community Participation

State	Maharashtra, Gujarat, Andhra Pradesh
Location	Maharashtra 38 villages of Maregaon and Zari Zamni Blocks, Yavatmal  Gujarat 10 villages from Rapar block of Kutch District  Andhra Pradesh 16 Habitations from 5 Gram Panchayats
Implementing Agency	Maharashtra Gramin Samasya Mukti Trust, Maregaon Dilasa, Zari Zamni  Gujarat Cohesion Foundation Trust  Andhra Pradesh Chaitanya Society for Agriculture and Rural Development (CARD)
Resource Support	United Way, Mumbai

Household quality of life is a function that has many parameters. However, among rural poor all over the world, these parameters remain restricted to the basic wants. Two of the most important of these are food & nutrition, and health & hygiene. The absence of security in these factors, more than men, is experienced by women. While women end up sacrificing their share of food in impoverished homes, an equally great loss is endured by them in the context of adolescent, reproductive and maternal health.



*This beneficiary cannot hide her joy as she stands in the middle of the kitchen garden she developed after being trained under the programme*

“Ensuring Food Security through Community Participation” is a programme seeking to address the malaise of this potent combination among poor households in three different regions in India – Yavatmal district of Maharashtra, Kutch District of Gujarat, and Ranga Reddy District of Andhra Pradesh. United Way, a Mumbai based non-profit, working on leveraging corporate resources towards civil society organizations working for social causes, is partnering with AFPRO on this programme, further divided into separate projects for each region.

AFPRO is working as the main implementing agency for overall coordination and management of the project and for extending technical and capacity building support to various project stakeholders.

Homestead cultivation, sustainable agricultural and land-based livelihoods, with special emphasis on nutritional intake are the broad components of the food security strategy. Influencing community level behavioral changes in sanitation, health and hygiene, and promoting maternal & child health seeking behavior are the approach under the health & hygiene strategy.

### Food & Nutrition Security

Homesteads were promoted in all the three sub-project schemes with slight variations in tactical emphasis after consultation with local communities.

AFPRO Field Unit-I Ahmednagar, the nodal regional team in Maharashtra, focused on homestead cultivation together with Integrated Crop Management as a suitable location specific agricultural option for higher productivity.

AFPRO Field Unit-III Udaipur, serving the project in Gujarat, promoted homesteads with sustainable agricultural practices in combination with soil & water conservation measures.

AFPRO Field Unit-VI Hyderabad, in Andhra Pradesh, supported homesteads with capacity building on sustainable agriculture, fallow land development and land-based livelihoods.

### A Case Study from Gujarat

Mrs. Valu Ben Rajput from Ravechi Nagar in Rapar Block of Kutch District is very enthused by her kitchen garden. The 35 year old cannot restrain herself from making an objective analysis of the benefits she has gained from it. She says, "Vegetables from the market are both expensive and not fresh. I used to spend 800-1000 rupees each month on purchases. The market itself is quite far."

Market prices of locally popular vegetables such as Brinjal (Baingan), Lady's Finger (Bhindi), Bottle Gourd (Lauki), Cucumber (Kheera), Spinach (Palak) and Ridge Gourd (Turai) ranged between Rs. 15 -30 per kilogramme. Three months after she cultivated a kitchen garden, Valu Ben has stopped purchasing vegetables from the market.

She says, "Not only have I stopped buying vegetables from the market, when I have more than I need, I distribute these vegetables among my neighbours or give it to the Anganwadi." She has also trained her neighbours on growing kitchen gardens, and they have successfully adopted the practice. As one of the trainees of a kitchen garden training event organized by AFPRO, Valu Ben has proved to be a worthy student, and has graduated to a teacher as well.

**Zari Zamni & Maregaon Blocks, Yavatmal District, Maharashtra:** Local level institutions were formed in all the villages under the project. These included Village level food security committee comprising of 12 members, new women SHGs and groups of adolescent girls, and also formation of Balsevak group consisting of children in the age group of 9-17. 1293 kitchen gardens were developed in the two clusters. Homestead cultivation has been taken up and is being monitored by local institutions such as Balmanch (Children's group) and Food Security Committees. Cultivation of vegetables and fruit trees have been taken up.

**Rapar Block, Kutch District, Gujarat:** 10 Trainings on kitchen garden maintenance were organized across all project villages with a total of 398 women participants. 633 households in the project area in Gujarat adopted kitchen gardening and 508 of these were able to grow the vegetables.

Homestead cultivation and sustainable agriculture with special emphasis on nutritional intake are the broad components of the food security strategy.



Mrs. Valu Ben Rajput proudly displays two bottle gourds (lauki) grown by her in her kitchen garden

**Shabad Mandal, Ranga Reddy District, Hyderabad:** In Andhra Pradesh, 54 Food Security Groups comprising 1000 women, 11 Adolescent Groups with 181 adolescent girls and 52 Farmers Groups have been formed among 954 households, 300 of which are landless. Around 500 families across the 12 villages could grow homestead gardens at households and at fields. They were distributed 14 varieties of seeds each.

### Health & Hygiene

Health & hygiene were addressed through a host of theme-based trainings and distribution of IEC material. Groups of women and adolescent girls were formed and trained on Health, Personal Hygiene, Water & Sanitation, Environment & Health, Nutrition & Health Care Requirements, all with special focus on Maternal, Adolescent and Child Health.

socio-technical support for improvement of agricultural livelihoods for inhabitant communities through soil and water conservation measures. Ultra Tech, a part of the Aditya Birla Group, is a cement manufacturing company and undertakes mining in the region.

Situated in the north-western part of Raipur district, the project area is spread over 2500 hectares, of which 1500 hectares are covered by 4 villages Hirmi, Saklor, Paraswani, and Kuthroud. The remaining 1032 hectares are occupied by Ultra Tech, out of which 849 hectares have been set apart for mining, 135 hectares for the plant and 48 hectares for the township.

During the year of reporting, AFPRO Task Force, Raipur undertook a reconnaissance study of the project area. The main problems identified include scarcity of water for

One of the major environmental impacts observed is a fall in the water table of the region through depletion of groundwater aquifers. Groundwater recharge is a natural process, and actual restoration of groundwater levels takes a comparatively long time. This has a direct long term impact on agricultural livelihoods in the region as well.

### Improving Rural Livelihoods in Hirmi Cement Works for Ultra Tech Ltd.

State	Chhattisgarh
Location	Raipur District
Resource Support	Ultra Tech Limited

Industrial activities like power generation, mining, and other similar activities that promote economic growth also have direct unavoidable linkages with hydro-geology of the particular region of activity. One of the major environmental impacts observed is a fall in the water table of the region through depletion of groundwater aquifers. Groundwater recharge is possible only at the end of such activities; besides, this is a natural process, and actual restoration of groundwater levels takes a comparatively long time. This has a direct long term impact on agricultural livelihoods in the region as well.

AFPRO Task Force, Raipur is providing Ultra Tech Limited's Hirmi Cement Works in Raipur District, Chhattisgarh with

irrigation, low agricultural production, and lack of care for water harvesting structures. Due to poor irrigation facilities, small and marginal farmers and farm workers also take recourse to employment at Hirmi Cement Works as labour. Besides, apart from the Rabi crop viz. paddy, existing water resources would not allow for a second crop.

Various soil and water conservation measures have been recommended in the village area. These include construction and renovation of structures such as canals, tanks, and check dams, installation of head regulators, and linking of tanks. These will help increase the irrigation potential through increased water poundage resulting from additional capacity and efficiency of water storage and delivery structures.

Activities recommended inside the Plant Area and Township focus on rainwater harvesting for groundwater recharge. Other measures recommended are the plantation of hardy trees like Babool and construction of contour bunds in the area of the mines, and capacity building on improved sustainable agricultural practices such as use of organic manure.

## Partnership for Innovation and Knowledge in Agriculture (PIKA)

State	Uttar Pradesh
Location	5 districts, viz., Barabanki, Sitapur, Unnao, Hardoi and Fatehpur of U.P
Resource Support	World Vision India

Retail market in India is undergoing a process of reorganization and is expected to grow from 5%-30% in the next 10 years. Some estimates reveal that food and groceries will alone comprise 44% and 30% respectively of total retail sale. Unless smallholder farmers are able to negotiate strong deals, they would not be able to retain their livelihoods.

World Vision India in partnership with AFPRO, ACDI/VOCA and Rice-Wheat Consortium, an extended arm of IRRRI, is currently implementing a community based project named "Partnership for Innovation and Knowledge in Agriculture (PIKA)". The project which is funded by USAID is being implemented in five districts of U.P. namely Barabanki, Sitapur, Hardoi, Unnao, and Fatehpur. The project is unique in that it attempts to increase household income of smallholder farmers and farm labourers through the combined expertise of a public-private alliance that comprises social, institutional, technical, financial, and marketing agencies.

PIKA seeks to draw advantageous linkages for such farmers from the basics of productive activity to the last point of sale. The highlights of PIKA are its approach that focuses on empowering female farmers and women in agriculture, knowledge sharing and dissemination, and capacity building of local actors.

Accordingly, the major outcome envisioned includes:

- Improved water resource management and soil conservation.
- Increased farmer access to advanced cropping technologies.
- Strengthened linkages to major regional markets for female and male farmers.
- Development and strengthening of non-farm micro-enterprises linked to selected value chains.
- Increased access to comprehensive financial services and financial risk mitigating measures for female and male smallholder farmers and farm labourers.

The project has been initiated for holistic support to smallholder farmers who are not equipped to meet the requirements for competing in the retail business through effective production and marketing. AFPRO's support for improved water resource management and soil conservation will improve the scope for agricultural production in selected project villages. This will be further strengthened by advanced cropping technologies. Further, by organizing themselves to directly market their produce, smallholder farmers will increase their bargaining power for better prices and gain economies of scale. Not only will this give them a just market-related price for their produce, but also capacitate them to survive in the changing retail business environment.

In order to provide support for proper implementation of various interventions aimed at improving land and water management conditions in the project area, AFPRO Field Unit-V, Gwalior, has setup a satellite office in Lucknow, U.P. A need assessment of farmers was carried out in the beginning of the project. Consequently, appropriate measures suitable to the regional hydrogeology and acceptable to local small farmers were identified. These measures include farm bunding, biological/agronomical measures, and rainwater harvesting structures like check dams, farm ponds, etc. A systematic impact assessment mechanism has also been developed under which assessment of water table, water quality and water use is carried at specified interval.

AFPRO has been making conscious efforts to provide technical support and capacity building for better soil & water conservation and water resource management through training, exposure visits, on-farm demonstration and formation of water users associations. Approximately, 700 small farmers have been trained as para-professionals in land and water management. As regards execution of physical water harvesting and soil conservation measures, renovation of 11 village ponds and farm bunding on 3.3 acres have been completed. Apart from the above, monitoring of water quality aspects and water table levels is done on regular basis in 25 observation wells.

The community has been involved in planning and implementation of water harvesting structures in order to make them assume greater responsibility for post-project maintenance & management. Such an approach enables people to explore their sense of ownership and self-determination by making full use of their self-help potential. Formation of water users' group is an integral part of the process, for it enhances accountability through transparency.

## Sustainable Livelihoods for Tribal Communities in Chhattisgarh

State	Chhattisgarh
Location	4 districts
Resource Support	Lutheran World Relief

About 5 years ago, LWR and AFPRO had embarked on a programme for strengthening tribal livelihoods in the Indian State of Chhattisgarh. Six districts were identified and 15 villages with substantial population zeroed upon. The programme wanted to create and leave behind models of growth that were possible in deeply socio-economically alienated contexts. Looking back, the programme has planted key initiatives for rural livelihoods based on land and water resource management combined with sustainable agricultural options and community organization initiatives.

Buoyed by the fruit of that experience, LWR has promoted a second phase of similar activities in 7 villages across 4 districts of Chhattisgarh. Care is being taken to include key learnings from the previous initiative as the basis for enhanced delivery. These are briefly enumerated below;

- Ensuring dynamic linkages between implementing NGOs and PRIs as key to programme sustainability.
- Strengthening linkages with local and regional government entities need to be strengthened for greater convergence of efforts.



*Farm bunding undertaken at village Dongripara in Bastar District, Chhattisgarh*

- Care to address the rights of the landless, marginalized and women farmers within the project delivery framework.
- Intensive capacity building efforts.
- Detailed planning of distribution of water for irrigation based on proper land classification according to socio-economic categories.

Criticality of aligning water management along environmental conservation principles has gained prime importance. This new programme also attempts to reflect on this by showing the linkage of rural agricultural livelihoods with soil and water conservation activities in poverty-prone regions. The socio-economic impacts of these programmes make a strong case for an internally streamlined rural development approach. These are a must for sustainable development of water resources and agricultural livelihoods which are fundamental strengths of our national economy.

## Consultations on Indian Marine Fisheries Sector

States	Andhra Pradesh, Orissa, Karnataka and Gujarat
Location	Vishakapatnam, Bhubaneswar, Mangalore, Verawal, Hyderabad
Collaborating Agencies	Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India and the World Bank

AFPRO organized 4 Regional Consultations followed by a National Consultation on behalf of the Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India, and the World Bank. As part of its mandate, AFPRO was also to present a report of the proceedings of each consultation to the World Bank.

These consultations were conducted over a period of two weeks from 27 October – 7 November 2008. The four regional consultations were one-day events held at Vishakapatnam in Andhra Pradesh, Bhubaneswar in Orissa, Mangalore in Karnataka and Verawal in Gujarat. The National Consultation was a two-day event held at Andhra Pradesh Forest Academy, Hyderabad. AFPRO Field Unit-II Bangalore, AFPRO Field Unit-III Udaipur, AFPRO Field Unit- VI Hyderabad and AFPRO Task Force Bhubaneswar coordinated the efforts at their respective regional levels.

The consultations were organized to gauge responses and recommendations to a study conducted by the World Bank

on the Indian Marine Fisheries Sector. The participants of the regional consultations included representatives of the Department of Animal Husbandry, Dairying and Fisheries of the Ministry of Agriculture - Government of India, the World Bank, representatives of coastal State Governments, scientists and researchers, NGO leaders and civil society representatives, and fisher people. The National Consultation participants were key officials from fisheries departments of Central and State governments, the entire team from World Bank which conducted the study, NGO and fisher folk representatives.

The main objectives of the World Bank study on the Indian Marine Fisheries sector were to:

- a) Review the general structure, conduct and performance of



There was broad consensus on the need for reforms in Indian marine fisheries. Participants across the spectrum recommended that the reform initiative should have an all India focus, under the supervision and coordination of an empowered representative body at the national level, and should be built on best practices relevant to the Indian context, focusing on existing institutions.

- b) Assess the role of marine fisheries in the livelihood patterns of coastal communities and trends in the socio-economic status of these communities.
- c) Identify the main legal, policy, technical, social, environmental, and institutional constraints to sub-sector growth, and biological and economic sustainability.
- d) Undertake marketing and supply chain analyses available to small and large-scale fishers for key fin and shellfish species.
- e) Examine the current marine fisheries management system to identify the key constraints around more effective approaches.
- f) Draw on national and international “best practice” experience to recommend alternative strategies to address these issues.

Sessions in the regional consultations included an overview of current status of marine fisheries in India – performance and issues, livelihood issues in the marine fisheries sector,

key recommendations from the World Bank report and ways forward for implementing the reform process, followed by Group discussions.

At the National Consultation, apart from the issues raised at regional consultations, the outlook was broadened to include a comparative look at global fisheries, international policies, legal and institutional issues, opportunities for reform and global best practices. On its behalf, AFPRO presented a summary report of the recommendations gathered from regional consultations. On the final day discussions were held on a programme for implementing the recommended reforms and role of different institutions would play.

There was broad consensus on the need for reforms in Indian marine fisheries, while at the same time suggestions have been made for inclusion in the study report. Participants across the spectrum recommended that the reform initiative should have an all India focus, under the supervision and coordination of an empowered representative body at the national level, and should be built on best practices relevant to the Indian context, focusing on existing institutions. These recommendations and Action Plans formulated at the National Consultation have been submitted to the World Bank.



*A participant vaccinates a goat during a training on goater management*



## Human and Institutional Development

### International Learning Exchange for UNICEF, South Korea

UNICEF, South Korea approached AFPRO regarding their interest to draw lessons from approaches adopted in India for supply of safe drinking water in rural areas specially through the installation of hand pumps. AFPRO facilitated an International Learning Exchange for a team from UNICEF, South Korea to project sites in Bangalore, Satara and Pune. AFPRO Field Unit I, Ahmednagar and AFPRO Field Unit-II, Bangalore coordinated the events from 19-22 October 2008.

The objective of the team was an exposure to all facets of Hand Pumps based water supply including installation procedures, demonstrating AFPRO's training model for community representatives on hand pump repair and maintenance, and a broad understanding about issues and challenges of the development and implementation of a comprehensive hand-pump programme in India.

Among the variety of aspects discussed, special emphasis was made on the community level processes in management as the key reason for long-term functionality of hand pumps. Another issue stressed on was water quality, including both source related aspects as well as sanitary conditions around the hand pumps.

Interactions were also organized with *Zilla Parishad* officials and village level institutions. Through these discussions the team was exposed to the reform approach being adopted across various states, and a broad overview was provided on the experiences of the *Jalswarajya* Project implemented in Maharashtra. District level initiatives for maintenance of hand pumps were further explained to the team.

Team members were also taken to important hand pumps manufacturers for exposure to manufacturing process and quality standards maintained in production. Different models

of India Mark-II and India Mark-III, along with accessories and toolkits were displayed followed by detailed discussions on their technical feasibility and comparative merits for application in varying geological situations. Special pumps that are run on mechanical energy generated from merry-go-rounds and see-saws were also demonstrated.

### TRAININGS CONDUCTED BY AFPRO

AFPRO conducts numerous trainings each year as part of its outreach. These capacity building events are conducted on themes related to enhancing rural livelihoods through natural resource management and improving quality of life. Again these are provided either as part of ongoing programmes for accomplishment of overall goals, and also as separate training events based on AFPRO's perception of the requirement. The report of a series of trainings on hand pump repair and maintenance undertaken for UNICEF, Orissa is presented below representative of AFPRO's approach. This is followed by a list of various themes on which AFPRO staff facilitated training events during the period of reporting.

### Self Employed Mechanics Training Programmes for UNICEF -Orissa

UNICEF – Orissa entrusted AFPRO Task Force – Bhubaneswar with an assignment to conduct training events on hand pump repair and maintenance for Government recruited Self Employed Mechanics (SEM) of Koraput district.

The prime objective for the training programme was to strengthen the capacity of SEMs on identification of causes of dysfunctional hand pumps followed by appropriate action in terms of repair and maintenance. The training exercise focused on various models being used in the state, including India Mark-I, Mark-II, Mark-III, Tara and popular (shallow) hand pumps.



*Self-employed mechanics undertaking a practical session during the training on hand pump repair & maintenance*

Hand pump repair and maintenance is a crucial component of drinking water supply systems. It is often underrated and hence not given due emphasis in rural development plans. AFPRO's training has strengthened the capacity SEMs to support delivery of drinking water amongst those dependant on hand pumps.

While assessing the reasons for dysfunctional hand pumps, it was noticed that many of the hand pumps were defunct due to mechanical failure whereas there were cases where non-performance was due to depletion of the water table. While training would address the issue of repair and maintenance of hand pumps, AFPRO recommended that water harvesting measures be taken up on a large scale for groundwater recharge.

A total of nine training programmes have been conducted in two different phases at three locations in the district. The events were for 5 days each and approximately 30 participants were present at each event. There were 24 sessions spread over the five-day period, which looked at a variety of aspects such as different types of hand pumps, tool kits, hand pump installation procedures, sanitary surveillance for such drinking water sources together with appropriate response plans, etc.

Hand pump repair and maintenance is a crucial component of drinking water supply systems. It is often underrated and hence

not given due emphasis in rural development plans. AFPRO's training has strengthened the capacity SEMs to support delivery of drinking water amongst those dependant on hand pumps. The SEMs were so motivated after the events, that they gave assurance regarding their commitment to address all defunct hand pumps in the district. They also took upon themselves the responsibility for sanitary surveillance to maintain water quality. Encouraged by the success and utility of the training UNICEF is likely to replicate the same in other districts.

### **Training Assignments taken up by AFPRO in 2008-09**

The capacity building events carried out by AFPRO during the year of reporting have been represented in three categories below. The first category relates to trainings undertaken as part of programmes; the second to trainings where AFPRO staff have facilitated training events as resource persons; and the third where AFPRO has organized the event.

## Programme-based Trainings

Title	Time Period
<b>Ensuring Food Security through Community Participation supported by United Way, Mumbai</b> <i>Nodal Units: AFPRO Field Unit-I, Ahmednagar, AFPRO Field Unit-III, Udaipur &amp; AFPRO Field Unit-VI, Hyderabad</i>	
Various events have been conducted at different cluster and village levels on the following themes <ul style="list-style-type: none"> <li>• Cultivation of Homestead Gardens</li> <li>• Soil and Water Conservation</li> <li>• Land Based Livelihoods for Women</li> <li>• Nutritional Cooking for Adolescent Girls</li> <li>• Peer Training on Health Aspects for Adolescents (separate events for boys &amp; girls)</li> <li>• Personal Health, Hygiene and Sanitation for Teachers and School Children</li> <li>• Maternal &amp; Child Health and Nutritional Aspects</li> </ul>	Apr - Mar 08
<b>Rural Water Supply &amp; Sanitation (Aaple Pani) Project supported by Government of Maharashtra with Financial Assistance from KfW</b> <i>Nodal Unit: AFPRO Field Unit-I, Ahmednagar</i>	
Training events were conducted on the following themes <ul style="list-style-type: none"> <li>• Trainings on Community- level Financial Management and Record-Keeping</li> <li>• Procurement and Tendering Process</li> </ul>	Oct – Nov 08
<b>Integrated Rural Livelihood Programme Supported by EFICOR</b> <i>Nodal Unit: AFPRO Field Unit-I, Ahmednagar</i>	
<ul style="list-style-type: none"> <li>• Training for Village Community on the Watershed Management Approach</li> </ul>	Jan 09
<b>Better Management Practices in Cotton supported by IKEA</b> <i>Nodal Unit: AFPRO Field Unit-I, Ahmednagar</i>	
<ul style="list-style-type: none"> <li>• Training on Integrated Crop &amp; Nutrient Management Practices Conducted for Farmers at Various Stages of the Cropping Cycle</li> </ul>	Apr - Mar 08
<b>Vulnerability Assessment and Enhancement of Adaptive Capacity to Climate Change in Semi-Arid Regions of India supported by SDC</b> <i>Nodal Units: AFPRO Field Unit-III, Udaipur &amp; AFPRO Field Unit-VI, Hyderabad</i>	
<ul style="list-style-type: none"> <li>• Weather manager trainings were conducted in Srirangapur and Kothur villages by AFPRO Field Unit-VI, Hyderabad in April 2008</li> <li>• Training on Irrigation Water Management conducted by AFPRO Field Unit-III, Udaipur in December 2008</li> <li>• Livestock Management Training, conducted by AFPRO Field Unit-III, Udaipur in January 2009</li> </ul>	Apr 08 Dec 08 Jan 09
<b>Partnership for Innovation and Knowledge in Agriculture supported by USAID</b> <i>Nodal Unit: AFPRO Field Unit-V, Gwalior</i>	
<ul style="list-style-type: none"> <li>• Soil &amp; Water Conservation Measures</li> <li>• Water Harvesting &amp; Management</li> </ul>	28 – 29 Mar 09 30 – 31 Mar 09
<b>Water Quality Monitoring &amp; Surveillance Programme supported by UNICEF Raipur</b> <i>Nodal Unit: AFPRO Task Force, Raipur</i>	
Trainings were conducted on the following themes: <ul style="list-style-type: none"> <li>• Preparation &amp; Implementation of Response Plan for Vanwasi Chetna Ashram, Dantewada</li> <li>• Operation of WAGTECH Field-level Water Testing Kit for PHED, Dantewada</li> <li>• 2 trainings on Technical Methodology of Water Sample Collection and Sanitary Surveillance for Vanwasi Chetna Ashram, Dantewada</li> </ul>	Apr 08
<b>Sustainable Livelihoods for Tribals in Chhattisgarh, supported by LWR</b> <i>Nodal Unit: AFPRO Task Force, Raipur</i>	
<ul style="list-style-type: none"> <li>• Training on Micro-credit Management &amp; Market Survey, conducted for staff of programme implementation NGOs</li> </ul>	3 - 5 Dec 08

## Trainings Facilitated by Resource Persons from AFPRO

Title	Place	Date
<b>AFPRO Field Unit-IV, Ranchi</b>		
Training on Watershed Delineation and Management organized by BIJHAN	Ranchi	25 - 26 Sep 08
Training on Soil & Water Conservation Measures and Water Harvesting Structures organized by Catholic Charities, Ranchi	Ranchi	16 -18 Jul 08
Training for Youth on Sustainable Agriculture organized by IGSSS	Jamshedpur	12 -15 May 08
Training on Organic Agriculture organized by Catholic Charities, Ranchi	Ranchi	16 -18 Jul 08
Training on Dairy Development & Management organized by SVS, Chandwa	Balumath	19-24 Feb 09
Training on Livestock Production & Management organized by Catholic Charities, Ranchi	Gurgurjari	23-27 Mar 09
Training on Piggery Development & Management organized by LWR, Raipur	Jagdapur	20 – 24 Jan 09
Training on Goatery Development & Management organized by LWR, Raipur	Jagdapur	2-7 Mar 09
Training on Sustainable Agriculture organized by ADP Malda, World Vision India	Malda	14-18 Jan 09
<b>AFPRO Field Unit-VI, Hyderabad</b>		
Training on Organic Cotton Cultivation organized by MARI, Warangal	Warangal	4-5 Jul 08
Training on Well-logging, conducted for officer of Groundwater Department of Andhra Pradesh	Warangal	20-24 Jan 09
<b>AFPRO Task Force, Guwahati</b>		
Livestock Farming Practices for partners and staff of Seva Kendra, Dibrugarh	Dibrugarh	23-27 Feb 09
<b>AFPRO Task Force, Raipur</b>		
Training on Disaster Preparedness & Mitigation Plan conducted for village communities in Mahasamund District	Labhra Khurd, Daldali, Maroud, Parsada	22 – 24, & 27 Sep 08
Training on Water Quality, Hygiene and Sanitation organized by ADP Raipur, World Vision India for VWSC of Karim Nagar Slum	Raipur	29-30 Jan 09
Training on Basic Concepts of Watershed Development, organized by GVT, or project staff and community members from target villages	Hirmi	19-20 Feb 09
Training on Goatery Development & Management, organized for Hirmi Cement Works conducted with resource support from AFPRO Field Unit-IV, Ranchi	Hirmi	2-6 Feb 09
Training on Basic Concepts of Watershed Development & Disaster Preparedness organized by CHDP SBH Jagdispur for project staff and community members from target villages	Jagdispur	17-18 Mar 09
Training on Formation of SHG Cluster and Federation, organized by Leprosy Mission, Chhattisgarh for project staff	Raipur	31 Mar-1Apr 09
<b>AFPRO Task Force, Bhubaneswar</b>		
9 Training Events on Hand Pumps Repair & Maintenance organized by UNICEF Orissaa for Self-Employed Mechanics recruited by the Government of Orissa	Laxmipur, Jeypore and Koraput	Aug 08 Nov-Dec 08
Training on Hand Pumps Repair & Maintenance organized by RWSS, Koraput for local mechanics	Koraput	4-6 Dec. 08
Training on Water Quality Analysis & Data Assessment organized by BSSS, Balasore for stakeholders and staff of Caritas Bhubaneswar	Balasore	15-17 Dec 08
Training on Soil & Water Conservation Measures organized by THREAD, Koraput for women SHG'S	Koraput	1 - 3 Feb 09
Training on Sanitation and Management of Solid Waste Management organized by Water Aid for Sanitation Ambassadors in Puri District	Bhubaneswar	February 5, 09
<b>Trainings Organized by AFPRO</b>		
<b>AFPRO Head Office</b>		
Process Documentation: Looking Beyond – Making a Case for Non-Fiction Story Telling	New Delhi	7 – 9 Aug 08



## Building Linkages

Activities for building linkages have great significance for AFPRO since its inception. AFPRO places emphasis on identifying the pulse of rural development sector seen in terms of AFPRO's core competencies. Through widespread interaction with stakeholders at the national, regional and local levels, AFPRO positions itself for appropriate intervention.

AFPRO's specialists are regularly reaching out to all stakeholders including relevant government departments, academicians and intellectuals, civil society representatives especially grassroots NGOs, and most importantly rural communities. AFPRO staff participate in plenty of workshops each year contributing AFPRO's perspective to the wealth of discussions and learning.

For the past decade and more, governments at both the centre and state levels are making special efforts for participatory approaches to rural development. They are approaching NGOs with relevant experience and competencies to support them in this endeavour. Such approaches are also being adopted by corporate agencies in their efforts under corporate social responsibility. AFPRO has a definite policy to link up with the efforts of governments and corporate agencies, in addition to seeking tie-ups with donor agencies already working in the sector.

During the year efforts were made for initiating several new rural development ventures, of which a few have fructified. Reports of two such new projects are presented below.

### National Agricultural Innovation Project (NAIP)

AFPRO has entered into an agreement with the Indian Council for Agricultural Research (ICAR) for implementation of activities under the National Agricultural Innovation Project (NAIP) for Dhemaji District, Assam. NAIP is a nationwide project launched by ICAR to promote transformation of Indian agriculture

based on collaborative action-research efforts and innovative approaches. NAIP is being implemented in the form of sub-projects and involves a broad spectrum of public and private sector organizations, civil society and academic institutions and community level stakeholders.

AFPRO Task Force Guwahati is coordinating this sub-project at the regional level. Titled "Live Better with the Floods", it falls under Component 3 of NAIP viz. Research on Sustainable Rural Livelihood Security. A consortium approach has been adopted for implementation based on the framework promoted by NAIP. Accordingly, AFPRO formed a consortium with like-minded partners North Eastern Regional Institute of Water & Land Management (NERIWALM), Tezpur, Assam, Assam Agricultural University (AAU), and Rural Volunteers Centre (an NGO).

Dhemaji district is a highly flood prone area which causes severe losses in agricultural livelihoods. Damage is caused not only to standing crops but also in terms of heavy sand deposits that makes land unusable. This has serious implications in a district where nearly 98% of the population lives in rural areas, and around 65% depends on agriculture for livelihoods with paddy as the primary crop.

The objectives of this project are:

- To improve the livelihood of the rural poor with efficient management of natural resources by enhancing productivity, profitability and diversity of farming system.
- To improve the delivery mechanism through skill development of primary stakeholders on improved practices of Agriculture, Livestock, Apiculture and Post Harvest Technology.
- To develop institutional mechanism among the primary stake holders for adopting the approaches and establishing market linkages for income generation activity.

Specific hypotheses have been advanced to provide the overall framework for action under each objective. The overall approach is oriented towards promotion of sustainable livelihoods based on the Integrated Farming System (IFS) approach. Four IFS modules are being promoted under the project including the following:

- Module-I: Rice-fish-vegetable;
- Module-II: Livestock-fish-vegetable;
- Module-III: Dairy-Fish-Vegetable;
- Module-IV: Sericulture-Livestock-Horticulture.

Based on effective utilization and proper management of existing resources, appropriate cropping patterns and associated livelihood practices can be adopted in synchronization with the flooding cycle. This forms the basic premise according to which responses are being recommended for time periods before, during and after the flood. Emphasis is also being laid on including local knowledge and experiences for arriving at solutions. The entire effort will be supplemented by capacity building exercises for supporting the rural communities to adopt these solutions and ensure project sustainability.

### **Enhancing Livelihood and Food Security through Diversion Based Irrigation System**

AFPRO and Sir Dorabji Tata Trust (SDTT) have initiated a rural development intervention in tribal dominated areas of eastern

and north-eastern India. The project envisages developing irrigation potential in selected remote, hilly regions for enhancing livelihoods and local food security situations.

Project areas have been selected within a district each from 5 States, Orissa, Jharkhand, Meghalaya, Tripura, and Assam. This selection was based on observed levels of development among poor and marginalized tribal communities dwelling on hilly terrains and their access to water sources. These communities have no option but cultivate crops on the slopes. Even though, highlands and uphill slopes in these areas are blessed with plenty of streams and small rivers, elevation differences make these inaccessible for irrigation. Eventually these farmers are not able to reap the potential harvest.

AFPRO Field Unit-IV, Ranchi, AFPRO Task Force, Guwahati and AFPRO Task Force, Bhubaneswar, are involved in providing socio-technical support for redressing this problem and related livelihood issues in respective regions. Project objectives include promotion of water resource management for irrigation, improved agricultural practices, and establishing community institutions for management of created structures.

The technological solution being promoted to circumvent the natural hurdles to delivery of irrigation water is the Diversion-Based Irrigation System (DBIS). DBIS provides a simple and comparatively low-cost solution by effectively deploying the power of gravity for water supply. DBIS taps water sources in hilly regions through different technical options such as gravity irrigation systems, earthen dams, farm ponds, masonry diversion weirs, irrigation channels, and other similar structures.

The programme team also had to take care not to undo the indigenous spirit of initiative and resilience by imposing technical measures that could not be replicated and maintained by these marginal communities.

## Strengthening Indigenous Irrigation Systems for Enhanced Adaptive Capacity— *A Case Study*

*Based on the approach adopted by the Programme on Vulnerability Assessment and Enhancement of Adaptive Capacity to Climate Change in Semi-Arid Regions of India*

"This *harren* was developed by my great-grandfather with the support of the entire village" says Ram Singh, 78, a farmer from village Amda, a small village located in interior Rajasthan. "*Harren*" is the local name given to manmade irrigation channels in the region. Ram Singh is a very proud man on two counts. First, his village has been selected under an international programme for adaptation to climate change. Second, the programme officers have commended the wisdom shown by his great-grandfather who mobilized the entire village to build an earthen bund for water storage on a local stream and construct an irrigation channel for conveying water to the fields.

He continues, "Along with the earthen bund built on the Bhutiya stream, this *harren* was designed based on the slope of land and according to location of the fields. His aim was to maximize the irrigation potential for our village."

Today about 1/3rd of the irrigated land in village Amda is served by the *harren* system. The contribution of this simple delivery mechanism cannot be underestimated in this village that is highly dependent on agriculture for livelihoods. In the absence of small or medium surface water structures, and very limited sources of groundwater, the *harren* serves as the village lifeline.

Besides, the villagers have also intelligently adapted it for use when levels in the Bhutiya water storage structure recede. Farmers are then forced to resort to pumping groundwater

from open dug-wells, which they convey to the fields through the *harren* system.

However Ram Singh comments, "For three generations, we have repaired the channel each year." These 'earthen' *harrens* have to be redeveloped each year after the monsoon season. During the course of the year, especially at winter irrigation, the *harren* gradually chokes up with silt accumulation. Moreover, it is also easily prone to damage when animals walk across. This and other natural wear and tear make for significant seepage losses.

It is paramount, in order to ensure crop productivity, that water be applied in appropriate quantities and at specific times in keeping with the cropping cycle. The *harren* system has definitely served the village well, providing a much needed irrigation system. But its natural limitations tend to weaken its impact and also result in much waste of the limited quantities of water available at the village. Eventually, farmers have to use pumps and use groundwater for completing irrigation requirements. Tail-end farmers, especially, bear the brunt of these shortcomings, as they do not get sufficient water for irrigation.

The challenge before the V&A Programme was to identify a low-cost, sustainable and locally adoptable measure for strengthening the irrigation mechanism for Amda. The *harren* had a specific vulnerability which could result in serious productivity depletion, especially in a climate change scenario. The programme team also had to take care not to undo the indigenous spirit of initiative and resilience by imposing technical measures that could not be replicated and maintained by these marginal communities.



*The harren, before and after it was lined*

After a round of discussions with the community, they were convinced about adopting a simple solution of lining the *harren* for improving its efficiency. This would improve delivery of water and also restrict seepage losses.

760 metres of *harren* have since been lined in the village. In approximately one year after its lining, the *harren* has served to irrigate an additional 1.5 ha. of land in comparison to 10 ha that were irrigated earlier. By regular upkeep and maintenance of the lining, the benefits from the *harren* will only increase. The possibility of damages either due to the flow of water or other factors has been far reduced, and seepage losses are no more a threat. Delivery is also efficient and quicker due to unobstructed flow of water, negligible conveyance losses and regulated openings for separate fields.

Faster, more efficient conveyance, and reduced time for irrigation also has special implications when groundwater from open dug-wells has to be pumped out for irrigation. First is the direct benefit of fuel savings in terms of lesser pumping hours. But a greater benefit is experienced in terms of controlling the amount of groundwater exploited for irrigation.

“Conveyance of water is faster after the *harren* was lined”, says Babu Singh who grows sugarcane on a plot of 800 square metres, located approximately 750 metres away from the nearest dug-well. “I was able to complete irrigation for my sugarcane crop using just one litre of diesel to run my pump. Last season, I had used four litres of diesel for the same purpose.”

Bansilal shares similar experiences, “I used to take 7 hours to irrigate my fields that lie about 500 m away from the well. Now, after the *harren* was lined, it took only 4 hours.”

Thus while the community saves on nearly 200 persondays of labour that were required for preparing the *harren* each year, the benefits go much beyond the convenience factor. Sustainable management of water resources including prudent utilization based on effective techniques would always be one of the most critical components of dealing with climate change.

Further, simple, controlled interventions undertaken through participatory, locally sensitive decision-making processes, lend a far bigger psychological impetus at the community level. Such impetus is a must to build up the spirit of resilience and innovation required at the grassroots for adaptation to the harsh realities of climate change.

# Financial Statements

## ACTION FOR FOOD PRODUCTION : NEW DELHI

Balance Sheet as at 31st March 2009

Particulars	31st March 2009 (Rs.)
<b>SOURCES OF FUNDS</b>	
Funds and Reserve	98,277,158.41
Programme Balances	(8,631,767.22)
<b>TOTAL</b>	<b>89,645,391.19</b>
<b>APPLICATION OF FUNDS</b>	
<b>A) Fixed Assets</b>	
i) Gross Block	64,413,977.38
ii) Less: Depreciation	48,251,811.66
iii) Net Block	16,162,165.72
iv) Capital Work in Progress	–
	<u>16,162,165.72</u>
<b>B) Investments</b>	53,133,851.00
<b>C) Current Assets</b>	
i) Interest Accrued on Deposits	4,078,897.40
ii) Recoverables & Prepaid Expenses	7,362,738.19
iii) Cash & Bank Balances	16,459,695.00
	<u>27,901,330.59</u>
<b>D) Less: Current Liabilities &amp; Provisions</b>	7,551,956.12
Net Current Assets	<u>20,349,374.47</u>
<b>E) IGP - Aligarh Deficit</b>	–
<b>TOTAL</b>	<b>89,645,391.19</b>

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

Cyriac Mathew  
Chief Finance Officer

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

Fr. Varghese Mattamana  
Treasurer

Martin P. Pinto F.C.A.  
for Pinto M. P. & Associates  
Chartered Accountants

Place: New Delhi

Date: 08-09-2009

## ACTION FOR FOOD PRODUCTION : NEW DELHI

### Income & Expenditure Account for the year ended 31st March 2009

Particulars	31st March 2009 (Rs.)
<b>INCOME</b>	
Programme Contributions	5,413,485.00
Training Course Receipts	51,000.00
Miscellaneous Receipts	334,464.80
Sale / Disposal of Assets / Old Items	144,434.00
Interest - Savings & Deposits	779,802.59
<b>Total</b>	<b><u>6,723,186.39</u></b>
<b>EXPENDITURE</b>	
<b>Core Integrated Development Programme</b>	
Human and Institutional Development	1,143,049.90
Socio - Technical Personnel Cost	25,481,000.21
Outreach Support	3,318,983.34
Information Services	336,127.00
<b>Administrative Cost</b>	
Admn. - Personnel Cost ( F & A )	4,293,067.32
Outreach Support	451,177.21
Office Expenses	4,267,881.58
Hired Services	1,708,654.00
<b>Capital Expenses</b>	3,074,068.50
<b>ED's Discretionary Fund</b>	81,501.00
	<u>44,155,510.06</u>
Excess of Expenditure over Income Transferred to :	
Programme Fund	(26,441,530.82)
AFPRO Millinm. Fund	(8,359,617.85)
General Reserve	(2,631,175.00)
<b>Total</b>	<b><u>6,723,186.39</u></b>

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

Cyriac Mathew  
Chief Finance Officer

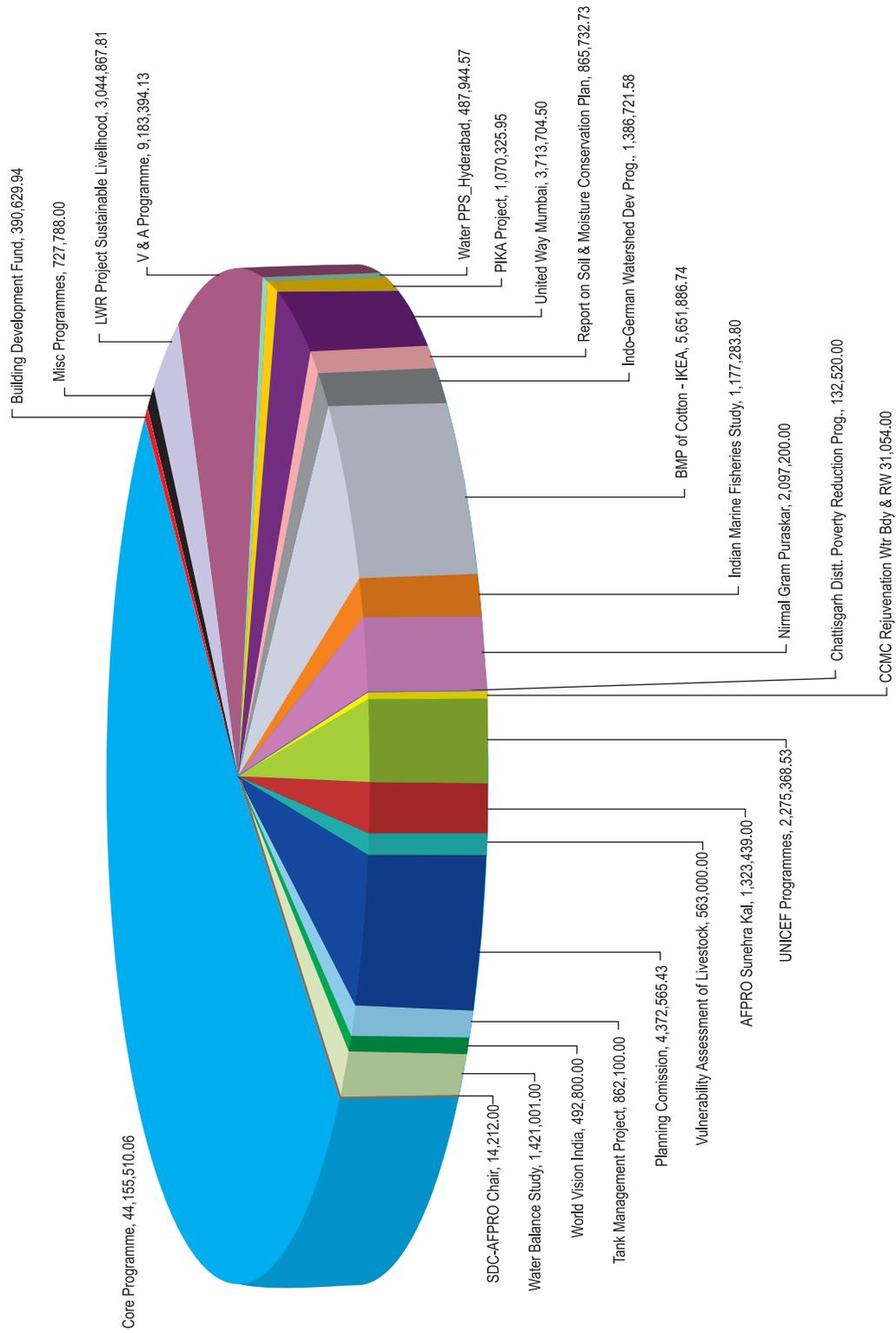
D. K. Manavalan IAS (Retd.)  
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Treasurer

Martin P. Pinto F.C.A.  
for Pinto M. P. & Associates  
Chartered Accountants

Place: New Delhi  
Date: 08-09-2009

## EXPENDITURE ON AFPRO PROJECTS



# 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 are 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 than 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 Corporation 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.

# List of Governing Body Members

## List of Governing Body Members as on 31st March 2009

**Mr. K.P Fabian**

President  
C/45 IFS Apartments  
Mayur Vihar, Phase-I  
New Delhi-110092

**Prof (Mrs) Janet Vasantha Kumari**

Vice President  
Madurai Institute of Social Science  
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Tamil Nadu

**Rev. Fr. Varghese Mattamana**

Treasurer  
C/o. Caritas India  
CBCI Centre  
Ashok Place (Gole Dakhana)  
New Delhi-110001

**Mr. T. Thomas**

Member  
National Council of YMCAs of India  
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New Delhi-110001

**Fr. Thomas Kunnunkal**

Member  
C/o. Indian Social Institute  
10, Institutional Area  
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**Mr. Sushant Agarwal**

C/o. Church's Auxiliary for Social Action – CASA  
Rachna Building  
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New Delhi-110008

**Mr. N.C. Bose Croos**

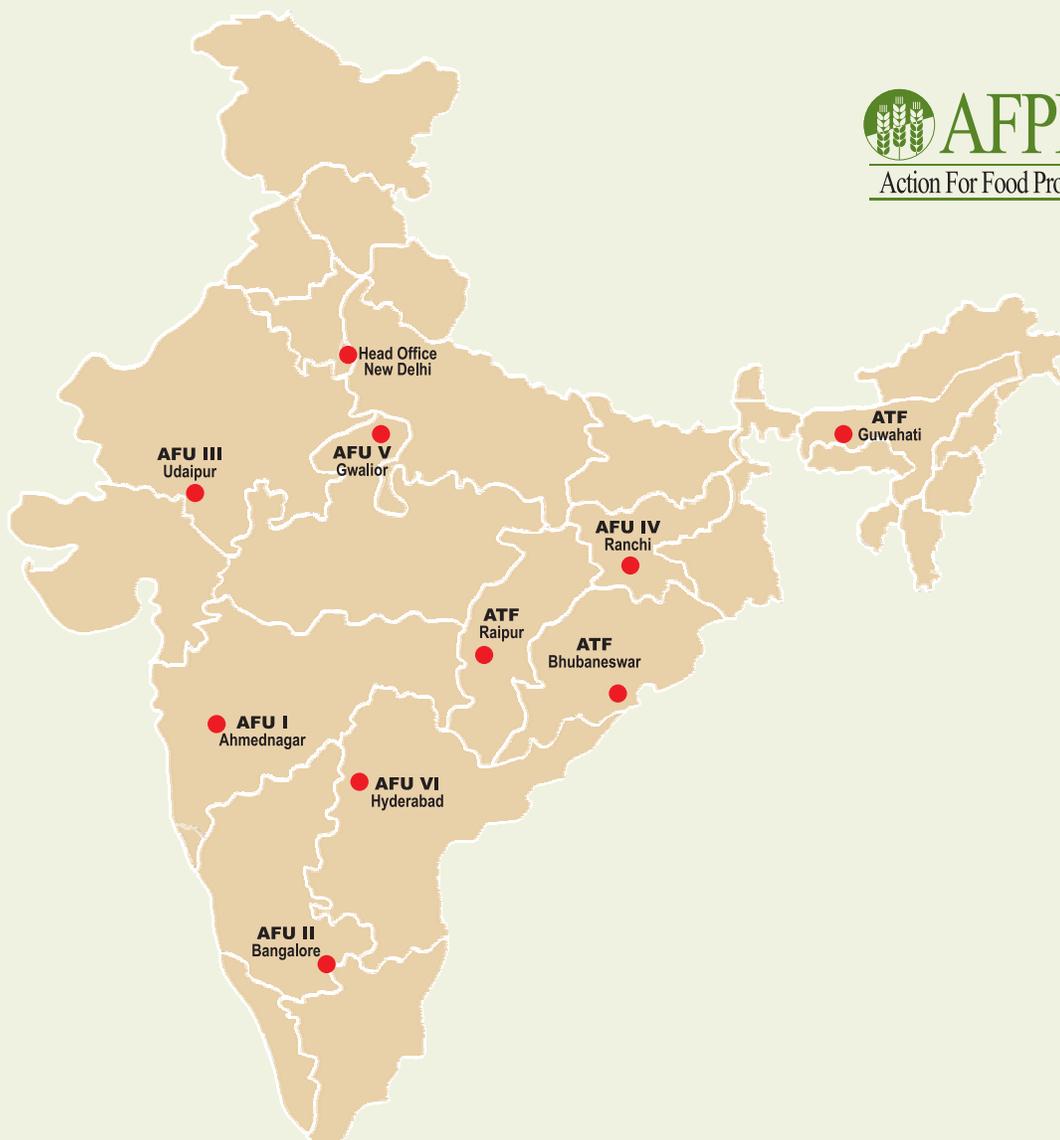
General Secretary  
Skills for Progress (SKIP)  
SKIP House  
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Bangalore-560 025, Karnataka

**Mr. D.K Manavalan**

Secretary cum Ex-Officio Member  
Executive Director, AFPRO  
25/1A, Institutional Area,  
D Block, Janak Puri, New Delhi-110058

# Abbreviations Used

ACDI/VOCA	Agricultural Cooperative Development International/ Volunteers in Overseas Cooperative Assistance	NAIP	National Agricultural Innovation Project
ADP	Area Development Programme	NAPCC	National Action Plan on Climate Change
AFPRO	Action for Food Production	NATCOM -SNC	Second National Communication to UNFCCC
BFL	Bharat Forge Ltd.	NGO	Non-governmental Organizations
BMP	Better Management Practices	NGP	Nirmal Gram Puraskar
BRGF	Backward Regions Grant Fund	NREGA/S	National Rural Employment Guarantee Act/Scheme
CBO	Community Based Organizations	NRM	Natural Resource Management
CBP	Capacity Building Phase	PHC	Primary Health Centres
CCT	Continuous Contour Trench	PHED	Public Health Engineering Department
DBIS	Diversion Based Irrigation System	PIA/PIO	Project Implementation Agency/Organization
DPC	District Planning Committee	PRA	Participatory Rural Appraisal
DPMU	District Project Management Unit	PRI	Panchayati Raj Institutions
DRDA	District Rural Development Agency	RRWH / RRHS	Rooftop Rainwater Harvesting/Structures
EED	Church Development Services, Germany	RSPMU	Reform Support and Project Management Unit
EFICOR	Evangelical Fellowship of India Commission on Relief	RWH	Rainwater Harvesting
FIP	Full Implementation Phase	SC	Scheduled Caste
GoI	Government of India	SCT	Staggered Contour Trench
GoM	Government of Maharashtra	SDC	Swiss Agency for Development and Cooperation
ha	hectares	SDTT	Sir Dorabji Tata Trust
HID	Human and Institutional Development	SEZ	Special Economic Zone
ICT	Information and Communication Technologies	SHG	Self-Help Groups
IEC	Information, Education and Communication	SMC	Soil and Moisture Conservation
IGP	Income Generation Programmes	SRI	System of Rice Intensification
IGWDP	Indo German Watershed Development Programme	ST	Scheduled Tribes
IPM	Integrated Pest Management	SWC	Soil and Water Conservation
IRRI	International Rice Research Institute	TSI/TSP	Technical Support Institution/Providers
ITC	Indian Tobacco Company Ltd.	UNDP	United Nations Development Programme
ITDA	Integrated Tribal Development Agency	UNFCCC	United Nations Framework Convention on Climate Change
KfW	Reconstruction Credit Institute, Germany	UNICEF	United Nations Children's Fund
LBS	Loose Boulder Structure	V & A	Vulnerability Assessment and Enhancing Adaptive Capacity to Climate Change in Semi-Arid Regions of India
LIS	Lift Irrigation Scheme	VDC	Village Development Committee
LWR	Lutheran World Relief	VES	Vertical Electrical Sounding
MoEF	Ministry of Environment and Forests	VWSC	Village Water Supply & Sanitation Committee
MoPR	Ministry of Panchayati Raj	WAT	Water Absorption Trench
MoRD	Ministry of Rural Development	WUA	Water User's Associations
NABARD	National Bank for Agriculture and Rural Development	WVI	World Vision India



### Executive Director

Mr. D.K. Manavalan I.A.S. (Retd.)

### Programme Coordinator

Mr. S.C. Jain

### Unit Managers

Mr. S. Salunke, AFU-I

Mr. Ravi Kumar, *Officiating*, AFU-II

Mr. P.K. Dutta, AFU-III

Mr. Ajit Kumar, *Officiating*, AFU-IV

Mr. V.D. Dubey, AFU-V

Mr. K. Sivaprasad, AFU-VI

Mr. Dhrujdit Sarma, ATF-G

Dr. S. Srivastava, ATF-R

Mr. K. Murali, ATF-B

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