

## Reporting Form

### Project Progress (Narrative Report)

#### Financial Support

For all projects supported by the Protestant Agency for Diakonia and Development - Bread for the World – Protestant Development Service (hereafter referred to as Financing Partner) a progress report is required after every six months. The report shall be sent to the Financing Partner 3 months after the end of the reporting period at the latest. Its volume should not exceed a total of 12 pages. Any additional information should be added as appendices. This applies also to statistical data, photographs, etc.

#### 1. General Information

Name of the Organisation	Accion Fraterna Ecology Centre
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Project Title	Promoting Sustainable Agriculture & Diversified Livelihoods in Anantapuram district
Project-No.	N-IND-2015-0024/EZE-No.2015 74383
Project Period	From 01-04-2015 till 31-03-2018
Reporting Period	From 01-04-2015 till 30-09-2016
Date of Report	30.12.2016
Author	Y.V.Malla Reddy

## **2. Change within the Organisation**

During the reporting period, did any important events or changes take place within your organisation?

**2.1**  
related to the management structure?

Yes  No

If Yes, please describe:

Change of management structure

**2.2**  
related to your planning system?

Yes  No

If Yes, please describe:

Planning system

**2.3**  
related to the composition of your staff?

Yes  No

If Yes, please describe:

Staff changes:

**2.4**  
related to other issues?

Yes  No

If Yes, please describe:

Change of topics

## **3. Changes of social, political, economic and ecological project context**

**3.1**  
Are there important changes (social, political, economic, ecological) in the projects' immediate environment since its inception?

Yes  No

If Yes, please describe:

No change

### **3.2**

Is the underlying problem analysis of the project still valid considering possible changes in the context?

Yes

No

If No, please describe:

Problem analysis

### **3.3**

Do these changes have implications for the work, the project objective and the latter's achievement?

Yes

No

If Yes, please describe:

Implications:

## **4. Outcome and Impact**

**Project objective: In total 21,400 marginalised families improve their nutritional and livelihood security through the strengthening of CBOs, the promotion of risk mitigating sustainable agriculture practices and the diversification of their income sources.**

<b>Indicators</b> (information differentiated by sex or one indicator for the gender dimension)	<b>Achievement of objectives</b> (Assess using indicators)	<b>Planned activities</b>	<b>Implemented activities</b>
1. 30% of 11500 household have benefitted from the adoption of drought coping technologies / practices recommended by the project.	15 % of 11500 households(1725) have directly benefitted.	1.1.2.5 Farmer Field Schools Sessions 1.1.3 Demonstrations on SA cropping systems & Drought mitigation practices	1) 178 Field Days were conducted in 48 villages and over 4000 farmers participated 2) 1114 SA Rainfed crop demonstrations conducted 3) Drought mitigation technologies like Farm Pond lining, Row water sowing and Protective Irrigation carried out in 1564 ha.

<p>2. 50% Women of those households which adopted the drought coping technologies / practices jointly {Women &amp; Men} participated in decision making.</p>	<p>30% of the women of the households who adopted the drought coping technologies or practices jointly participated in decision making. Women played active role in selecting the beneficiaries for the project activities and managing the CBO assets.</p>	<p>1.1.1 Strengthening of CBOs - Meetings 1.1.2 Capacity building of CBOs</p>	<p>1.1.1.1) 3763 SMG meetings were conducted against the planned 5136 in which average women attendance was 65% 1.1.1.2) 991 GSMS meetings were conducted against the planned 1284. Average attendance of women was 70% 1.1.1.3) 42 MSMS Meetings were conducted against 48 planned. 1.1.1.4) 2 ASMS Meetings were conducted as per the plan 1.1.2) 42 Cluster level trainings conducted on drought mitigation technologies for 1460 farmers (including 720 women)</p>
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<p>3. Thirty percent of young women and men provided with vocational skills by the project earn not less than Rs.1500/- per month from home based employment and not less than Rs. 5000/- per month from outside employment.</p>	<p>1) 72 (70%) of the 128 boys trained in Driving got employed as drivers during the reporting period and earning a minimum Rs. 6000/- per month.  2) 40 girls given advanced training on garment making, they started earning Rs. 3,000/- by stitching garments at home.  3) AF is exploring opportunities to link the trained girls with garment making industry to get piece-work assignments by staying at home.</p>	<p>1.2.1.1 Training in LMV driving  1.2.1.2 Training in HVM driving  1.2.1.3 Training women in garment making  1.2.1.4 Facilitating vocational trainings in other vocational training insitutions  1.2.1.5 Organising job-fairs under educated rural youth</p>	<p>1.2.1.1) 128 youngsters were trained on LMV driving and 72 of them got employment  1.2.1.3) 40 girls were given advanced training on garment making.</p>
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If the project is more complex and composed of different project components, kindly use the spread sheet attached.

#### 4.1

What other changes beyond the ones described in the above table did you observe/detect? Please mention anything that may be of relevance to the project progress.

Further changes: No further significant changes have been observed.

#### 4.2

In case you observed any direct negative outcome of the project, please describe it, too.

Potential negative outcome: No potential negative outcome was observed

#### 4.3

Which incidents / events could you observe, which you consider to be contributing to or interfering with the accomplishment of the development goal (impact-level)?

Failure of Rains in crop season: The kharif crop season starts with sowing of rainfed crops in month of June and ends in November with harvesting. This year the good rainfall in the months of June and July raised hopes of farmers and about 70% of small and marginal farmers in the district have sown Groundnut with other inter crops in their rainfed lands. The germination was good and the crop position was promising till mid of

August. Farmers were expecting good rains in August and September. But unlike the usual trend there is almost no rainfall in these months leading to severe drought and complete failure of rainfed crops. This situation has happened only in 4 years in the last 100 years. The rainfall in August is 18mm against the normal 88.7 mm. In September the rainfall is 41.9 against normal rainfall of 118.4 mm. So there is huge deficit of 146 mm in these two months which has severely affected the crops.

The Protective Irrigation is now a state policy of Government of Andhra Pradesh which will benefit more than a million rainfed farmers across the state. It is a very significant development that would positively contribute to the development Goal of AF.

All the Mandala Sasyamitra Samakhya are registered as Mutually Aided Cooperative Societies under APMACS Act in June 2016. AF has facilitated the formal registration, reorganizing of Board of Directors and completed statutory requirements as mandated by the law. About 5000 farmers have taken membership in these MACS. We will facilitate these MACS to grow as independent, democratic, self reliant community organizations. These organizations will contribute significantly to the development goal of AF.

#### **4.4**

Which methods did you apply to assess your project's outcome and impact?

The outcome was assessed using the following methods:

1. Focused Group Discussions were conducted in the project area to assess the use of output, outcomes and also women participation in project activities.
2. Random verification of results of project activities.
3. The data was collected and consolidated from village level records maintained in each of the 230 villages like Village Activity Registers, Minutes of Meetings, Monthly progress reports etc. and analysed.
4. Individual Interviews with some specific farmer & farm labourer families were organised to assess the outcome for certain activities.
5. The findings from various methods were triangulated comparing FGD reports, field verification and monitoring reports of STOs, AEOs, Subject Matter Specialists and PME team members.
6. The action learning cycle was used to reflect, learn and drawn lessons for improving planning, implementation, monitoring and evaluation.

### **5. Conclusion for the Future Work**

#### **5.1**

Based on your experience gathered, do you see a need to change the planned activities in order to accomplish the project objective?

Yes

No

If Yes, please state the reasons and elaborate on the changes:

Not applicable

## **5.2**

In case you require consultancy services, please state the respective area:

### **Consulting:**

Consultancy services are required in the areas of documentation, reporting and updating of our website.

We are already availing consultancy services on Gender and Women staff development.

## **5.3**

Which are the most important lessons learned during the reporting period?  
Please refer to gender equality issues also.

### **Lessons learned:**

1. This is a very unusual year in terms of rainfall, where in the two crucial months for rainfed crops (August and September) had seen very long dryspells. Thereby the District is heading towards a severe drought! This tendency of high rainfall variability is likely to increase in view of climate change. So, we have to work towards adaptation strategies to cope with enhanced climate variability.

2. Women leaders were elected as presidents of recently registered Mandal MACS and they are actively participating in building these institutions. Women leaders are actively involving in enrolling membership, setting up offices and other institution building works. It is again proved that if women are given opportunity, they will outrun men and achieve results.

**Annexe to 03-5 (Narrative Report):**

Project components' objectives	Indicators (information differentiated by sex or one indicator for the gender dimension)	Achievement of objectives (Assess using indicators)	Planned Activities	Activities implemented / carried out
1.	1.			
	2.			
	3.			
2.	1.			
	2.			
	3.			
3.	1.			
	2.			
	3.			
4.	1.			
	2.			
	3.			

## Annexure 1

### Description of Activities during 1<sup>st</sup> April 2016 to 30<sup>th</sup> Sept 2016

**Project Title:** Promoting Sustainable Agriculture and Diversified Livelihoods in Anantapuram district

**Project Number:** N-IND-2015-0024/EZE-No.2015 74383

#### 1.1.1 Strengthening of CBOs - Meetings

**1.1.1.1 SMG Meetings:** During the reporting period, 3763 SMG meetings were conducted against planned 5136. The average attendance per SMG was 18 (76%) in which 12 (65%) were women.

**Description:** There are 856 SMGs (Sasya Mitra Group) functioning in 214 project villages. (In rest of the 16 villages Watershed Development Committees (WDCs) are functioning). Each SMG consists of 25 members and of them at least 13 members are women. Every SMG elect Convener and Co-Convener and all Conveners are women. In each village, two SMGs are represented by rain fed farmers, one SMG by irrigated farmers and one SMG is represented by farm labour families. The SMGs are federated at village level called GSMS. The GSMS are federated at mandal level called MSMS. The MSMS is federated at project level called ASMS. Each SMG meets once every month to discuss about the implementation of programme activities as per plan, savings, internal lending of saved money, practice of mutual cooperation, accessing government programmes etc. SMGs select the deserving and eligible beneficiaries for incentive based activities considering their eligibility, interest & ability in implementation. Gender & Social equity was ensured during the selection by giving priority to women, SC/ST/BC communities.

During the reporting period, the efforts were continued to inculcate savings habit and mutual cooperation among the SMG members. Practice of mutual cooperation was promoted to reduce the cash transactions in agriculture activities and improve fraternity among the members. As on the date of reporting 802 SMGs comprising about 18000 families started small savings of Rs.50/- to Rs.100/- which was used for lending small amounts of money to the needy members of the SMG. These small loans helped the members in meeting small but urgent expenses like treatment of ill health, paying children school fees, purchase of grocery under PDS, small investment needs for agriculture etc. An amount of about Rs. 12.3 million is saved and revolved benefitting about 4875 families every month by availing credit for their small needs. The 18,000 families would be adding about 1.5 million rupees every month to their savings.

About 5000 SMG members practised mutual cooperation through sharing of implements, bullocks and exchange of labour. The members benefitted by timely completion of sowing operations and also by reducing cash transactions particularly in weeding and harvesting operations.

**1.1.1.2 GSMS Monthly Meetings:** During the reporting period, 991 GSMS meetings were conducted against planned 1284. The average attendance in each GSMS was 7 (80%) in which 5 (70%) were women and 4 (60%) were from SC, ST, BC Communities.

**Description:** GSMS is the village level federation represented by Conveners and Co-Conveners of each SMG in the village. Each GSMS meets once in a month and additionally whenever required. STOs (Socio Technical Organiser) facilitate these meetings. GSMS is the focal point in the village and has been actively involved in planning, implementation and monitoring of programme activities at village level. The management of the commonly owned equipment like sprayers, Sprinklers etc provided by AF was the responsibility of the GSMS in each village. The major responsibilities of GSMS include implementation and coordination of project activities, allocation of incentive based activities to SMGs, monitoring the output and use of output, payment of incentives as per the guidelines given by AF.

**1.1.1.3 MSMS Monthly Meetings:** During the reporting period, 42 (92 %) MSMS meetings were conducted against planned 48.

**Description:** There are 8 MSMSs functioning in 8 mandals in the project area. The MSMS meetings were facilitated at Mandal level by Area Team Leaders (ATLs) and Agriculture Extension Officers (AEOs). The MSMS members have been playing an important role particularly in planning, implementation, monitoring, evaluation, organizing mandal level awareness campaigns such as, Drought and Desertification Day, World Water Day, International Women's Day etc. MSMS provided authentic feedback on the relevance and effectiveness of various activities and also suggested improvements in activities and their implementation. The MSMS members played key role in popularising the important sustainable agriculture activities like drought resilient cropping systems and protective irrigation at various forums through experience sharing of their own and of the farmers who implemented in their respective villages like providing protective irrigation using cement lined farm ponds, bore well water sharing, mobile micro irrigation etc.

**Registration of MACS:** During the reporting period, AF has facilitated the registration of all 8 MSMS as Mandal farmer producer organisations under MACS Act 1995. Now all the 8

MSMS are formal organisations having legal identity and are called Mutually Aided Cooperative Societies. During the reporting period, 4922 rain fed farmers have taken membership in MACS in their mandals. Board of Directors were elected in all MACS societies. The presidents of all the MACS are women. Necessary trainings and exposure visits are planned to increase the capacities of Board members and the members. These MACS will take up value addition of agri-produce and marketing activities.

**1.1.1.4 ASMS Quarterly Meetings:** During the reporting period, two ASMS meeting were conducted and the ASMS members actively participated in the workshop conducted by the State Government for deciding drought mitigation policies and programmes in Andhra Pradesh.

**Description:** An Apex Sasya Mitra Samakhya (ASMS) was constituted in 2014 with 5 leaders from each of 8 MSMSs and 5 leaders from WDC (Watershed Development Committees) and 5 progressive farmers. This ASMS acts as an apex body of all farmers groups in the project. ASMS meets once in 3 months. ASMS provide inputs through experience sharing and representing the ground level problems to the state level officials and district level officials.

## **1.1.2 Capacity Building of CBOs:**

**1.1.2.1 Mandal level trainings to MSMS members:** During the reporting period 8 Mandal level trainings were conducted covering all the 8 mandals. 320 MSMS members were trained including 162 (50%) women and 170 (54%) members from SC/ST/BC communities.

**Description:** The Project area covers 8 mandals in the district. These 8 mandals comprise of 42 clusters. Each cluster consists of about 5 villages and one STO facilitates the cluster. Trainings were conducted to cluster leaders on Sustainable Agriculture with focus on providing protective irrigation during dry spells. These trainings were conducted in participatory manner with facilitation support from Chief of Sustainable Agriculture, ATL and AEOs. The technical aspects like moisture required during various stages of crop life, providing required moisture by sourcing the water from outside, plant growth behaviour under different weather conditions, rain fall analysis and rain water harvesting using cement lined farm ponds, providing protective irrigation through mutual cooperation between farmers with bore wells and neighbouring rain-fed farmers, estimated expenditure, probable yield increase and net income increase etc were discussed in these trainings.

### **1.1.2.2 Cluster level trainings to GSMS members on Sustainable Agriculture & Drought**

**Mitigation:** 42 cluster level trainings were conducted to 1480 GSMS members including 720 (49%) women.

**Description:** Similar trainings as described above were conducted at cluster level to GSMS members to ensure more outreach of the knowledge to village level.

**1.1.2.5 Farmer Field Schools (FFS):** During the reporting period, 178 Farmer Field School sessions were conducted in 42 clusters in which over 5000 farmers actively participated and observed the results of various crops.

**Description:** Farmer Field Schools were conducted by STOs with the objective of increasing farmers' awareness on life cycles of crops, pests & diseases, life cycles of friendly and enemy insects, non-chemical ways of controlling pests and diseases etc through observing, discussing, learning and doing approach as a group. Further the FFS was involved in experimenting and demonstration of the drought mitigation technologies, particularly providing protective irrigation using various sources & methods during dry spells. These FFS will be continued till the end of cropping season and concluded with field day where learning's will be shared with all farmers.

### **1.1.3 Demonstrations on SA cropping systems & practices:**

The critical challenge for farmers in Anantapuramu District is to manage moisture stress and save crops when rains are delayed. If this is solved then all other problems become manageable. For the past few years AF has been looking at this challenge in several ways and has been developing, promoting and popularising various drought mitigation measures. In this direction the following measures were implemented during the reporting period.

**1.1.3.1 SA Rain-fed demonstrations:** During the reporting period, rain fed *kharif* demonstrations were carried out in 445 ha of land belonging to 1114 farmers including 690 (62%) farmers from SC/ST/BC communities. In addition to this, AF partnered with state Government in implementing Navadhanya program (9 crops programme) to promote multiple and mixed cropping system. 4320 'Navadhanya Seed Kits' containing nine types of Millet, Pulses and vegetable seeds were distributed to rainfed farmers in the month of June.

**Description:** AF has been developing, promoting and popularising drought resilient cropping designs with millets, pulses and castor as intercrops/mixed crops. In order to

promote crop diversification, new and improved varieties crops of Caster, Green gram and Red gram, have been made available to farmers within villages. GCH-7- Caster, LRG-52- Red gram and NRI Shakthi- Green gram have been introduced during this crop season as the varieties have proven high yielding and resistant to pests.

**1.1.3.2 Chemical-free crop demonstrations under irrigation:** The focus of these demonstrations was to reduce indiscriminate usage of agro-chemicals in irrigated crops like Tomato, Groundnut and Chilli through following various agronomical and mechanical measures. During this year, Border crop of sorghum, bajra were encouraged in irrigated plots. These crops act as pest traps to protect from spread of pests across the fields.

**1.1.3.3 Fodder development in common lands:** During the reporting period, perennial fodder seeds have been sown in 70ha of common lands to secure fodder in summer months. This fodder area will feed 70 bovine cattle and 500 small ruminants for over three months in summer and will benefit 62 farmers.

**1.1.3.4 Compost Units:** During the reporting period no new units were supported, but started following up with families who have not been re-using the existing units.

#### **1.1.4 Establishment of Tree Crop Models:**

**1.1.4.1 Gap filling of fruit Plants:** The rain fed tree crop models promoted by AF have been up scaled by the state Government in the last 5 years. It was observed that some of the plants (particularly Mango) have died in plots supported by AF due to drought. Those farmers have requested for saplings for gap filling. In order to meet their requirements 15000 good quality fruit tree saplings were provided during the reporting period.

#### **1.1.4.2 New Tree Crop plantation & watering the existing plantations:**

During the reporting period, AF provided training inputs through FFS on protecting the young tree plants, pest & disease management, productivity enhancement and market intelligence etc.

#### **1.1.4.3 Raising & Maintenance of Nursery of fruit, fodder & bio-mass plants:**

The nursery was raised and maintained at the AF Campus. During the reporting period over 90,000 plants of fruit, timber, fodder and bio-mass plants were raised and maintained in the

nursery. These plants were given to families for backyard horticulture, farm forestry and fodder development.

#### **1.1.4.4 Campaign on Productivity Enhancement of tree crops:**

This activity is due to be taken up in next half an year between October 2016 and March 2017.

#### **1.1.5 Backyard activities for nutrition development:**

These activities were not taken up during reporting period due to lack of rains in August and September.

#### **1.1.6 Promotion of Drought Mitigation Technologies:**

Timely and surplus rain fall during June & July months resulted high demand for mechanized sowing equipment AF's efforts during previous year in popularizing sowing equipment to support small rain fed farmers resulted in good acceptance for such equipment and augmented the extent of area sown.

**1.1.6.1 Promotion of Ananta Planter (Custom hiring by CBOs):** Due to increasing mechanisation in agriculture operations, tractors have replaced the traditional draught animals which were earlier used for farm operations. In every village 5 or 6 big farmers own tractors and rent them to all other farmers. Hence small & marginal farmers, forming large chunk of the farmers, compete with big farmers to get tractor drawn planters on hire in order to complete sowing before the short lived soil moisture dries up. However, the tractor owners prefer to rent them to big farmers. The traditional planters available in the village are not of high efficiency and do not cater to the urgency of sowing requirement of large number of farmers in the villages. Ananta Planter is new equipment designed by local Agriculture Research Station. It is 4 times more efficient than traditional planters, hence very helpful in low rain fall conditions in which the soil moisture dries up very quickly in just 2 or 3 days only. But the Ananta Planter was originally designed for sowing only groundnut. So, AF improved the Ananta Planter to sow millets and pulses as well and was successfully tested on the farmers' fields during the previous year.

During the year 2016-17, 10 Ananta Planters were provided to the 8 MSMS, in order to lease them out to the farmers for efficient sowing. This arrangement had enabled the small & marginal farmers to sow in time. Various crops like millets, pulses, oil seeds etc were sown

in time covering over 800 ha of land benefitting over 1000 small & marginal farmers who were desperate to sow the crops before the soil moisture dries up.

**3.2.2 Watering furrows & manual sowing technique (Row water sowing):** AF introduced this technique during the last year on a small scale for establishing lesser plant density crops like castor and red gram. A water tanker with 5000 litres of water would be required for sowing castor and red gram on one acre of land. Shallow plough furrows were opened at every 6 feet and seeds were manually dibbled in the furrows. Water drawn from outside in a tanker was let in the furrows using pipes and the furrows were closed with a plank. With the previous year experience, demonstrations of this method were carried out on 135 ha of land belonging to 162 rain-fed farmers in the project area. The seed germination was good in all 114 ha. Since, the dry spell continued from July end to mid September, Protective irrigation is provided to all such plots hoping that rains during subsequent months will ensure the survival of the standing crops.

#### **1.1.6.2 Demonstration of lining of farm ponds for enabling protective irrigation:**

During the current reporting period AF provided support for lining of 50 farm ponds. Out of the total 142 Farm ponds constructed till now, only 54 ponds harvested rain water ranging from 50 to 80% of their holding capacity. Water harvested in 24 farm ponds is utilized to provide protective irrigation to 16 ha of standing crops. AF successfully demonstrated the usefulness of the farm ponds in protecting rain fed crops from droughts. AF was successful in drawing the attention of the policy makers consequently construction and lining of farm ponds has been promoted by Government.

#### **1.1.6.3 Demonstration of drought mitigation by protective irrigation for rain-fed crops:**

During the reporting period, AF supported 1430 farmers in providing protective irrigation of standing crops in 1430 ha, facing moisture stress due to long & severe dry spell from 1<sup>st</sup> week of August to end of September month across the project area. Water for protective irrigations has been accessed from various sources like Farm ponds, Tractor drawn tankers, Tanks and canals depending the availability, cost and ease of mobility. Effect and economics of this effort will be concluded in next reporting period.

The other technologies & practices for protective irrigation promoted by AF are:

- **Tractor drawn Micro (Protective) Irrigation Units:** During the previous year, AF designed and developed mobile micro protective irrigation unit using a truck with

tanker. It was used for demonstration of protective irrigation as a technique to save the rain fed crops during the long dry-spells. Last year AF innovated and tried tractor drawn tankers which are locally available in the villages for protective irrigation. This year AF improved it by fitting sprinklers and mini drip irrigation system for increasing water use efficiency. During the reporting period, AF demonstrated the protective irrigation to red gram on 600 ha of land.

- **Sharing of ground water among farmers:** AF has been promoting mutual cooperation among SMG members for the past 2 years. This initiative not only helped the members in reducing the cash transactions in agriculture operations through exchange of labour, implements and bullocks, but also created fraternity among families in SMGs. This year, AF encouraged GSMS members to explore the possibilities of irrigation farmers sharing water for providing protective irrigation to the neighbouring rain fed farmers during dry spells. During the reporting period, protective irrigation was given through this method to 783 ha benefitting 640 families. It had created more affinity among farmers and enhanced their level of mutual cooperation.

It is heartening to see that good number of farmers within and outside the project area practicing protective irrigation. This practice further gained momentum as the State Government taken up this activity all the districts for protecting crops.

#### **1.1.6.4 Research on drought mitigation technologies:**

AF has been constantly searching & researching on farm implements that could help small & marginal farmers to retain moisture and to reduce drudgery, particularly for women.

During the reporting period, AF developed prototype of a cost effective 'single tyre tractor' to execute multiple farm based activities like ploughing, sowing seeds, spraying of pesticides and weeding aiming to support small farmers. Performance of this prototype is promising, yet require little more tweaking.

**Cycle Weeder/seeders:** Cycle weeder is a simple implement innovated by a progressive farmer in Karnataka State by using a bicycle wheel for smooth and easy movement of the weeder on harder soils for weeding and inter-cultivation. AF promoted cycle weeders manufactured locally by some skilful agri-implement makers in the project area. These weeders received excellent response particularly from women, small farmers and wage labourers. Cycle weeders are operated by manual pulling it and increased the efficiency in weeding, saved costs and also reduced the drudgery for women. A lot of farmers started to

purchase it on their own after observing the benefit of it. They cost only Rs. 1500/- each. Irrigated farmer with small landholding found it very handy in weeding operations. About 800 cycle weeders were provided to small irrigated farmers with less than 2 acres and to farm labourers who used for speedy and easy weeding operations.

#### **1.1.7 Piloting Rain fed Farmers' Cooperatives (RFCs):**

The Pilot Project initiated during the last year by promoting 7 Rain-fed Farmers Cooperatives with 170 farmers as members. The objective was to explore how small & marginal rain-fed farmers can achieve livelihood security in the drought prone Anantapuram district. The cooperative strategy includes (a) reducing cost of cultivation by encouraging mutual cooperation among the members, (b) enhancing farm productivity by intensively promoting drought mitigation measures, (c) promoting Sustainable Agriculture practices and (d) diversifying livelihood portfolio of the rain-fed farmers by integrating collective farming, off-farm and non-farm livelihood activities on collective basis for generating additional income for the farmers.

During the reporting period 6 RFCs continued their monthly savings regularly and built a capital of Rs. 6,18,580 for meeting small financial needs of farm activities. One RFC (Seegalapalli group) took up rearing of Ram lambs by investing Rs 1,25,000/- as their contribution out of a total investment of Rs 2,50,000/-. The remaining RFCs are looking ahead to start their third collective business enterprises from October month onwards as the period is considered to be congenial in terms of generating investment, fodder and time.

With the implementation of livelihood activities, the RFC members gained hands-on experience both on internal group management and on understanding market dynamics. As the level of experience increased, the members are more confident in handling the next business cycles.

#### **1.1.8 Piloting Low Carbon Farming - Pilot Project:**

AFEC is continuing LCF pilot work in selected villages but since we have not yet found a prospective buyer the activity is not picking up momentum.

**1.2 Diversified / Alternate Livelihoods:** AF has been promoting alternate diversified livelihoods for educated/under educated rural youth by imparting requisite skills either in-house at AF Driving Schools, Garment making Training Centres and by developing linkage with Vocational Training Institutes and potential employers from private sector industries.

- AF has started new training trade-‘Two wheeler mechanism’ during this reporting period. A well equipped training facility is established to offer training in two wheeler mechanism covering atleast 6 types of two wheelers. The facilities available for this trade can train a minimum of 120 youth.
- 128 youth were trained in LMV driving and 72 of them were employed and started earning Rs. 6000/- to Rs. 8000/- per month as professional drivers.
- A village level survey has been conducted to identify rural under educated youth in the project area. The survey is aimed to get the details of education, skills & interests and to know the preferences of the youth such that a comprehensive data is available to assess the situation and plan for more acceptable and beneficial trades of livelihoods. More than 1550 youth have been surveyed during this period and the information is being collected and compiled.

### **1.3 Policy Advocacy & Public Opinion Building:**

AF Ecology Centre in collaboration with other NGOs, CSOs, progressive writers, cultural groups and farmers’ organisations has been working on public opinion building and policy advocacy on important issues of Anantapuram district like droughts and water crisis, policies related to rain-fed agriculture, gender, MGNREGS, crop insurance, Community Managed Seed Systems and input subsidy for rain-fed crops including long term issues of drought and desertification in the district.

### **2. Streamlining of MIS with the support of ‘Verdantum’:**

During the reporting period an effort is been made to develop a hassle free Management Information System (MIS) for availing accurate and reliable information from field. All the field staff had been provided smart phones along with the VERDANTUM Application which helps in timely collection of data along with photographs. ‘Verdantum’ is a software application developed Mr. Rohit based in Hyderabad. Verdantum is a social network platform supporting development organisations in managing data through IT solutions. This initiative is helpful in receiving field information, data and pictures in real time. Data is also shared among the staff with this application. It also helps in consolidating data at different levels like cluster, Area and Project. This also ensures smooth two way information flow. AF is trying to establish this MIS to increase efficiency of the project through better decision making. This app is very user friendly and eco friendly.

**17<sup>th</sup> June, 2016**

**WORLD DAY TO COMBAT DROUGHT AND DESERTIFICATION**

**1. INTRODUCTION:**

Accion Fraterna Ecology center (AF-EC) has been consistently working on reviving and sustaining rain fed farming in drought prone Anantapur district. As the District is severally affected by droughts and desertification of this rain shadow area AF-EC has been supporting farmers to face the challenges of nature like drought, desertification, and climate change by improving the farming practices and technologies and promoting various activities for improving ecology and environment. AF has been actively working with Government Agencies, CBO's, NGO's, CSO's in building the missing links and implementation of policies which are favorable for agriculture and other rural livelihoods to the poor.

**2. BACKGROUND OF WORLD DAY TO COMBAT DROUGHT & DESERTIFICATION:**

In 1995, UN has declared June 17<sup>th</sup> as "World Day to Combat Drought and Desertification" every year to draw the attention of every stakeholder, to the problems of drought and desertification. During the past two decades, consecutive droughts of different degrees have severally affected Anantapuramu District. Efforts at various levels are made by different players like the State, Agriculture Research Institutions, NGO's, CSO's etc in order to minimize the ill effects of drought on farmers of this district. In this context being a proactive organization, AF-Ecology Center has been conducting a mass campaign involving large number of stake holders every



year on this day. This year also a major event was conducted on 17<sup>th</sup> June 2016 at RK Function Hall, Anantapuramu.

### **3. OBJECTIVE OF THE CAMPAIGN:**

The campaign was aimed at show-casing and propagating proven and practically viable solutions for drought mitigation and enhancement of rural livelihoods. The rainfed farmers and farm labour were the focus of the event. The campaign was used as a forum for demonstrating and experience sharing by the farmers who adopted various drought mitigation technologies, practices and implements. This campaign was also aimed at to create a hope among the farmers as it exhibited various ways & means to address the drought. The policy makers from the district as well as at State level had also been invited to participate in order to expose various policy issues and sensitise to work for more farmer friendly policies.

### **4. PARTICIPANTS:**

About 1270 small and marginal rain fed farmers including 636 women farmers from 230 project villages have participated in the campaign. The campaign was successful in drawing rain fed farmers who are most vulnerable to the frequent droughts as well as the CSOs, policy makers, subject matter specialists and intellectuals. Dr. Y.V.Malla Reddy, Director AF-Ecology Center facilitated the event. The distinguished participants for the campaign include as below besides the farmers:

- 1) Dr Y V Malla Reddy, Director, AF Ecology Centre.
- 2) Dr T Yellamanda Reddy, CSA, AF Ecology Centre.
- 3) Sri Lakshmi Kantham, Head, Watershed Programmes.

### **GOVERNMENT FUNCTIONARIES:**

- 4) Dr K Raja Reddy, Director of Extension, A.P. Agriculture University.
- 5) Sri P V Sreeram Murthy, Joint Director of Agriculture, Anantapuramu.
- 6) Ms Padmalatha, Special Officer, ARS (Agriculture Research Station), Rekalakunta, Anantapuramu.

- 7) Sri Ravindranath Reddy, Principal Scientist, Agriculture Research Station, Anantapuramu.
- 8) Ms Bargavi, Principal Scientist, Agriculture Research Station, Anantapuramu.
- 9) Sri P Subramanyam, Retried Executive Engineer, Minor Irrigation. Govt. of A.P.
- 10) Sri Purushotham Reddy, Deputy Director, Groundwater, Department, Govt. of A.P.

#### NGO's

- 11) Sri Kristappa – RIDS, Anantapuramu.
- 12) Ms Bhanuja – REDS, Anantapuramu.
- 13) Sri Adinarayana – CSA, Hyderabad.
- 14) Sri Kullai Swamy – CERA, Anantapuramu.
- 15) Sri Basha – HRF (Human Rights Forum)
- 16) Sri Singamaneni Narayana – (Writers Association) Writer & Social Activist

#### PROGRESSIVE FARMERS FROM THE PROJECT AREA.

- a) Kundurpi Area: 1) Sri Ramesh, 2) Sri Chandra Sekhar
- b) Dharmavaram Area: 1) Sri Srinivasulu, 2) Ms Venkata Lakshamma, 3) Sri Konda Reddy, 4) Sri Siva Reddy
- c) Kalyanadurg Area: 1) Sri B K Govinda Rajulu, 2) Ms Hemalatha, 3) Ms Imambee, 4) Sri Pathanna
- d) Kuderu Area: 1) Ms Naga Lakshmi; 2) Sri Ramudu; 3) Ms Akkamma.

The above 10 progressive rain fed farmers were special invitees who shared their hands on experience in adapting the technologies, practices and implements promoted by AF-EC in overcoming the challenges of droughts. This event created an opportunity of face to face interaction between senior

Government officials, farmers NGO's and CSO's, Research Bodies, Academic Institutions etc., on one platform.

## **5 PROCEEDINGS OF THE CAMPAIGN:**

### **5.1 EXHIBITION OF VARIOUS TECHNOLOGIES, IMPLEMENTS & PRACTICES FOR DROUGHT MITIGATION:**

An exhibition was organized at the venue with stalls showing the various agricultural technologies, implements, practices and livelihoods aimed at drought mitigation. Success stories of farmers and photos have been a great attraction as the farmers clearly understood &



appreciated the solutions that they were offered for managing droughts and improving livelihoods. Various stalls were set up exhibiting SA crop models, water and soil conservation activities and low cost farm inputs. Live demos were conducted and all participants developed a clear idea about the drought mitigation practices like sowing crops efficiently

with Anantha Planter, Cycle Seeder cum Weeder, Cement lining of Farm Ponds various methods of Protective Irrigation with Drip Irrigation and Sprinklers. This has drawn the attention of Govt. Officials, CSOs, subject matter specialists, intellectuals, cultural activists and the farmers immensely.



## **5.2. EXPERIENCE SHARING & DELIBERATION:**

Meeting started with Cultural Programmes and the artists presented the importance of the Sustainable Agriculture, importance of diversified cropping, food crops and Water Conservation through ballets and songs. The Director of AF-EC Dr Y V Malla Reddy, and other dignitaries inaugurated the event lighting the lamp at 11.30am followed by Dr. Y.V.Malla Reddy's inaugural message. In his inaugural message, Dr. Malla Reddy warmly welcomed all the participants for the occasion and he highlighted the fact that Anantapur District has become a live example for the consecutive droughts and is heading to become a Desert. He expressed fear that the climate change has intensified the Drought & Desertification in this district, so the stakeholders had a primary responsibility to sensitise the farmers the Government and other stakeholders on how to overcome droughts and desertification. He particularly emphasized that this campaign is aimed to expose and debate the innovative technologies practices and policies to mitigate the drought. Dr.Y V Malla Reddy said that top priority is given for adopting eco-friendly and climate smart agriculture practices. He enlightened the farmers to take the advantage of Government's farm ponds scheme for harvesting rain water on the farm itself for providing protective irrigation during long day spells and or recharging of bore wells in the farm lands.

## **5.3 EXPERIENCE SHARING BY THE FARMERS:**

- ❖ Mr. Ramesh, a dry land farmer of Kundurpi area has built a farm pond in his 10 acres of land to harvest rain water and use for watering the fruit plants in 2 acres. The farm pond is lined with cement so that can hold water from seepage for more than 1.5 months. Apart from watering the fruit plants, (mango trees) he gave supplemental irrigation to Castor crop and saved from drought in 10 acres during a long dry spell in 2015 kharif. This activity rewarded him saving the fruit trees as well as castor



crop from drought. He suggested farmers to stop depending on mono crops, particularly Ground nut. His experience gave confidence to small farmers in saving their standing crops with establishing farm ponds.

- ❖ Ms Hemalatha, a dry land farmer from Obulapuram Village elaborated on the advantages of Mana Vithana Kedram (Community Managed Seed System or CMSS) programme being implemented in her village. Ms Hemalatha, ASMS leader shared the experience of seed management. All the farmers were earlier dependent on the subsidy seed provided by the Government. But, the scenario changed this year with AF's intervention. AF facilitated the farmers to preserve the seed from their own crop using three layer bags which were provided by AF. The farmers followed the instructions as per the advice of AF and stored the same for next season. This has helped the farmers with timely seed supply at home itself during the sowing season at no costs. The cost of the 3layered bags come at a very small price. And the important thing is that it benefitted every family in the village.
- ❖ Sri.Govindarajulu, Mallapuram village inspired the participants by sharing their collective work that paved way for secured livelihood by mitigating the drought through rain fed fruit tree crops in the village. 18 farmers have taken up rainfed tree crops in 30 acres supported by AF EC. Farmers dug 3 big farm ponds (each one to cater for 6 farmers) lined with cement and mud mixture, a low cost technology. During the first year they were watering plants with water transported from far away by a tractor tanker by paying Rs 700/- for each water tanker. Once the group established 3 farm ponds lined with cement all the farm ponds were filled up twice and once partly with the rain in between Aug 2015 to May 2016. The water from these farm ponds, was used by 18 farmers and saved around Rs70,000/- which otherwise had to pay for the water and the tankers. He expressed his satisfaction which not only saved money but also gave confidence to the farmers in protecting their tree crops under adverse rain conditions.



❖ Ms Nagalakshmi, Sivarampeta village expressed the benefits that the farmers of her village gained by group savings. In her village six groups are in progress and around 120 families are doing savings to a tune of Rs. 12000/- per month. This practice was in force since 2.5 years and as of now Rs. 4 lakhs was accumulated. The savings amount is being loaned for lending to the families for their financial needs like purchasing the seeds, cattle feed, food grains, agricultural inputs, paying school fees, medical expenses etc. The management of savings, lending and recovering the loans is done by the Group Representatives selected by the groups. So, for there one no defaulters. The Group has set simple norms for borrowing and lending, which are observed by one and all. Every month 20 to 30 families are borrowing from the savings amount. This activity has also strengthened their Groups and they are able to implement all development activity effectively. Most of them benefited with these savings and she expressed happiness for promoting this activity and urged all the members to promote savings and credit for strengthening their Groups and improving their standard of living.

❖ Sri. Konda Reddy, Kothapalli Village shared his experience on cultivating inter / mixed crops as against - mono crop of groundnut. He reduced the extent of groundnut crop and started crop rotation with Jowar, red-gram and other food crops. He followed all the SA (Sustainable Agriculture) protocols as



advised by AFEC. Mr. Reddy observed that because of crop diversity some crops yielded even during drought years and the improvement in land fertility. There were also substantial savings on the cost of the cultivation. Now, he is encouraging his fellow farmers to opt for climate smart crop rotation & inter / mixed crops with millets, pulses & vegetables instead of going for monocropping of groundnut.

❖ Sri. Pathanna of Battuvanipalli village is member of Management Committee. He has elaborated on how his village developed by implementing the NABARD funded watershed project by AFEC for the

past 6 years. Post watershed development, a livelihood development fund is established by forming a MACS for the whole village. Out of 188 members 146 members have availed loans ranging from Rs.10,000 to Rs. 50,000 for livelihood development (dairy products, tailoring, grocery, business cattle rearing etc). This gave for the landless and agriculture labor also an opportunity in the MACS for availing credit for taking up diverse livelihoods to tide over from the droughts.

Farmers who shared their experiences in their own language & slang generated great degree of hope and aspiration among the farming community.

Speaking on the occasion, Joint Director of Agriculture Mr. Srirama Murthy, called upon the farmers to take full advantage of Government schemes of establishing farm ponds for providing protective irrigation to the rainfed crops and or recharging of ground water for boosting the water in the bore wells. He said the recent rains and filling of ponds with rain water proved that they are one effective way of water conservation and drought mitigation. He also emphasized on the need for adopting climate smart agriculture practices and conservation of ecology. Farmers should cultivate inter crops with pulses and millets as a healthy climate resilient cropping system. He lauded the effort made by the farmers of Anantapuramu by showing interest in sustainable agriculture and gave due credit to AF-Ecology Centre for their contribution in this regard.

Dr. Raja Reddy, Director of Research, Archarya NG Ranga Agriculture University, advised farmers that due to changes in climatic conditions the seasons have changed their behavior. In this context, he urged every citizen should strive for protecting natural resources for the future generations. He said preventing soil erosion is in the hands of farmers which will ultimately help in preventing desertification. He advised the farmers not to depend on the subsidy seed and they themselves should preserve the seed for the next crop season. He also appealed to farmers to avoid crops that require more water. He shared the importance of drought resilient cropping systems like Navadhanya, Tree crops and Fodder development instead of depending on the mono crop of Groundnut. So, if we go for a healthy crop mix each and every

farmer will be benefited and ecology and environment also would benefit. He reiterated that every farmer should take an oath and be courageous to defeat droughts occurring in this district.

### **8. OUTCOME OF THE EVENT:**

The event has been successful in bringing out the drought mitigation technologies and livelihoods to large number of farmers and other stakeholders both in the form of experience sharing of farmers who directly benefited, live exhibition witnessing the technologies practices and implements suitable for this agro-climate. These experiences coupled with the inspirational messages by the speakers gave farmers a feeling of hope for farmers for mitigating the adverse impacts of droughts and desertification. They understood the need for growing climate resilient crops, recharging ground water and minimize digging of new bore wells. Government officials appreciated various technologies and practices that can be scaled up by Government by bringing appropriate policies. They also appreciated the involvement of farmers particularly women in the campaign. The electronic and print media gave a massive coverage of the whole event and created positive impressions in the minds of farmers, officials NGOs, CSOs and the public. The media coverage of the campaign reached to a much longer audience in the district. Finally, all the participants expressed positive applause and hope for fighting the drought and sustaining rain fed farming.