

Annual Report 2019-2020

Empowering rainfed farmers towards agro-ecology, drought mitigation, natural resources development, sustainable livelihoods and enabling policy conditions in Ananthapuramu

Our dharma

- Concern for others
- Work beyond duty
- Pursuit of excellence in work
- Reaching as many needy people as possible

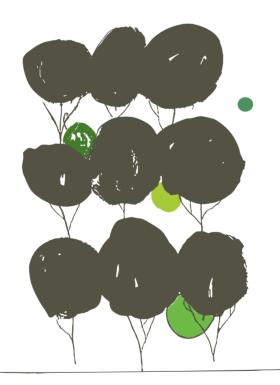
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Our core values

- Compassion, concern, honesty, sincerity, hard work
- Equality of human beings, particularly women, poor, disadvantaged
- Concern for nature, biodiversity, ethics of conservation, sustainability
- Excellence in execution of activities
- Inclusive, participatory in decision making, planning and implementation
- Transparency in all transactions and accountable to all stakeholders



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Our vision

All people in rural areas lead a respectable and dignified life with economic security, social equity, gender equity, in an atmosphere of democracy, peace, cooperation and community support; and all the people and institutions live as '*Eternal Trustees of Mother Earth*', and follow a culture of simple living and the ethics of conservation.

Our mission

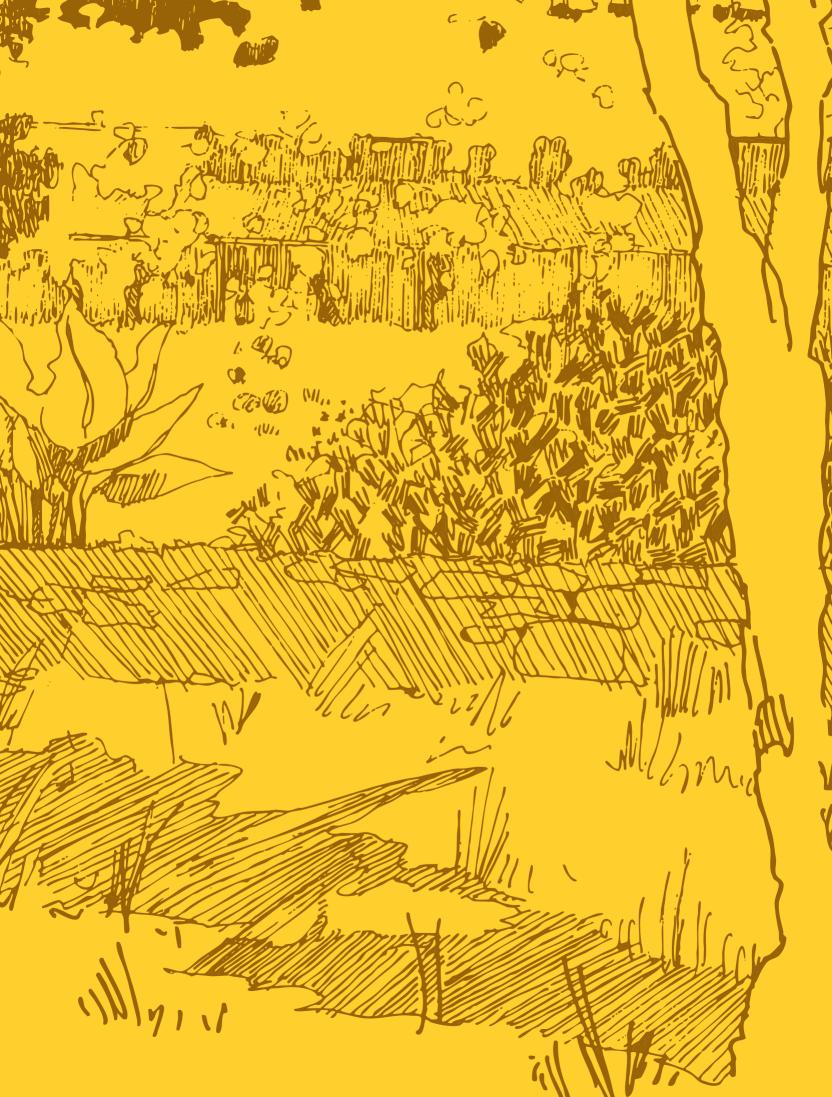
We are committed to enable rural poor farmers, particularly women, to free themselves from drought, poverty and all forms of discrimination, in order to live a decent life with dignity and self-respect.

Acronyms



AF-EC	Accion Fraterna Ecology Centre
AGEEWA	Achieving Gender Equality through Empowerment
	of Women in Agriculture
APDMP	Andhra Pradesh Drought Mitigation Project
APGB	Andhra <i>Pragathi Grameena</i> Bank
APO	Assistant Project Officer
APMAS	Andhra Pradesh Mahila Abhivruddhi Society
ASMS	Apex Sasya Mitra Samakhya
BC	Backward Classes
BoD	Board of Directors
BYP	Backyard poultry
СВО	Community Based Organisation
CDM	Clean Development Mechanism
CER	Carbon Emission Reduction
CMSS	Community Managed Seed System
CRZBNF	Climate Resilient Zero Budget Natural Farming
DPMU	District Project Management Units
DWMA	District Water Management Authority
FCN	Fair Climate Network
FPO	Farmer Producer Organisations
GS	Gold Standard
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit– German Society for International Cooperation
GSMS	Grama Sasya Mitra Samakhya
HEIDA	High External Input Destructive Agriculture
HMV	Heavy Motor Vehicle

ICT	Information and communications technology
IFAD	International Fund for Agriculture Development
IWMP	Integrated Watershed Management Programme
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
KfW	Kreditanstalt für Wiederaufbau – Reconstruction Credit Institute
LFA	Lead Facilitating Agency
LMV	Light Motor Vehicle
MACS	(Farmers) Mutually Aided Cooperative Societies
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MPEO	Multi Purpose Extension Officer
MSMS	Mandal Sasya Mitra Samakhya
NABARD	National Bank for Agriculture and Rural Development
OBC	Other Backward Classes
PPC	Primary Processing Centres
RDT	Rural Development Trust
RySS	Rythu Saadhikara Samstha
SADLP	Sustainable Agriculture and Diversified Livelihood Project
SMG	Sasya Mitra Group
SC	Scheduled Caste
ST	Scheduled Tribe
UNFCCC	United Nations Framework Convention on Climate Change
WDC	Watershed Development Committee
VWDC	Village Watershed Development Committee
WASSAN	Watershed Support Services and Activities Network
ZBNF	Zero Budget Natural Farming



Contents

Director's overview of 2019-20	02	
The journey so far	04	
Strategic approach	06	
Major interventions in 2019-20	08	
Sustainable agriculture and drought mitigation	09	
Sustainable Agriculture and Diversified Livelihood Project	10	
Andhra Pradesh Drought Mitigation Project	14	
Climate Resilient Zero Budget Natural Farming	17	
Achieving Gender Equality through Empowerment of Women in Agriculture	18	
Livelihood diversification (off-farm and non-farm)	22	
Youth Centre	23	
Non-farm and off-farm livelihoods for women	24	
Ecology, climate change mitigation and landscape development	30	
Integrated Watershed Development Project	31	
Soil Development Project (NABARD)	34	
Biogas Project under Clean Development Mechanism Project	37	
Sustain Plus Project	38	
Improved farmer incomes through cooperative action and market value additions	40	
Accelerating value chain benefits	40	
Farmer Producer Organisations	42	
Policy advocacy	45	
Our Human Resource	46	
Annexures	48	
Audit Report	58	

Director's overview



A year that started badly and ended rather happily for farmers.

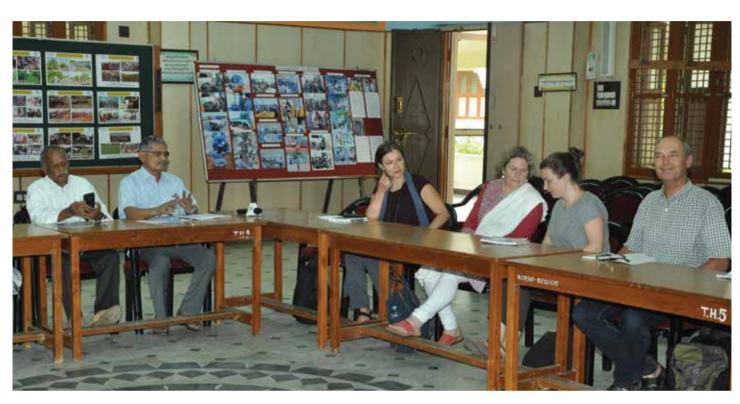
The south-west monsoon, forecast from June to August 2019, failed the farmers. The main crops could not be sown for want of rains in the sowing months of June and July. However, from September the rains were favourable. We campaigned with our rainfed farmers to plan for contingency cropping in September, instead of keeping their land fallow. In anticipation of a fodder shortage, we encouraged cattle and sheep rearers also to go for contingency cropping, not only in their own lands, but also leasing in others' lands to grow horse gram. We backed this with incentives of subsidised horse gram and jowar seed, to over 10,000 rainfed farmers and sheep rearers. Almost 15,000 acres were sown. This was a big hit because of favourable late rains during the returning, north-east monsoon. It gave farmers partial relief from economic distress and fodder scarcity.

A major behavioural change, fostered by AF-EC, is of mutual cooperation within the Sasya Mitra Groups (SMG). Farming households have begun pooling labour for farm operations like sowing, weeding and harvesting, which are labour intensive and time bound. They share farm equipment and bullocks with each other. This has brought down the cost of cultivation and the need for cash, giving farmers a shared sense of control in managing farm operations. This trend is nurturing cohesion in the SMGs.

Accion Fraterna Ecology Centre is more and more convinced that its strategy of promoting sustainable agriculture and diversification of livelihoods for poor rainfed farmers is highly relevant and effective; particularly its focus on women and youth. AF-EC's strategic interventions on low-cost natural farming, drought mitigation and combining annual crops and tree crops, together with livelihood diversification in non-farm sector for women and youth have been very effective. The interventions are low-cost, economically remunerative and gender friendly. They have other desirable impacts like food and nutritional security for the family and agro-ecology. The impact is visible in the community Sasya Mitra Groups and their federations, in emerging women leadership and voice in the project area: women farmers make up 75% of the 16,000 SMGs.

There was a change in the governments at central and state levels. The farmers' distress in the region had reached its peak over three consecutive drought years and the people greeted the new governments with hope. The new government constituted the Andhra Pradesh Agriculture Mission to advise it on policies concerning farmer distress and agricultural crisis. Accion Fraterna Ecology Centre was nominated as a member of the Agriculture Mission. This was in recognition of AF-EC's contribution to farmers' welfare, particularly rainfed farmers, who represent approximately 70% of the 6 million farmers in the state of Andhra Pradesh. We have, thus, been able to play a proactive role in agricultural policies of the government. The new governments are responsive to the problems of farmers and have been coming up with a number of policies and initiatives to redress the issues of the farm sector.

Six senior members of the German Parliament visited us, accompanied by Ms. Roswita Kupke, Mr. Martin Remppis and Ms. Anja Esch from Bread for the World. They visited the fields, interacted with farmers, particularly



women. They also interacted with the District Collector and his team of senior district officials.

As the financial year came to an end in March 2020, Covid-19 entered India and the threat of a serious pandemic loomed large! And suddenly the government announced a countrywide lockdown from 24th March. The unprecedented story of the pandemic and how we responded will appear in the next report.

On behalf of the people, staff and the Board of Trustees, I want to express my heartfelt thanks to Bread for the World, our core partner, for their understanding and continued support of SADLP. I thank the Government of Andhra Pradesh, particularly Department of Agriculture, District Water Management Agency (DWMA), Government of India, International Fund for Agricultural Development (IFAD), Azim Premii Philanthropic Initiatives (APPI), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Walmart Foundation, National Bank for Agriculture and Rural Development (NABARD), Fair Climate Network (FCN) for their financial support to various projects. I thank Agricultural Development & Training Society (ADTS), Rural Development Trust (RDT), Watershed Support Services and Activities Network (WASSAN), Mahila Abhivruddhi Society, Andhra Pradesh (APMAS), Krishi Vigyan Kendras, Regional Agriculture Research Stations and a network of activists. friends and well-wishers from CSOs, government, practitioners and experts who have been with us in our efforts.

I wish to thank all the people, the SMGs, their federations, Farmers' Mutually Aided Cooperative Societies, Watershed Development Committees and other participating groups, who have partnered with us in the fight against drought and poverty.

Last and most important, I thank our Board of Trustees and our personnel for working with passion in pursuing the organisation's goals and objectives.

Ila Redel

Dr. Y.V. Malla Reddy Director

The journey so far

Accion Fraterna Ecology Centre was founded by Father Vincent Ferrer in 1982 and is registered under the Indian Registration Act, 1908. Accion Fraterna works with rainfed farmers to find solutions to the problems of drought and poverty in the chronically droughtaffected district of Ananthapuramu in Andhra Pradesh. Accion Fraterna currently works directly with more than 60,000 families of small and marginal rainfed farmers across 14 mandals—Atmakur, Beluguppa, Dharmavaram, Kalyandurg, Kuderu, Kundurpi, Rapthadu, Settur, Kanaganapalli, Ramagiri, Amarapuram, Brahmasamudram, Gummagatta and Kambadur—of Ananthapuramu district.

dalit and tribal

Accion Fraterna is, today, in a position to demonstrate the effectiveness of community-centric approaches and practices in mitigating the ill effects of drought and in improving livelihood security through practices and programs on sustainable agriculture, climate resilient cropping systems, drought management, watershed development, job-oriented training and skill building and income diversification. Policy advocacy and community-centric lobbying has helped us mainstream our experiences into government programs and schemes.

1982	1986	1995
Awareness on poverty and development of dalits and tribals	From farm labour to farmers: an upward social mobility	Landscape-wide watershed development
Exclusive focus on dalits and tribals; improving awareness of government programs addressing poverty, illiteracy and health	Focus on participatory development of dalit and tribal landholdings for natural resource management, drought mitigation, soil and water conservation activities with the	Shifted to area approach, micro- watershed development activities following ridge-valley treatment in order to improve natural resource endowment for all farmers, not just

objective of mainstreaming dalits and

tribals from farm labour to farming



2007

Sustainable rainfed agriculture for small and marginal farmers

Leveraging government's MGNREGS initiative and investment in watershed development, concentrated on making rainfed agriculture drought resilient and sustainable

2017-18

Drought mitigation, sustainable farming systems and diversified livelihoods

Intensified work on drought mitigation technologies and cropping systems in rainfed agriculture and promoted skill based livelihoods. Started being recognized as knowledge resource organisation for scaling through GoAP projects

2019-20

Agro-ecology, regenerative agriculture introduced under Community Natural Farming Project

Emphasis on alternative and supplementary livelihoods for women and under-educated youth in nonfarm sector, while continuing efforts on sustainable agriculture and drought mitigation

Strategic approach

- Promoting vibrant peoples' institutions to actualise their potential and access opportunities with government banks, private sector, NGOs. Gender and social equity are an integral part of people's institutions.
- Developing agro-ecology models based on integrated farming systems and strategies for coping with droughts and enabling rainfed farming to be remunerative and regenerative.
- Diversification of family livelihoods with particular focus on women and under-educated youth in order to provide livelihood security.
- Demonstrating farming technologies, practices and models that are proven, cost effective and sustainable to farmers, government functionaries, policy makers and CSOs so that they can be scaled by replication across the state.
- Public opinion building and policy advocacy for pro-poor and pro-environment farming policies and livelihood programmes.





Major interventions in 2019-20

Sustainable agriculture and drought mitigation

- Sustainable agriculture (natural farming and drought mitigation)
- *Palle jeevam* (Andhra Pradesh Drought Mitigation Project)
- Climate Resilient Zero Budget Farming (CRZBNF)
- Achieving Gender Equality though Empowerment of Women in Agriculture (AGGEWA)

Livelihood diversification (off-farm and non-farm)

- Youth Centre/ Training of youth in job-oriented skills
- Non-farm and off-farm livelihoods for women

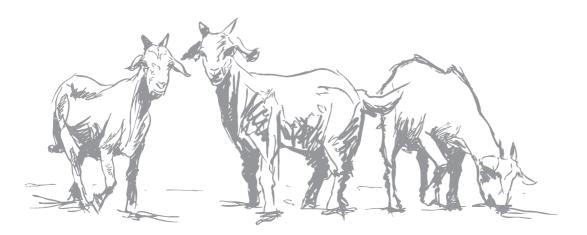
Ecology, climate change mitigation and landscape development

- Integrated Watershed Development Project (IWMP)
- Soil development projects (NABARD)
- Biogas project under Clean
 Development Mechanism (CDM)
- Sustain Plus project (solar energy for rainfed farmers)

Farmer Producer Organisations, farm services, agri processing, value addition and marketing

- Accelerating value chain benefits for improved incomes and nutrition for consumers
- Farmer Producer Organisations (FPOs/ MACS Ltd)

Policy advocacy



Sustainable Agriculture and Drought Mitigation



The sustainable agriculture and drought mitigation project promotes natural farming, climate-smart farming systems, contingency cropping, drought mitigation technologies and economies of scale as strategies to address uncertain rainfall and limited financial resources of smallholder farms. Kasamma from the Boyalapalli village says that growing fodder is not a new practice. But market demand for cash crops has disincentivized and replaced contingency planning. This year's yield has ensured Kasamma fodder for the entire year.

Sustainable Agriculture and Diversified Livelihood* Project (SADLP)

SADLP is the core of AF-EC and is supported by Bread for the World, Germany. Its focus is demonstrable livelihood improvement of rainfed farmers and farm labour through drought mitigation and sustainable agriculture. It promotes climate resilient, regenerative cropping systems, agro-biodiversity, nutritional intercrops and drought mitigation technologies and practices. This has led to favourable policies and new schemes for drought mitigation in not just Ananthapuramu but also in other rainfed regions in the state.

Achievements in 2019-20

- Direct outreach to 20,000 droughtaffected farmers, of a population of 1,00,000 farmers in 230 villages.
- Focus on SC, ST and OBC, constituting 80% of the 20,000 families.

68% families represented by women

- Community participation, savings and credit.
- 784 Sasya Mitra Groups (SMG) at 94% participation.

16,772 families, with a representation of 12,650 women.

- Rs. 6,80,00,000/- savings as of 31 March 2020.
- 12,413 SMG members availed loans from their SMGs for livelihood improvement, crop investments, children's education or health needs.

Farmer Producer Organisations' (FPO) initiatives

- Eight FPOs partnered with Andhra Pradesh State Seed Development Corporation Limited (APSSDCL)'s drive to procure 10563.87 quintals of groundnut seed as part of Community Managed Seed System (CMSS). The total sales were for Rs. 7,53,01,625/- and the profit earned by FPOs in this business was Rs. 38,22,786.69/-.
- Nine FPOs, with turnover of Rs. 50,00,000/- and profits at Rs. 4,00,000/-, from farmer shop trade.
- Collaboration with government agency, Andhra Pradesh Oil Federation (APOILFED) on a groundnut



procurement centre opened by Settur MACS Ltd (FPO). It procured 35.95 tons of groundnut from 33 farmers at minimum support price (MSP), benefitting farmers additionally to a tune of Rs. 21,00,000/-, at Rs. 600/per quintal.

Gender

- Women's leadership and voice seen to be getting stronger in SMGs and federation discussions, decision making and implementation of program activities. Also observed at household level with women playing a more consultative role in decision-making.
- Over 1,000 women leaders have emerged in SMGs, federations and FPOs. At least 150 women are leading FPOs at district level, far beyond their own villages.
- Women membership in SMGs increased from 60%(from 11,374 households) last year to 68% (from 16,772 households) this year. 55% (433) SMGs are exclusively women. The convenors in all SMGs, GSSs, MSSs are women. 52% of the Board

Learnings

It is a hard and time-consuming task to inculcate the culture of formal organisational management approach amongst Board of Directors of FPOs. They tend to interact in informal ways as individuals and would like to conduct their businesses in the same fashion. The project is patiently cultivating adaptation of formal organisational systems.

 Crop diversification with food and nutrition-oriented intercropping of millets and pulses is picking up and gradually breaking the monocropping of groundnut. However, there is a strong need to enhance market gains by remunerative support prices, processing, value addition and marketing linkages.

*The diversified livelihoods part of this project is reported under off-farm and non-farm livelihoods diversification on Page 22.



of Directors (BoDs) in the existing nine Mutually Aided Cooperative Societies (FPOs) are women.

Sustainable agriculture

- Sustainable agriculture practices with additional benefits of Rs. 2,000/- to Rs. 5,000/- per acre were demonstrated to 5,300 farmers on 1,462 plots across 1,500 acres.
- Crop diversification as recommended by AF-EC was adopted by more than 6000 farmers, demonstrating increased incomes of more than Rs. 2,000/- per acre compared with mono-cropping with groundnut. Crop diversification also contributed to the food and nutrition security of farming households.
- 448 women farmers saved labour input/ labour costs of up to Rs. 2,000/- per acre by adopting cycle weeder/ seeder.
- 450 families used 4,300 threelayered bags to preserve their own seeds for the following season, thus saving seed purchase cost.
- The project promoted 305 livestock farmers to cultivate improved

varieties of fodder on 521 acres of land. This improved milk yields by about one litre per animal per day. Of these, 50 farmers have adopted storing of fodder through silage method, which has eased the fodder problem for cattle in summer months.

 The project promoted 1,059 household kitchen gardens, promoting balanced diet of a variety of vegetables and greens.

Drought mitigation strategies

- ▶ 5,600 farmers covered 14,500 acres with contingency crops of horse gram and jowar, yielding Rs. 4,000/- to Rs. 6,000/- per acre, and a total income of Rs. 7,25,00,000/.
- Protective irrigation, as recommended by AF-EC, was adopted by 680 rainfed farmers. This saved crops in over 1836 acres from drought. Yielded income of Rs. 36,72,000/- @ Rs. 2,000/- per acre.
- Dryland horticulture, to diversify land use and stabilise income to farmers, taken up by 1,250 farmers planting 2,10, 000 mango saplings.

Priorities for 2020-21

- Covid 19 has necessitated growing of diversified crops to improve nutritional intake of all family members. AF-EC has developed a rainfed natural farming model, which it will need to promote vigorously with SMG members in the coming year.
- Introduce a local volunteer cadre called karyakartha for facilitating SMGs.





How contingency cropping can make a difference to thousands of farmers

This year, 40% of the farmers in the project area could not sow the main crop of groundnut in June-July for want of timely rains. AF-EC mobilized farmers to prepare for contingency crops in the month of August 2020. Farmers were reluctant to proceed since input costs are high at Rs. 2,500/- acre for seed, sowing, harvesting etc., and returns are uncertain. AF-EC was able to convince 5,600 farmers, who grew horse gram and jowar on 14,500 acres. Providentially, subsequent rains were adequate and the farmers harvested at least one tractor-load of fodder and 200-300kg of grain, benefitting by Rs. 4,000/- to 6,000/per acre; and earning approximately Rs. 7,25,00,000/-.

The farmers who had taken up contingency cropping were overjoyed as they got some income in a drought year, versus none, while other farmers felt that they had lost an opportunity. This helped demonstrate the benefits of contingency cropping, with protective irrigation, if needed, as a strategy to mitigate the effects of drought. **Ms. Anasuyamma,** from Boyalapalli village grew horse gram as a contingency crop on two acres, in response to failed rains. She said that even during the current bad drought, she had enough fodder to feed her cattle. She followed natural farming conditions and grew a chemical-free crop. Milk yield increased by 25% with this nutritional intake. She is happy that she was not compelled to sell her cattle due to shortage of fodder. She has decided to grow fodder on at least an acre next year as well—even if the rains are good.

Creating economies of scale for smallholder farms

Mutual cooperation maximizes the economic benefits for small farmers. Farming is a barely viable enterprise for small and marginal farmers who own 1-5 acres of rainfed land due to *'diseconomies of scale'*. These farmers are 90% of our target communities.

To create economies of scale, AF-EC promotes mutual cooperation between farming households. Four or five families pool labour, implements, bullocks and other resources and use them in rotation. This informal exchange of labour and bartering of resources reduces the burden on financial outlay. It saves costs—upto Rs 2,000/- per acre—and eases farm operations. AF-EC makes small equipment like pumps, pipes, ploughs etc, available, of which the group has collective ownership.

Protective irrigation and mutual cooperation

Protective irrigation is a technology developed and promoted by AF-EC. It consists of a pump set and a water tanker with two lateral pipes, and uses a mere 10,000 litres of water per acre to wet the crop through a mobile protective irrigation method. It costs an extra Rs. 500/- to Rs. 1,000/- per acre but it saves the crop, which in normal course of drought events, is lost. This technology is demonstrated to farmers in SMGs. Implementation of protective irrigation individually involves individual equipment costs and effort. As a shared resource between four or five families, the costs get divided.

Five small farmers in Venkatadripalli village set an example. Using the protective irrigation equipment provided to them at a subsidized cost by AF-EC, they drew water from a public village pond to irrigate 10 acres of their adjoining fields: two acres for each farmer. They managed to save the crop from drought. The water was available from public commons; and the rest was their own labour. **Geetamma** got 8 quintals of castor in her two acres of land and sold it in the market for Rs. 31,200/- @ Rs. 3900/- per guintal.

Kamalamma's farm yielded 3.5 quintals of groundnut, which she sold for Rs.18,460/-.

Adilakshmi harvested eight quintals of castor, which gave her an income of Rs. 31,200/-.

The other two farmers obtained similar benefits. Farmers who did not adopt protective irrigation had 30–50% less yield.

These farmers of Venkatadripalli village have inspired more farmers to help each other. Almost 80% of over 16,000 small and marginal farmers have agreed to cooperate on labourintensive activities like sowing, weeding, harvesting. This saves each family Rs. 5,000/- to Rs. 10,000/- in production cost per agricultural season.



Sustainable agriculture and drought mitigation

Palle jeevam Andhra Pradesh Drought Mitigation Project (APDMP)





Sanjamma, from Muktapuram village in Kanaganipalle mandal, grew her country chicken farm from 60 to 200 in nine months. A poultry farmer can buy a country chick for Rs. 50/- and sell it for Rs. 400/- in six months. After expenses, they make Rs 200/- per fowl. But in the six-month period, the farmer needs to ensure proper shelter and maintenance. It is here that APDMP and AF-EC step in to support women poultry farmers. Sanjamma got funding to build a shed. She makes Rs 12,000/- every month. **Drought mitigation/ Andhra Pradesh Drought Mitigation Project (APDMP)** is a government of Andhra Pradesh project. It is also called Palle jeevam, which translates to 'village life', in local language, Telugu. The Palle jeevam objective is to improve the incomes of 1,65,000 farm households and strengthen their resilience to drought. This goal is to be achieved through strengthening the adaptive capacity and productivity of rainfed agriculture in five districts in southern Andhra Pradesh. The project aims to use a participatory approach through FPOs, with facilitation support from NGOs like AF-EC.

APDMP has funding support from International Fund for Agriculture Development (IFAD) for this project. AF-EC has been selected as Lead Facilitating Agency (LFA), along with Sahajeevan Trust, its sister concern, to guide and support project implementation in 12 mandals of Ananthapuramu district.

Project outreach

The implementation is through participation of 12 FPOs, with 7,500 shareholders farmers. The mandals are Ramagiri, Kanaganapalli, Rapthadu, Atmakur, Kuderu, Kalyandurg, Beluguppa, Brahmasamudram, Gummagatta, Kambadur, Kundurpi and Amarapuram, covering 36 Gram Panchayats.

There are three components to implementation:

- FPOs as key partners in implementation
- Climate resilient crop production systems
- Drought proofing through natural resource management and governance

Achievements in 2019-2020

- ▶ FPOs strengthened to manage the project effectively. FPO membership has crossed 7,500 with share capital of Rs. 75,00,000/-. The FPOs have mobilised convergence activities with other line departments.
- Annual budget of Rs. 1,75,00,000/covered agriculture, livestock, NRM and groundwater. Direct beneficiaries of the project are the 7500 shareholder farmers; the project indirectly benefits all farmers in 36 Gram Panchayats.
- Custom Hiring Centres (CHCs), established by FPOs, are equipped with tractors and other farm equipment to serve small and marginal farmers by providing services at lower than market rents. Revenue generated by the 12 CHCs was Rs. 50,00,000/-.

- Each FPO has a business plan. The FPOs run farmer shops. All have obtained seed licenses, fertilizer licenses and GST registration. Revenue from farmer shops has crossed Rs.1,30,00,000/-.
- ▶ The FPOs participated in the government community managed seed system (CMSS) programme in collaboration with APSEEDS. Good quality groundnut seed of 11,550 quintals was procured from 1,850 farmers, processed, packed and supplied to APSEEDS at Rs. 7,100/per quintal. The FPOs earned a profit of Rs. 30,00,000/-.
- The seed village program (SVP), taken up by the FPOs, produced 6,200 quintals of groundnut in the rabi season, through 552 farmers in 800 acres land. They sold the produce to APSEEDS at Rs 500/- higher than market rate, per quintal. The farmers got an additional income of Rs. 30,00,000/- through this.
- Intercropping of millets and pulses was promoted in 4,100 acres, covering 3,260 farmers, under a scheme called Navadhanya. This was undertaken as a drought mitigation practise.
- Livestock production system improvement activities such as small ruminant vaccinations, supplementary feed supply, fodder development and animal health camps were organised with 3,114

Learnings

• Extension services and timely input services increase shareholder participation in FPOs. Investments in creating productive assets for FPOs, as through APDMP, worked as incentive and increased shareholder participation. These FPO-owned assets, which are difficult to own as individuals, improved people's participation in general with a sense of collective ownership. It is essential to inculcate organisational culture in FPOs, especially among Board of Directors. They tend to behave as individuals and conduct business informally as opposed to functioning as formal business organisations. farmers and 2,21,128 animals, including sheep and goat vaccination services for 1,80,125 livestock belonging to 2,895 families.

- De-worming services provided to 2,65,487 sheep belonging to 3,114 shepherds.
- Drinking water troughs for livestock were established in 48 locations in 36 villages.
- Fodder cultivation was promoted in 9511 acres of common lands in 36 Gram Panchayats.
- Breeding units were established to promote backyard poultry production of local breeds. 157 local poultry units enhanced the livelihoods of 157 poor families.
- Farm ponds were constructed in 227 rainfed farms, covering 227 rainfed farmers, to prepare them for protective irrigation. MGNREGS was leveraged to create soil and moisture conservation and water harvesting structures in 1,800 acres, benefitting 1,200 farmers in the project villages.

How planning for livestock care reduced distress migration

"This year, the men in our families stayed with us in spite of such a severe drought. They would have migrated with the sheep to Gangavathi or Mysore for 3-4 summer months and returned only when the commons became green, after the rains," says **Mrs. Laxmamma**, wife of Yerriswamy, with a smile on her face.

Pillalapalle and Gonchireddipalle are twin villages. Over 180 families rear 14,000 sheep and goats. It is their primary occupation. Fodder for the livestock is the main problem, particularly in drought years, when



common lands are bare. This year, there was a severe drought and there was neither green grass in the commons, nor water for cattle. The non-irrigated farmers had left their lands uncultivated, as it did not rain in the sowing months of June/ July when they grew groundnut.

At this critical juncture, Andhra Pradesh Drought Mitigation Project (APDMP) supported the sheep rearers by constructing drinking water troughs for the animals. APDMP staff conducted Rearer Field Schools (RFS) every month to talk about animal health. Come September, they encouraged farmers to grow drought-resistant fodder as contingency crop: horse gram and jowar, to tide over the fodder scarcity for small ruminants.

About 50 interested shepherd families were formed into small groups of 5-8 families each. These groups cultivated fodder in 240 acres of uncultivated farmland, leased to them at Rs. 500/per acre, in September 2019. 18 farmers joined with 90 acres of their own lands. Horse gram seed was provided as incentive. The landowners were happy to lease out their vacant lands, since the contingency crops would also improve soil fertility for the kharif season in 2020. The shepherds planted 1,600 kgs of horse gram seed and 200 kgs of jowar seed. Luckily the latter rains were favourable and fodder yield was exceptional.

More than 10,000 sheep grazed for more than four months from January 2020 in these lands. The sheep and goat browsed in the village commons for part of the day, and part of the day in these fodder farms. This saved rearers the hard times that come with migrating hundreds of kilometres in search of fodder, living shelter less day and night with their sheep, in addition to the financial costs involved. The sheep rearers have estimated that together they had saved about Rs. 20,00,000/by growing their own fodder.

Azim Premji

Philanthropic Initiatives

Climate Resilient Zero Budget Natural Farming (CRZBNF)

AF-EC is a resource organisation for CRZBNF, initiated by the government of Andhra Pradesh in collaboration with Azim Premji Philanthropic Initiatives (APPI) and RySS (Rythu Saadhikara Samstha). It is a multi-partner project involving District Project Management Unit, Department of Agriculture, RySS, multiple NGOs and CBOs. The project was initiated in July 2017.

Achievements

An agro-ecology farming model was developed, covering a contiguous landscape of 260 acres in Thammiahdoddi village, supporting 56 families. The model integrates regenerative natural farming, climate smart agriculture and drought mitigation practices with natural resource management interventions.

- Five-layer cropping models following agro-ecology principles were established in 76 acres covering 76 farmers in order to droughtproof agriculture and regenerate landscape productivity on a sustainable basis.
- Farm ponds with lining were established on 70 rainfed farms belonging to 70 farmers for onfarm rainwater harvesting and protective irrigation.
- Grassland development was promoted in 75 acres of common lands to ease fodder shortages.
- Contingency crops were promoted in 319 acres, covering 200 farmers, who had been unable to sow in June and July because of lack of rain.
- Trained and provided on-farm technical support to 666 Master Farmers for RySS. Master Farmers help other farmers shift from

conventional to natural farming. These Master Farmers influenced 22,278 farmers in 284 villages in RySS clusters to shift to ZBNF, either fully or partially.

• AF-EC facilitated 919 farmers on 1,078 acres shift to ZBNF, either partially or fully.

How zero budget natural farming helped Thippeswamy dodge the worst affects of drought

"I got the most amazing yields despite one of the worst droughts in 20 years," says **Thippeswamy**, a farmer from Thammaiahdoddi village, Kundurpi mandal. He says, "The mixed cropping five-layer model, ZBNF practices and protective irrigation, all together, are the only way to mitigate drought and improve agroecology on a sustainable basis."

He can say this because he harvested 800kg of groundnut, 30kg red gram, 200kg cow pea, 50kg bajra, 20kg jowar, 80kg of castor, 80kg horse gram on his two-acre plot. Thippeswamy earned Rs.70,000/after retaining enough grain for seeding in the next season, and for the year's household consumption.

Thippeswamy had provided two rounds of protective from his farm pond, using the sprinkler set and water pump provided under the project. He has been practising ZBNF for two years.



Achieving Gender Equality through Empowerment of Women in Agriculture (AGEEWA)

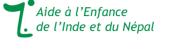
AGEEWA is an institutional platform of women in agriculture. It aims to empower women farmers affected by drought. Its on-ground implementation is through exclusive women FPOs. AGEEWA promotes women-friendly innovations in sustainable agriculture, including agri-extension and value chain development for sustainable livelihoods; and supports advocacy platforms of women farmers to help them access services, rights and entitlements.

This project, funded by AEIN Luxembourg, is being implemented by a consortium led by Andhra Pradesh Mahila Abhivrudhi Society (APMAS) with AF-EC, Rural Environment Development Society, Grameen Mahila Mandali and People's Action for Creative Education. It aims to impact at least 2,000 women farmers, 500 of them through AF-EC.



Achievements

- ▶ 561 women members from SMGs in six villages are members of Bhumata FPO. 260 members have paid full share capital of Rs. 1,000/each, totalling Rs. 2,60,000 and 31 members have paid partially.
- ▶ 178 members availed of the extension services, supply of sale seeds, tarpaulins and agriculture implements provided by Bhumata FPO this year.
- The total turnover in FPO businesses was Rs. 1,96,470/- and the gross profit, Rs. 35,860/-.
- The FPO provided small business loans to landless poor women and single women. Ten such women started petty businesses, each one borrowing Rs. 5,000/- from the FPO and putting in another Rs. 5,000/from her own resources. They earn Rs. 200/- to Rs. 300/- a day by selling vegetables, groceries, garments etc.
- The Bhumata FPO organised awareness meetings on the importance of nutrition and balanced diet for women and children. It provided 100 women with vegetable seed kits with ten varieties of vegetables and green leaves to initiate nutri-kitchen gardens in their backyards.
- 560 women were exposed to demonstrations to learn about cropping systems, natural farming practices and drought mitigation practices and technologies that would ensure at least 50% yields in spite of drought. These crop demonstrations were organised on 138 acres, with 138 farmers.





- Demonstrated protective irrigation in 38 acres, with 12 women farmers. The crop was saved from drought; the farmers were shown to have earned an additional Rs. 3,000/- per acre compared to farmers who had not followed protective irrigation.
- Assisted 128 farmers to opt for contingency crops with jowar and horse gram, since they had missed the June-July sowing of groundnut because of lack of rainfall. These farmers made a net income of Rs. 3,000/- to Rs. 5,000/- per acre.
- The women were given awareness on government schemes and services that they were entitled to access, through APGB, Veterinary Department, MPEO and APO MGNREGS.
- Three village-level convergence meetings were organised with RUDSETI staff on vocational training opportunities for under-educated youth. 75 women attended.
- Two village-level convergence meetings were organised with the newly introduced staff of the village secretariat, Rythu Bharosa Kendralu, which means 'farmers' assurance centres' and Integrated Child Development Services staff (teachers) on services available to women at the village secretariat. 41 FPO members attended.
- Nine members of the Board of Directors were trained in governance, accounting and book keeping, business planning and business development.



How I changed from wage seeker to businesswoman on the strength of a small loan

"I am **Nagamma** and my husband is Chandrayadu. We live in Dharmapuri village of Dharmavaram mandal. I am a member of the village SMG and also a shareholder in Bhumata Mutually Aided Cooperative Society facilitated by the AGEEWA project." "We have been living in poverty as farm labour. Both of us are aged. We found it hard to look after ourselves. There wasn't enough work. I decided to start a business. I took a loan of Rs. 5,000/- from the Bhumata FPO. I carry petticoats to nearby villages for retail selling. I make a profit of Rs. 400/- to Rs. 500/- a day. My monthly income is between Rs. 9,000/to Rs. 12,000/-. Household expenses are up to Rs. 4,000/-. So I am able to cover emergency health expenses and also save some money."

"Because I was a member in the FPO and SMG I was able to get a business loan easily with a low interest, without any mortgage." Her husband, Chandrayudu adds, "I am happy... we have not fallen into the trap of indebtedness with moneylenders."



How an off-farm venture changed the way for Bharathi's family

Dairying as an off-farm activity can mitigate drought impact on farmers, particularly in drought-prone areas like Ananthapuramu. *"I am Bharathi from Dharmapuri village of Dharmavaram mandal. My husband Gopal Rao and I work as part labour and part cultivator. We have 4.5 acres of land. Our son is doing his post-graduation. We could hardly make ends meet. We were poor* because of the frequent droughts and lack of daily wage work."

"By virtue of being member of SMG and also a shareholder in Bhumata FPO, I was able to take a loan from Andhra Pragathi Grameena Bank for dairy farming. The loan was facilitated by AF-EC as part of AGEEWA project."

"Now I am able to earn Rs.10,000 to Rs.12,000 every month from dairy animals. And some more income on daily wages. It is sufficient for the family's needs, including for my son's studies. I am also able to save a small amount every month for any future needs."

Husband Gopal says, "We were able to avail of the bank loan only because of the facilitation from the SMG and FPO. Thanks to the dairying, our financial position has improved a lot, along with our social status and self-respect."



Livelihood diversification (off-farm and non-farm)



T. Nallappa from Kammuru village in Kuder mandal knew that he could not supplement the family's income from their two acres land. After a sixty-day driving course, Nalappa is proud to be the first salaried member of his family, earning Rs. 10,000/- a month working for a windmill manager near his village.

Youth Centre

The Youth Centre aims to equip undereducated or unemployed rural youth with skills so that they become financially independent, contribute to household income, and are less inclined to migrate. The objective is also to help the household diversify their means of earning and income through non-farm employment.

The program emphasizes that such employment be created either at home or close to home so that opportunity costs are minimized, families stay together, and cities are not flooded with rural distress migrants.

Achievements

- Vocational training and skills learning included personality development, spoken English skills and orientation on customer care services. The youth were also given training on first aid and awareness on AIDS.
- In all, 378 youth, including 15 women, were trained in driving, motorcycle mechanics and cell phone repair.

- Of the 378 youth trained this year, 332 are either employed or selfemployed and earning an income of Rs. 6,000/- to Rs. 20,000/per month.
- 167, including 15 women, were trained to drive light motor vehicles. Training included theory and on-road practice. Today, 100 candidates are employed, earning an average monthly salary of Rs. 7,000/- to Rs.10,000/-, besides travel allowances.
- ▶ 59 were trained in heavy motor vehicle driving. 40 are employed and earn Rs.15,000/- to Rs.20,000/per month besides allowances for food and rest on travel days.
- The 128 rural youth trained in mobile phone and motorcycle repairs were provided a toolkit, so that they could start their own repair shop. Out of 128 trained, 47 earn a daily income of Rs. 200/- to Rs. 500/-.
- Trainees were taken on exposure visits to vehicle showrooms in the town to observe various types of vehicles being serviced.



- AF-EC has acquired a state-of-theart automobile driving simulator to teach fundamentals of driving, comprehension of data analysis, road signs and signals.
- AF-EC enabled 21 women trained as auto drivers to get bank loans for buying their own three-wheeler autos. They are now the proud owners-cum-operators of autos and earn Rs.800/- to Rs.1,000/per day. Loans for other women are also in the pipeline.

Priorities for 2020-21

- Non-farm livelihoods for women.
- AF-EC is keen to introduce vocational training for electricians and repair of domestic appliances. It has been found that these two trades have high demand in rural and urban areas.

Learnings

- Need to build entrepreneurial abilities among rural youth and women in order to enable them to diversify their income opportunities
- Need to expand basket of skill trainings to attract more youth
- Need to create awareness and mobilize youth for skill-based training and employment
- More effort is needed to help young women opt for trainings.

Non-farm and off-farm livelihoods for women



"I am M. Prameela from Kaluvapalli in Beluguppa mandal. I sell fruits in the morning and paanipuri in the evening. I make Rs. 400/- to Rs. 500/- a day. We did not have money for a square meal. I used to work as domestic help in three houses to make ends meet. Now, I have repaid all my debts. I can pay for my husband's health and daughter's education. When AF-EC conducted gender and leadership trainings for women, I participated. I am a member in Mandal Sasya Mitra Samakhya and a Director in our mandal MACS Ltd. With courage, I'm able go forward as a leader." This woman-centric programme aims to diversify income opportunities in nonfarm and off-farm sectors for women from rainfed farming households. The idea is to help women farmers and labour get into skilled enterprise so that they can contribute to the economic wellbeing of the family, building self-esteem and respect as a result.

AF-EC has been encouraging monthly savings and revolving credit within SMGs within a circle of 16,000 families. Each family saves Rs. 50/- to 150/- per month and utilizes the same as a revolving credit fund. As on March 2020, total savings including interest on credit, stood at Rs. 68,000,000/-. Every month, over 4,000 women borrow from this fund to address immediate financial needs on health, education, agriculture and other livelihoods.

The project facilitates self-reliance of women through nano-enterprises like garment businesses, petty *kirana* shops, vegetable shops, ram-lamb rearing, dairying etc. Women earn Rs. 200/- to Rs. 500/- per day from such enterprises. They can borrow Rs. 5,000/to Rs. 25,000/- from the revolving fund, making them free of moneylenders.

Achievements

Trained 72 rural women in industrial garment-making in collaboration with Ganesh Corporation Ltd, Bengaluru. These women work, part-time or full-time, from home, earning Rs. 120/- to Rs. 300/- per day.

- One garment company established a decentralized production units in three villages: in Kalyanadurga, Venkatadripalli and Gangavaram, employing 56 women. These three units are located conveniently close to the women, so that they do not have to leave their villages.
- Between 2018-20, in two years, 340 women were trained in tailoring.
 62% depend on tailoring as a sole means of livelihood, the rest practice part-time and continue farming as well.
- AF-EC has assisted 201 women entrepreneurs from 39 villages to start nano-enterprises like petty shops, coconut business, jewellery shops, bangles making, vegetable shops, flower shops, saree and petticoat business, steel utensils business, *kambli* weaving, basket making etc. Each woman borrowed Rs. 5,000/- from AF-EC's revolving fund and another Rs. 5,000/- from their own SMGs, in order to set up these enterprises. This initiative has increased basket of earning opportunities, which has helped

hedge the risk of crop failure due to drought. Women earn an assured additional income of Rs. 200/- to Rs. 500/- per day.

- With support from Livelihood Enhancements and Development Program (LEDP) of NABARD, 90 women entrepreneurs were trained in making snacks with typical dryland produce of nutritious millets and pulses. They received marketing support for selling locally.
- The 514 women farm labourers who took up alternative or supplementary income generation activities have become role models for livelihood diversification for other women.
- This supplementary income has helped reduce distress migration during droughts. It has helped build the women's self esteem as it signifies upward occupational mobility from farm labour.

Learnings

Women seem to market locally made, inexpensive products better—like children's garments, petticoats and nighties, millet snacks etc. So decision going forward is for AF-EC to focus on identifying and promoting such inexpensive, local products and services for women entrepreneurs.



How we achieved dignity through enterprise

Every year, 2000 women borrow small credit to venture into a new form of livelihood, away from the farm work that they know. Here is the story of how these small amounts go a long way in changing lives and according respect and dignity to the women.

"My name is **Renukamma**. I live in Yerragudi village in Beluguppa mandal. I have never been to school. My husband, Ramanjaneyulu has studied up to 8th class. We have three daughters and one son. All of them go to school now. We have two acres of dryland, which is not very fertile. The only crop we used to grow was groundnut, which was affected by droughts. But over the past four years we left the land barren because we used to incur losses; we lost investments on inputs during drought years."

"My husband and I used to hire ourselves out as agricultural labourers in and around Yerragudi. Daily wage employment is irregular and inadequate. We lived in poverty. 2019 was a very bad monsoon year. There was severe drought and no demand for farm labour. This affected us badly. We did not have enough even to eat."

"Fortunately, I am a member of an SMG facilitated by AF-EC in Yerragudi and have been saving Rs. 50/- every month along with 20 other members in the group. I was able to borrow Rs. 10,000/- from the group and set up a petty kirana grocery shop in my village. The shop did well even though it was the second one in the village."

"My husband assisted me in buying and transporting stock from Beluguppa. We sold provisions, condiments and vegetables. Now I make Rs. 300 to Rs. 400 per day. My husband goes out for work on the national employment guarantee scheme (MNREGS) whenever it is available. We are now able to manage our household."

"I am grateful that our SMG made it possible for us to live happily in our own village even in a drought year. Without the support of the SMG and AF-EC we would have had no option but to migrate with our children to a faraway place in search of wages."

"Like me, twenty other members in our SMG took loans. It has reduced our dependency on inadequate wage employment. We are no longer forced to approach moneylender for our small cash needs. They not only charged very high interest rates, but also exploited us in several ways."

In the words of Ramanjaneyulu: "I am thankful to SMG for helping my wife start a business. Today she is earning more than what I bring home. She is respected in the community. I am proud of her. Gradually the business volume may increase and we would be able to live even better, with respect and dignity."

The SMG members say: "We are happy that Renukamma has benefitted through the SMG. She is hardworking and courageous. She has become a good example for other members. She promptly repays her loans, enabling others to benefit from the savings and credit scheme."





Saree business

"My name is **Geetha** and I live in Kalavapalle village in Beluguppa mandal. We have a three-year old daughter. Although we have some dryland, we do not farm because of losses due to droughts.

I joined the SMG in my village and became an active member of the savings and credit scheme. I borrowed Rs. 10,000/- from my SMG and invested it in a saree business that I operated from my house. I buy sarees on wholesale rates from Ananthapuramu town and sell them retail in the village. I was always prompt in repaying my loans to SMG and seeking fresh loans. My business soon picked up and today I have a stock worth Rs. 50,000/- at my disposal. Apart from sarees, my merchandise includes apparels like petticoats, night dresses that have a demand in the village. Word of mouth has made me known in neighbouring villages also. My business thrives during festivals, when people like to buy new clothes.

My husband is proud of me. We are grateful to our SMG for helping us explore new opportunities for earning within our village. Like me, other women in our SMG also have started some activities to generate additional income for the family. It has added to our self-esteem and respect in the family and in the village."



Belonging to my SMG means that I am not alone

"My name is **Kasamma** and I live in Gotluru village in Dharmavaram mandal. We have a 20-year old son who has left home in search of work. We have a daughter who is paralyzed. We do not own house or land. My husband is chronically ill.

I was managing house by working as domestic support in three households. I used to earn Rs. 4,500/- a month. Doing this work while also taking care of my daughter and husband was becoming difficult for me. I shared my problems at one of the SMG meetings, which I am a member of. The SMG suggested that I take up vegetable vending as it might suit me better. I got a loan of Rs. 3,000/- from my SMG. This was complemented by AF-EC with a grant of Rs. 5,000/-.

The grant and loan helped me start my vegetable vending business. I sell vegetables close to my home from 6am to 9am. This allows me to take care of my daughter and husband. Also, the business picked up. I started making a daily profit of Rs. 400/-. When I shared this news in the SMG meeting, the members were very happy. The SMG recommended to RDT to allot a house to my physically challenged daughter. I am grateful to my SMG for transforming my family conditions."

Ecology, Climate Change Mitigation and Landscape Development



Integrated Watershed Development Project (IWMP)

AF-EC has been implementing the Integrated Watershed Management Project in Kudair mega watershed since 2011. This is the final year of the project, covering an area of 4,264 hectares at the cost of Rs. 5,11,68,000/-. It is viewed as a model watershed project by the government because of robust community participation in its planning and execution.

Achievements

Most land-based watershed activities were completed last year; only a few remaining activities have been taken up in 2019-20.

- Constructed three check walls, four check dams and repaired two check dams to harvest rainwater and recharge borewells
- NADEP compositing was established for 9 families
- One community threshing flourmill was established for use by all farmers
- Generated employment of 1,952 person days, benefitting 49 families with wages amounting to Rs. 6,83,000/-.
- Boulder removal undertaken in three acres for two families.

Major impacts: 2011-2020

The overall impact is a changed landscape from a barren desertlike environment to a visibly green landscape. Key impact areas:

- 4,795 acres of land belonging to 2,584 farmers benefited directly with recharge in groundwater levels as a result of check dams, check walls, farm ponds, dugout ponds, percolation tanks and repairs to existing check dams and percolation tanks.
- ▶ 5,831 borewells, belonging to 3,125 families, were recharged due to increase in water table.
- 9,755 additional acres of land has come under irrigation due to the project.
- Inter/mixed cropping has been increased from 3,487 acres to 8,745 acres, in project villages, benefitting 1,862 families.
- Land use has shifted to perennial fruit tree crops in 2532 acres of rainfed area, benefitting 603 families. The fruit trees were planted in 2018-19. Consequently, there is green cover on the farmlands.
- 4,266 families were supported through breed improvement of livestock and better availability of green fodder in collaboration with the Department of Animal Husbandry.
- 1,386 families, particularly women, benefited from off-farm and non-

farm activities for diversified livelihoods. Their yearly earnings ranged from Rs. 60,000/- to Rs. 75,000/-. The revolving fund amount available with the Village Organisation stood at Rs. 63,28,000/- with regular recoveries and incremental improvements in the livelihoods of poor farmers and landless families.

- Vegetation cover was achieved in 247.50 acres of common lands, including greening of hillocks. Rock filled dams, loose boulder structures, gabion structures and staggered trenches helped conserve soil, water and moisture across 362 acres of land belonging to 154 farmers, upstream of the valley.
- A total of 7,40,652 person days of employment was generated under the project, providing wage income to 1,482 families. Distress migration was totally arrested in the IWMP watershed villages.
- The project ensured convergence of different government departments. In particular, Rs. 8,79,78,000/- was accessed from MGNREGS for farm ponds, dryland horticulture, greening of hillocks, NADEP, avenue plantation, block plantation, barren hillock afforestation, staged trenches and water observation trenches.

How a check dam turned a landscape green

Before watershed

A stream from **Ipperu percolation tank** runs near Antharganga village. Before watershed development activity took place here, the farmers were never able to make use of this water. On the banks of this stream there are 16 farmers owning 58 acres of land and 18 borewells, of which nine had dried up. Over the years, 28 acres of land was left barren around the stream. In summer, there was water scarcity. Drinking water was supplied through water tanks. Many of the community migrated to nearby towns.

Present situation

The 16 farmers on the banks of the Ipperu stream petitioned with IWMP for a program that included construction of a check dam and greening of hillocks. But watering plants on the hills was difficult. Apart from safeguarding the plants in the wilderness, carrying water uphill was a challenge in the wilderness. The farmers decided to build a chain of three ponds to harvest rainwater during rainy season so that it became easier to transport water to the plants. These ponds were filled with water tankers during summer and the plants were watered from the ponds. Due to the collective efforts of the farmers and IWMP, 11,000 plants

(Gliricidia, sitafal, Pongamia) were planted and 80% survived. This has changed the landscape and impressed the community and IWMP.

Because of the check dam and vegetation upstream, the rainwater was collected and stored. Eighteen borewells around this check dam got recharged and all of the dry 58 acres of land came under irrigation. Now farmers are cultivating two crops in a year. They have assured income every year, the droughts of Ananthapuramu district do not affect them, and the landscape is full of vegetation!





A piece of dry barren land turns into a horticulture garden

Dryland horticulture with mango is an important activity under IWMP. This activity aims at drought proofing with assured income to the farmer even in drought years. It creates vegetation across the farmed landscape, nurturing biodiversity, increasing biomass, providing shade and slowing desertification. This year, 2,532 acres of rainfed farmland, belonging to 603 farmers were brought under rainfed mango farming. It has not only changed the landscape, but assured regular income to the farmers.

The story of **Leelavathi** reflects the stories of 603 rainfed farmers in the

Kudair mega watershed. Leelavati and her husband Ramasubbu live in Kadadarakunta village. Their son and daughter study in a college. The five acres of dry land that the family possessed was not able to sustain their livelihood including costs on education. Like other farmers in the village Leelavati also cultivated groundnut year after year. More often than not there was a drought and the family used to forfeit even the investment costs on the farming. As a result the family had no other option but to raise loans to run the family. Their loans reached Rs. 1,15,000/-.

In 2013, IWMP arrived in Kadadarakunta. Leelavati opted for rainfed horticulture with mango and the project assisted the family to raise a mango plantation in their entire fiveacre plot. The family managed to pull on for five years by relying on income from wage employment including MGNREGS and IWMP activities. By 2018, the garden started yielding. The family sold the mango crop on wholesale basis for Rs. 70.000/-. This was a blessing for the family as they could tide over some of their outstanding loans. In 2019 Leelavati and family decided to sell the mango crop on a retail basis. In this way they earned Rs. 1,28,000/-. Leelavati says, "We are so happy. The income from our farm this year not only eased our loans, it also helped us get our daughter married."

Soil Development Project (NABARD)

The main objective of soil projects is to improve soil productivity and sensitise farmers on Climate Smart Agriculture and drought mitigation.

AF-EC has been implementing two soil development projects supported by NABARD and KfW in Garudapuram and Battuvanipalli villages of Kalyanadurg mandal. The Garudapuram soil project covers an area of 3,000 acres at a cost of Rs. 47,02,000/- and Battuvanipalli covers 2375 acres with a project cost of Rs. 45,97,000/-. The project duration is three years, from 2017 to 2020.

Achievements

- Thirty eight Board of Directors were trained on climate change mitigation and adptation, MACS Ltd, governance and management of livelihoods fund, maintenance fund, managing Custom Hiring Centre, credit support for women for nonfarm and off-farm livelihoods.
- Training was organised for 712 farmers on Climate Smart Agriculture adapted to Ananthapuramu agro-climatic conditions. This included trainings on ZBNF practices, dairying, livestock and poultry, financial literacy, market linkages etc. The aim was to enable farmers cope with droughts and climate risks, and stabilise farm income. Farmer to farmer learning was also facilitated within the watershed villages.
- Demonstrations were organised with 211 farmers, on the practices of ZBNF, reclamation of problem

soils, crop rotation, climate resilient alternative crops like jowar, foxtail, bajra and other local millets, improved varieties of red gram (LRG-52 and Ujwala), black gram etc.

- Exposure visits were organised for 215 farmers to Musunuru, Mulakanuru, MACS Ltd Bijikera integrated organic farming and Nandyal Regional Agriculture Research Farm to learn new climate smart farming systems and practices.
- Soil testing was done for 95 farmers covering 126 acres of land and appropriate soil-test based crop recommendations were made.
- An Automatic Weather Station was installed in Garudapuram. Farm pond lining was done for two farm ponds/ farmers. The farmers contributed Rs. 50,000/in Garudapuram and Rs. 30,000/in Battuvanipalli.
- Deep ploughing was done in 198.50 acres, benefitting 103 farmers.

Inter cropping or mixed cropping with millets and pulses was promoted in 189 acres, benefitting 96 farmers.

- Crop rotation with millets and pulses was done in 68 acres, benefitting 39 farmers.
- Application of tank silt was carried out on 80 acres, benefitting 93 farmers.
- 76 acres of land was reclaimed, benefitting 48 farmers.
- Stone outlets were built on contour bunds in 240 acres (160 stone outlets) benefitting 48 farmers.



Major impacts

- Rainwater harvesting recharged
 43 borewells, benefitting as many farmers, over 70 acres of land.
- More farmers are adopting inter cropping and crop diversification with millets, pulses, flowers etc.
- More farmers are opting for contingency cropping when their main crop fails.
- High yielding varieties of seeds were widely adopted by many farmers, with improved yields.
- 250 farmers opened bank accounts; some even adopted digital banking technologies.
- Green cover on hillocks was increased through plantation and seed dibbling.
- 51 acres of additional land was brought under cultivation by removing rock outcrops.
- Village Watershed Development Committees (VWDCs) are functioning effectively and managing livelihoods fund with excellent results.





Battuvanipalli today, five years after watershed implementation

The watershed development project was implemented in financial cooperation with NABARD, in Battuvanipalli, between 2010-2016.

"Our elders are the main culprits... they never thought of planting trees... even for a toranam, we had to collect green mango leaves from other villages (toranam is a garland of fresh green mango leaves used to decorate doorframes at homes during festivals and other auspicious occasions)." **Bommayya**, an active watershed committee member narrates the greening process that began in 2012.

"Our village had only one open well, from which we all fetched drinking water. With the advent of borewells the open wells dried up. More and more farmers dug borewells deeper and deeper...the water was found to be unfit even for drinking – high levels of Total Dissolved Solids and fluoride, causing fluorosis... even these borewells dried up, as everyone in the village dug so many borewells." AF-EC arrived at our village in 2010 and started discussing soil and water conservation and watershed development projects with NABARD. We did not understand till we visited Mallapuram, a village where AF-EC had already implemented a watershed development project. We realised then, that we should take responsibility for improving our soil, water and vegetation.

The first impact was that groundwater was recharged. Land under irrigation increased from less than 50 acres to about 400 acres. From groundnut





dominant mono-cropping system, farmers moved towards multi crop systems. There was a big change in land use from annual crops to perennial tree crops. This change would mitigate drought impact and slow desertification. Out of 180 farmers, 75 farmers have raised 30,000 mango trees in the village. Some farmers also planted orange, sapota, papaya, flowers and so on.

An amount of Rs. 17,56,100/- was allocated for revolving credit for livelihood improvement for the landless and poor. A Mutually Aided Cooperative Society was registered with all the 188 families in the village. Today, the revolving fund has grown to Rs. 68,17,500/-. The turnover between 2015 and 2020 is Rs. 2,36,48,000/-. Livelihood-related loans are used for sheep-rearing, dairying, kirana shops business, auto operators, garment business, sheep rearing etc. Every needy family is able to borrow from their MACS Ltd. So far every borrower has repaid 100% with 12% interest, without any defaults. *"We have a self-managed bank in our village and we are able to borrow from Rs. 5,000/- to Rs. 40,000/-, repayable in easy instalments"* says Potanna, who took a loan to run a shop.

Thimmarayudu is a farmer who switched to a mango and tomato combination. He says, *"I am able to plant two crops of tomato per year. I am earning Rs. 2,50,000/-* to Rs. 4,00,000/- per year in tomato. My mango orchard started yielding in a small way and now I earn Rs. 1,50,000/- per year. The current agricultural situation in the village is very prosperous and forward looking compared to previous situation where only rainfed groundnut was cultivated and investments lost due to drought. Farmers were trapped in a vicious cycle of poverty, debt and distress."

Bommayya agrees with Thimmarayudu. He grows chillies, tomato and mango. Sharing his experiences of cultivating chilly crop, he believes that chilly gives good returns to farmers.

Biogas Project under Clean Development Mechanism Project (CDM)

This is an ongoing climate mitigation and adaptation project begun in October 2014, to enable a switch to renewable sources instead of firewood as biomass for cooking fuel.

AF-EC registered a Clean Development Project with the UNFCCC and Gold Standard in January 2012 but could start actual work only three years later, after 'selling' 66,523 yet-to-begenerated Gold Standard Carbon Emission Reductions, to the Fair Climate Network for a sum of Rs. 8,50,00,000/- with the understanding that these CERs will not be traded in the international carbon market. Instead, they will be retired in the UNFCCC Retirement Registry and handed over to IndiGo Airlines, India's largest domestic airline, for them to demonstrate their commitment towards maintaining climate integrity.



As on 31 March 2020, 3,090 domestic biogas units have been built and commissioned to as many rural women in 164 villages of Ananthapuramu district, and 290 more were under construction. We have therefore increased our target by 13% at no additional cost. This is thanks to the diligent work of our team of seven biogas case workers supported by the FCN facilitator. The total usage days count is 31,58,000 days. This has generated 31,668 tonnes of greenhouse gas reduction (CERs). Overall functionality stands at 84% and within-the-month functionality at 77% in spite of chronic drought, shortage of fodder and distress sale of cattle.

United Nations Framework Conv Climate Change

Gold Standard



Sustain Plus Project

The pilot project 'Drought mitigation through protective irrigation under Sustain Plus energy platform' has established a model to scale protective irrigation technologies with renewable energy and introduced hydroponic technology to fodder producers. This was a big opportunity to rainfed farmers and the landless. The duration of the project was for one year, from August 2019 to July 2020.

The project was undertaken in financial cooperation with Sustain Plus, Bengaluru. The goal of the project was to showcase drought mitigation using solar energy and to introduce solar-based hydroponic fodder production for rainfed farmers and landless.

Achievements

- A mobile solar water pump, drawn by motorcycle or bullocks, so as to be suitable to the local terrain, was introduced.
- Two hydroponic fodder production systems powered by solar energy were established so that farmers could have green fodder throughout the year. Created awareness with 70 farmers on animal health issues caused by lack of nutritious fodder.
- One solar pump was installed on a farm pond, which increased the cultivated area for the rainfed field from 5 acres to 8 acres, using protective irrigation method.

Impacts

- Farmers in 230 villages across
 8 mandals now know more about solar pumps and hydroponic fodder systems.
- Income of two dairy farmers has increased by Rs 18,000/- per year and health problems of livestock, reduced.
- Cultivated area has increased from 5 to 8 acres, bringing one farmer an added benefit of Rs. 60,000/- per year.

SUSTAIN

Fodder costs had increased so much that Rathnamma, from G Kothapalle village, was finding dairying unprofitable. She was in a dilemma whether to retain her two cows or to sell them! Using the hydroponic fodder production unit under the Sustain Plus project, she not only cut fodder costs but also started getting a higher yield of milk because of the nutritious green fodder.

Priorities for 2020-21

- 41 farmers from 8 mandals will be equipped with hydroponic fodder systems by 2020.
- 40 dryland farmer families will be equipped with portable solar pumps by 2020.
- One farmer will be equipped with fixed solar pump by 2020.

Learnings

- The farmers are open to new techniques, which helps in improving livelihoods.
- Hydroponic fodder systems are beneficial to even landless farmers, who can be engaged in dairy farming. This was not possible before.





How Vannappa harnessed some help from the sun

Before Sustain Plus project

K. Vannappa from Mallapuram village of Kalyandurg mandal is from a backward community. He holds five acres land and lives in an old house. He cultivated groundnut crop, like most farmers in the district. The frequent droughts hurt his crop and his livelihood. Therefore, Vannappa also worked as a wage seeker under MGNREGS. Under the MGNREGS program he managed to establish a farm pond on his land and planted mango saplings. As his luck would have it, his farm pond struck an aquifer, which gave him water at all times. He watered the mango saplings by installing a diesel pump, as there was no access to electricity. But managing the diesel pump was a burden for Vannappa as it needed fuel and maintenance costs, and mango trees have a long gestation period of about seven years, before they start yielding.

After Sustain Plus project

The project team identified Vannappa as one of the Sustain Plus beneficiaries in 2019-20. A solar water pump was installed on his farm pond. This was a great relief in savings and also drastically reduced time and effort in watering the saplings. This encouraged Vannappa to take another three acres of adjoining land on lease and to raise groundnut crop. He watered this also from the water from the farm pond. He says, *"I am very thankful for this solar power pump on my land. I am now able to water my mango plantation and with groundnut crop, have increased my income to Rs. 60,000/-."*



Improved farmer incomes through cooperative action and market value additions

Accelerating value chain



This project's aim is to increase a farmer's income through value addition, while ensuring better nutrition for farmers as well as consumers. While ICRISAT is the main project holder, AF-EC is field implementation partner for the project. Walmart Foundation is financing the project. The project duration is for two years, from July 2018 to June 2020, and spread over the eight mandals of Dharmavaram, Rapthadu, Atmakur, Kudair, Beluguppa, Kalyandurg, Kundurpi and Settur.

The targets for the year were to improve income for 6,000 farmers through agricultural technologies, agri-processing and value addition, and to improve nutritional status of 300 households through increased nutrition awareness and access to nutritious food.

Achievements

 Eight mandal level FPOs federated to form a farmer producer company called Rythu Nestham Food Producer Company Ltd, registered in May 2019 under the Producer Companies Act. Rythu Nestham Food Producer Company Ltd purchased one acre of agriculture land in Muddalapuram village in Kuderu mandal for setting up a groundnut secondary processing unit. The conversion of agriculture land to commercial land was completed.

- Cost saving measures, with use of shrivelled groundnut seed, were demonstrated to 75 farmers, in 75 acres, during the *kharif* season. This shrivelled seed cost 30% less but has the same yield as normal seeds. This demonstrated to farmers that shrivelled seed are a viable option and can save the farmer Rs. 3,000/to Rs. 4,000/- on seed cost.
- ▶ Four Primary Processing Centres (PPCs) processed 56.5 quintals of groundnut and 0.6 quintals of red gram on a trial run. They sold the processed groundnut kernel and red gram to traders and made a gross profit of Rs.1,07,131/-.
- Staff and Board of Directors were trained to maintain food safety and quality at primary and secondary processing units.

- Three workshops were conducted for Board of Directors, on managing Custom Hiring Centres, agriprocessing units and new high yielding varieties of crops.
- The project demonstrated the role of cement-lined farm ponds, for on-farm rainwater harvest and storage for protective irrigation, with seven farmers.

Priorities for 2020-21

- Strengthen the nine FPOs at mandal level, and their federation.
- Operationalize the four primary processing centres. Develop business plans for these.
- Get approvals for secondary processing unit construction from concerned departments. Construct and operationalize secondary processing units.
- Finance and create market linkages to the processed products.
- Organize demonstrations on multi cropping systems to break the mono-crop of groundnut.



Imagining the impacts: One million farmers saving Rs. 4,000/- an acre

Jayamma, wife of Obulesu, is a farmer from C. Battalapalli village, Dharmavaram mandal. She is a member of her village SMG. In monthly meetings, she learnt that shrivelled seed is as good as normal seed and she could reduce seed cost by Rs. 4,000/- per acre. She volunteered to try the shrivelled seed experiment. She also volunteered to take up lining work for the farm pond on her land. Jayamma realized that 40kg of the small seed replaces 60–70kgs of normal seed required for sowing an acre. The seed cost was 30% lower than normal seed cost.

Jayamma used shrivelled seed in half acre of demo plot and normal seed in another half acre. Initially, the crop growth was slow but by 40 days the crop reached its usual growth, with flowering comparable to control plot. She provided one round of protective irrigation to both plots at the time of a long dry spell. The yield in each plot was 240 kg. However, she had an extra saving of Rs. 2,100/on the seed cost in the test plot.

Jayamma shared her experience with other farmers in the village on a field day organised by AF-EC. These technologies have a big implication for rainfed groundnut farmers in the country.

Farmer Producer Organisations*

FPOs, also known as farmers' Mutually Aided Cooperative Societies (MACS Ltd), enhance market gains for farmers through post-harvest agri-processing, value addition and marketing. A primary FPO objective is the supply of agriculture inputs like seeds and implements, including custom hiring at a fair price. FPOs take up aggregation and bulk sale of agricultural produce for farmers; they oversee quality seed production and sale of certified seeds to the farmers and to government seed agencies.

AF-EC has promoted nine such FPOs, including an exclusively women group—Bhumata MACS Ltd. The shareholders in these FPOs are from SMGs promoted by AF-EC over the years. The number of members this year was 11,659. Of these, 4,489 are shareholders who have paid share capital of Rs. 1,000/- each.

FPOs are financially supported under SADL Program, Value Chain Development Program, AGEEWA Program and NABARD. AF-EC and NABARD partly subsidize the fixed costs of FPOs, like staff salaries, rents etc. NABARD has been supporting five FPOs—Bhumata MACS Ltd, Beluguppa MACS Ltd, Kalyanadurg MACS Ltd, Settur MACS Ltd and Kundurpi MACS Ltd—in capacity and business development. This support will continue for another two years.

Achievements

- The number of farmers enrolled as shareholders stood at 4,487 as on 31st March 2020, with each farmer paying a share capital of Rs. 1,000/-.
- The business turnover of the nine FPOs stood at Rs.8,00,36,360/- in this financial year, and gross profit at Rs.65,54,080/-.
- 3,475 member farmers took advantage of FPO services on seed production and community managed seed system under the government seed production and subsidised seed supply program; provision of agriculture implements like cycle weeder cum seeders; and sale of agriculture inputs and implements.
- Three training programs were conducted for Board of Directors, covering business plan development and market analysis, including value chain analysis. They were taken on an exposure visit to ICRISAT at Hyderabad. Another visit to the farm of Sri Veerabhadrappa at BG Kera in Karnataka introduced members to integrated natural farming system.

- FPO staff was trained in accounting and book keeping at APMAS, Hyderabad.
- A marketing analysis workshop was conducted at AF-EC.
- The staff also had an exposure visit to an FPO at Madanapalle for orientation on tomato value addition and marketing. Two workshops on preparation of business plans were conducted at AF-EC at Ananthapuramu.
- Annual audit and legal compliances for all FPOs were completed by end of June.
- Four primary processing centres have been opened with support from ICRISAT and Walmart.

Priorities for 2020-2021

- Implementation of business plans opening farmer input shops, regular business activities
- Streamlining accounting systems; introducing Tally accounting package in all FPOs

*There are 12 FPOs under APDM project. Their achievements are reported separately under APDM section on page 15 and not included here.



Policy Advocacy

The government of Andhra Pradesh constituted the Andhra Pradesh State Agriculture Mission (APSAM) in August 2019. It is an advisory body, made up of agricultural experts and activists and government. Its agenda is to study and recommend policies favourable to farmers, particularly small and marginal farmers, and to develop agriculture as a profitable sector. Accion Fraterna Ecology Centre was appointed a member in APSAM.

This year's successful policy advocacy interventions include:

- A blanket input subsidy of Rs. 13,500/to each farmer, including tenant farmers, in three instalments—at the times of sowing, weeding and harvesting. This subsidy shields small and marginal farmers from moneylenders. It benefitted 5.5 million farmers in Andhra Pradesh
- A policy to allocate Handri-Neeva project river waters for filling 1300 traditional village water bodies in Ananthapuramu district. This improved groundwater table and recharged thousands of borewells

in the influence zones of the water bodies. Benefits would be accrued to approximately 300,000 farmers in Ananthapuramu district.

- Procurement of agri-produce by the government when the market price is lower than Minimum Support Price (MSP), so that farmers need not resort to distress sale. This year, groundnut and pigeon pea market prices fell below MSP and were procured by government. This policy automatically enhances market prices because the farmers have a choice to sell to the Government. Thus it stabilises the prices of farm produce. This policy helped 5.5 million farmers this year.
- AF-EC has been advocating for switching from groundnut monocropping to crop diversification with millet and pulse intercrops. The problem that the farmers faced was that there was no MSP for millets. AF-EC advocated for announcement of MSP for millets also, as for groundnut. The Government announced MSP of Rs. 2,500/- per quintal for all millets: foxtail millet, small millet, pearl

millet, jowar etc. and has benefitted over 1,00,000 farmers, particularly small and marginal rainfed farmers in Andhra Pradesh.

Policies proposed for review

- Andhra Pradesh Water, Land and Trees Act (WALTA), to regulate the use of groundwater on a sustainable basis.
- Review of crop insurance to make it farmer-friendly, particularly for rainfed farmers, and with respect to timely payment of compensation
- Policy for conservation and multiplication of local breeds of cows, enabling livelihoods based on drought-resilient local breeds
- Decentralised and empowered local self-governance and decentralised farm services at Gram Panchayat level
- Policy and financial support for promoting non-farm livelihoods for rural poor women, as a safety net to cope with droughts

Our Human Resource

Accion Fraterna Ecology Centre believes that human resource is the most precious resource of the organisation.

Human resource at organisation leadership level consists of qualified multi-disciplinary professionals with long years of leadership and management experience and extensive hands-on experience in the sectors of natural farming and drought mitigation, animal husbandry, natural resources management; institution development, community organisation, gender, human resources management, project management, monitoring and evaluation, financial management, ICT etc.

The mid-level cadre consists of persons with hands-on field experience in project management, natural farming and drought mitigation, horticulture, watershed development, genderfocused project implementation, institution development, accounts, financial management etc.

Grassroots staff is a trained and experienced cadre with rural background.

Being a learning organisation, we are forever reflecting on our own experiences and drawing lessons for improvement. We are open to new ideas, technologies, and practices and keep looking for those relevant to our context. We change and adapt as per the changing needs of the people with whom we work, and changing situations.

The organisation is a repository of deep-rooted values in development thought and practice. The organisational

systems, culture and practices have been acquired and upgraded through decades of our work with the people of Ananthapuramu district. Personnel participation, transparency in decisionmaking, accountability, sensitivity towards gender and diversity, social equity, teamwork and inclusive culture are some of the integral parts of our culture and values.

As of March 31, 2020 we were 142 personnel; 41 are women. AF-EC is an equal opportunity employer offering equal opportunities to women, persons with disabilities and others at all levels.



Annexures

Livelihood diversification: Youth Centre

Rural youth trained and employed/ self employed in 2019–20

Institution	Centre	Yo	uth tra	ined	Total trained	Employed	Self-employed	Total youth employed
		SC	ST	Others				
AF-EC Driving School (LMV)	Ananathapuramu	60	7	37	104	50	5	55
AF-EC Driving School (LMV)	Kalyandurg	61	7	16	84	55	2	57
AF-EC Driving School (HMV)	Ananathapuramu	22	4	33	59	35	4	39
Two-wheeler repair	Ananathapuramu	7	1	20	28	15	2	17
Two-wheeler repair	Kalyandurg	19	2	27	48	25	5	30
Mobile phone repair	Kalyandurg	25	0	29	54	30	4	34
	Total	194	21	162	377	210	22	232

Rural youth trained and employed or self employed from 2007–2020

Name of the training	Centre	Year Estd.	Candi	dates t	rained	Total	Employed	Self- employed	Total	Percentage
			SC	ST	Others					
LMV driving	Ananathapuramu	2008	501	74	628	1203	630	34	664	55%
LMV driving	Kalyandurg	2008	598	62	459	1119	660	30	690	62%
HMV driving	Ananathapuramu	2011	109	26	185	320	155	12	167	52%
Two- wheeler repair	Ananathapuramu	2017	37	6	47	90	38	8	46	51%
Two- wheeler repair	Kalyandurg	2017	53	2	70	125	10	10	20	16%
Mobile phone repair	Kalyandurg	2017	64	5	83	152	15	15	30	20%
Auto driving for women	Ananathapuramu	2015	50	5	46	101	12	15	27	27%
	Total		1412	180	1518	3110	1520	124	1644	62%

Climate Resilient Zero Budget Natural Farming Project Physical achievement during

the year 2019-2020

Farmer's conversion to natural farming

Village	Total farming households	Farmers converted completely	Farmers converted partially
Cherlopalli	252	35	107
Bandameedhapalli	396	71	102
Kairevu	452	57	94
Thammaiahdoddi	55	52	3
Chintharlapalli cluster (10 villages)	3,000	169	517
Total	4,155	384	823

Project activities implemented

Particulars	Units achieved	Families benefitted
Rainfed five-layer crop models	76 acres	76
Farm ponds with lining	70 farm ponds	70
Grassland development	75 acres	Village community
Kitchen gardens	65 kitchen gardens	65
Contingency crops	560 acres	422
Pre-monsoon dry sowing plots	54 acres	64
Row water sowing	22.5 acres	23
Five-layer vegetable models	8 acres	11
Backyard poultry	200	20
Navadhanya cropping system	1,200 acres	600
Protective irrigation	60 acres	60
Regeneration of degraded pastures	30 acres	2 villages

Climate Resilient Zero Budget Natural Farming Project

Cumulative Achievement from 2017-2020

Farmer's conversion to natural farming

Village	Total farming households	Kudair mega watershed	Farmers converted partially
Cherlopalli	252	50	100
Bandameedhapalli	396	100	120
Kairevu	452	82	120
Thammaiahdoddi	55	52	3
Chintharlapalli cluster (10 villages)	3,000	220	600
Total	4,155	504	943

Project activities implemented

Particulars	Units achieved	Families benefitted
Rainfed five-layer crop models	76 acres	76
Farm ponds with lining	70 farm ponds	70
Grassland development	120 acres	Village community
Kitchen gardens	220	220
Contingency crops	1,200 acres	760
Pre-monsoon dry sowing plots	75 plots	72
Row water sowing	40 acres	40
Five-layer vegetable models	18 plots	28
Backyard poultry	400 nos	40
Navadhanya cropping system	2,000 acres	1200
Protective irrigation	130 acres	60
Regeneration of degraded pastures	30 acres	2 villages

Andhra Pradesh Drought Mitigation Project/ Palle jeevam

FPO promotion activities: Achievements in 2019-2020

FPO	Mandal	FPO shareholders as on 31 March 2020	Revenue generated from CHC in ₹	Revenue generated from CHC in ₹ Lakhs	Area under seed prodution in rabi 2019 in CMSS in Ha	Quantity of seed procured for APSEEDS in quintals	Value of the seed procured in ₹
Sivalingeswara Swamy Farmers MACS Ltd.	Kalyandurga	706	11,14,983.00	6.30	15	465.00	33,01,500.00
Sri Subramanyeswara Swamy Farmers MACS Ltd.	Atmakur	469	2,54,090.00	5.20	14	1,520.00	1,07,92,000.00
Sri Sangameswara Swamy Farmers MACS Ltd.	Kuderu	642	7,63,056.00	8.80	27	1,000.00	71,00,000.00
Sri Anjineyaswamy Farmers MACS Ltd.	Kundurpi	557	2,58,910.00	7.60	37	673.00	47,78,300.00
Sree Annapurneswari Farmers MACS Ltd.	Amarapuramu	758	6,06,298.00	16.60	46	1,230.00	87,33,000.00
Sri Thimappa Swamy Farmers MACS Ltd.	Kambadur	641	3,35,602.00	11.10	23	1,693.00	1,20,20,300.00
Chinna Kadaraiah Swamy Farmers MACS Ltd.	Rapthadu	518	3,73,205.00	6.30	16	831.00	59,00,100.00
Shiridi Sai Farmers MACS Ltd.	Ramgiri	680	3,72,149.00	6.40	58	678.00	48,13,800.00
Sri Ganga Bhavani Farmers MACS Ltd.	Kanaganapalli	676	10,53,737.00	18.80	35	1,134.00	80,51,400.00
Sri Lakshminarasimha Swamy Farmers MACS Ltd.	Gummagatta	558	2,03,443.00	7.20	13	960.00	68,16,000.00
Vedavathi Farmers MACS Ltd.	Beluguppa	704	7,60,229.00	16.20	18	1,023.00	72,63,300.00
Sri Dona Thimmaraya Swami Farmers MACS Ltd.	Bramhasamudram	562	1,31,649.00	9.10	42	570.00	40,47,000.00
Total		1471	62,27,351.00	119.60	344	11,777.00	8,36,16,700.00

Andhra Pradesh Drought Mitigation Project Farmer Producer Organisation (FPO) promotion activities

Cummulative achievements from the year 2017-2020

FPO	Mandal	FPO shareholders as on 31 March 2020	Revenue generated from CHC in ₹	Revenue generated from farmer shop in ₹ Lakhs	Area under seed prodution in rabi 2019 in CMSS in Ha	Quantity of seed procured for APSEEDS in quintals	Value of the seed procured in ₹
Sivalingeswara Swamy Farmers MACS Ltd.	Kalyandurga	706	11,14,983.00	6.30	15	465.00	33,01,500.00
Sri Subramanyeswara Swamy Farmers MACS Ltd.	Atmakur	469	2,54,090.00	5.20	14	1,520.00	1,07,92,000.00
Sri Sangameswara Swamy Farmers MACS Ltd.	Kuderu	642	7,63,056.00	8.80	27	1,000.00	71,00,000.00
Sri Anjineyaswamy Farmers MACS Ltd.	Kundurpi	557	3,15,000.00	7.60	37	673.00	47,78,300.00
Sree Annapurneswari Farmers MACS Ltd.	Amarapuramu	758	7,00,000.00	16.60	46	1,230.00	87,33,000.00
Sri Thimappa Swamy Farmers MACS Ltd.	Kambadur	641	3,35,602.00	11.10	23	1,693.00	1,20,20,300.00
Chinna Kadaraiah Swamy Farmers MACS Ltd.	Rapthadu	518	4,73,205.00	6.30	56	831.00	59,00,100.00
Shiridi Sai Farmers MACS Ltd.	Ramgiri	680	3,72,149.00	6.40	58	678.00	48,13,800.00
Sri Ganga Bhavani Farmers MACS Ltd.	Kanaganapalli	676	11,60,000.00	18.80	35	1,134.00	80,51,400.00
Sri Lakshminarasimha Swamy Farmers MACS Ltd.	Gummagatta	558	2,03,443.00	7.20	13	960.00	68,16,000.00
Vedavathi Farmers MACS Ltd.	Beluguppa	704	8,20,229.00	16.20	25	1,023.00	72,63,300.00
Sri Dona Thimmaraya Swami Farmers MACS Ltd.	Bramhasamudram	562	2,12,649.00	9.10	50	570.00	40,47,000.00
Total		7471	67,24,406.00	119.60	399	11,777.00	8,36,16,700.00

Annual Report 2019-2020

Andhra Pradesh Drought Mittigation Project

Natural Resources Management and Livestock promotion activities: Achievements in 2019-2020

FPO	Mandal	Number of farm ponds constructed	Expenditure in ₹	Living soil activity taken up in hectares	Expenditure in ₹	Number of water troughs constructed for cattle	Expenditure in ₹	Number of household backyard poultry units [night shelters] constructed	Expenditure in ₹
Sivalingeswara Swamy Farmers MACS Ltd.	Kalyandurga	20	7,85,496.00	557.52	4,63,538.00	7	85,725.00	31	1,70,800.00
Sri Subramanyeswara Swamy Farmers MACS Ltd.	Atmakur	10	3,27,154.00	27.46	21,500.00	4	88,691.00	27	1,40,150.00
Sri Sangameswara Swamy Farmers MACS Ltd.	Kuderu	21	7,13,346.00	43.64	4,71,935.00	3	64,351.00	83	4,32,875.00
Sri Anjineyaswamy Farmers MACS Ltd.	Kundurpi	19	6,88,570.00	20.94	1,59,500.00	4	85,802.00	67	3,50,586.00
Sree Annapurneswari Farmers MACS Ltd.	Amarapuramu	22	8,56,474.00	69.47	4,75,689.00	4	83,075.00	87	4,69,500.00
Sri Thimappa Swamy Farmers MACS Ltd.	Kambadur	32	11,87,662.00	70	5,85,900.00	4	64,061.00	67	3,68,470.00
Chinna Kadaraiah Swamy Farmers MACS Ltd.	Rapthadu	11	3,94,854.00	23	1,53,080.00	4	87,275.00	88	4,88,453.00
Shiridi Sai Farmers MACS Ltd.	Ramgiri	15	5,93,888.00	28	1,95,410.00	4	88,690.00	06	4,86,013.00
Sri Ganga Bhavani Farmers MACS Ltd.	Kanaganapalli	20	7,03,878.00	31	2,10,920.00	4	91,444.00	06	4,89,523.00
Sri Lakshminarasimha Swamy Farmers MACS Ltd.	Gummagatta	22	7,18,493.00	52	3,16,843.00	4	54,322.00	92	4,68,904.00
Vedavathi Farmers MACS Ltd.	Beluguppa	18	5,92,876.00	66	6,18,400.00	3	58,055.00	88	4,94,848.00
Sri Dona Thimmaraya Swami Farmers MACS Ltd.	Bramhasamudram	18	5,83,074.00	30	2,76,668.00	9	63,372.00	97	5,25,728.00
Total		228	81,45,765.00	519	39,49,383.00	48	9,14,863.00	206	48,85,850.00

Andhra Pradesh Drought Mitigation Project

Agriculture, Natural Resources Management and Livestock promotion activities



Cummulative achievements from the year 2017–2020

Agriculture activities	Volumes achieved	Financial achievement in ₹
Breeder and foundation seed distributed under CMSS	215 quintals	_
Formation and orientation of CMSS committees	12 committees	
Seed production under CMSS	1,500 quintals	
FFS – Sessions	450 sessions	6,76,560.00
Farmers trainings	1,080 trainings	2,31,000.00
Field days conducted	68 days	10,25,000.00
Bio-resource centres	12 centres	6,75,000.00
Seed licence obtained	12 FPOs	24,000.00
Row water sowing	363 hectares	7,17,750.00
Protective irrigation	1,342 hectares	7,81,584.00
Foliar spray	100 hectares	30,000.00
Training and workshops on crop production	4 workshops	1,11,375.00

Andhra Pradesh Drought Mitigation Project

Agriculture, Natural Resources Management and Livestock promotion activities

B

Cummulative achievements from the year 2017–2020

Agriculture activities	Volumes achieved	Financial achievement in ₹
Situation analysis of RLU's	12 numbers	—
Rearer field schools	300 numbers	4,50,000.00
Formation of CIGs	325 numbers	_
No of GP accesssing schedules seasonal vaccination	36 gram panchayats	3,75,003.00
Establishing of BYP breed farm (entreprenuer level)	12 numbers	18,75,003.00
Night Shelters constructed	907 numbers	48,85,850.00
Cattle troughs	48 numbers	9,14,863.00
Exposure cum training visit on Back Yard Poultry	12 numbers	1,80,000.00
Trained paraworkers	36 numbers	1,80,000.00
Informal group of small ruminant rearers	12 numbers	

Andhra Pradesh Drought Mitigation Project

Agriculture, Natural Resources Management and Livestock promotion activities

С

Cummulative achievements from the year 2017–2020

Agriculture Activities	Volumes achieved	Financial Achievement in ₹
Identification of Learning sites	12 numbers	_
PRA and DPR preparation of Learning sites	12 numbers	_
Earthen bunding (MGNREGS)	2,400 m ³	_
Farm ponds with lining	228 ponds	81,45,765.00
Living Soil Activity	519 hectares	39,49,383.00
Dryland horticulture (MGNREGS)	600 hectares	
Silt application (MGNREGS)	240 hectares	3,00,000.00
Deep ploughing (MGNREGS)	1,200 hectares	
Workshop and training on groundwater collectivisation	3 workshops	2,00,000.00
Process monitoring	4 numbers	52,396.00

Achieving Gender Equality through Empowerment of Women in Agriculture (AGEEWA)

Village-wise details of members and shareholders in Bhumata women MACS Ltd.

Village	Number of members (membership ₹ 100/-)	Amount paid in ₹	Number of shareholders (₹ 1000/-)	Amount paid in ₹
Dharmapuri	73	8,030.00	42	42,000.00
Ravulacheruvu	152	16,720.00	109	1,09,000.00
C Bathalapalli	38	4,180.00	24	24,000.00
Pothula Nagepalli	68	7,480.00	37	37,000.00
NRK Kottala	17	1,870.00	06	6,000.00
Tumparti	73	8,030.00	42	42,000.00
Total	421	46,310.00	260	2,60,000.00

Promotion of non-farm livelihoods for rural women

Details of rural women taken up nano businesses during 2019-20

Mandal	Number of Villages	Number of women	Community wise details		
		started nano business	SC	ST	Others
Rapthadu	5	22	8		14
Atmakur	10	34	15	4	15
Beluguppa	6	29	20		9
Dharmavaram	4	30	9		21
Kalyanadurga	2	5	5	7	0
Kuderu	2	15	8		0
Kundurpi	4	45	12	11	33
Settur	6	21	9		12
Total	39	201	86		104

Farmers Mutually Aided Cooperative Societies

MACS-wise details of members and shareholders

Name of the FPO	Number of members (membership ₹ 100/-)	Amount paid in ₹	Number of shareholders (₹ 1000/-)	Amount paid in ₹
Kalyandurg Farmers MACS Ltd	1526	1,67,860.00	874	8,74,000.00
Settur Farmers MACS Ltd	2046	2,25,060.00	606	6,06,000.00
Kundurpi Farmers MACS Ltd	1604	1,76,440.00	596	5,96,000.00
Kudair Farmers MACS Ltd	1178	1,29,580.00	575	5,75,000.00
Beluguppa Farmers MACS Ltd	1215	1,33,650.00	443	4,43,000.00
Atmakur Farmers MACS Ltd	1647	1,81,170.00	510	5,10,000.00
Rapthadu Farmers MACS Ltd	1102	1,21,220.00	360	3,60,000.00
Dharmavaram Farmers MACS Ltd	920	1,01,200.00	263	2,63,000.00
Bhumata Women Farmers MACS Ltd	421	46,310.00	260	2,60,000.00
Total	11,659	12,82,490.00	4,487	44,87,000.00

MACS-wise net profit in 2019-2020

Name of the FPO	Number of members (membership ₹ 100/-)	
Atmakur Farmers MACS Ltd	59,998.00	
Beluguppa Farmers MACS Ltd	81,594.00	
Dharmavaram Farmers MACS Ltd	7,282.00	
Bhumata Farmers MACS Ltd	33,858.00	
Kudair Farmers MACS	1,11,103.00	
Kalyandurg Farmers MACS Ltd	1,25,924.00	
Rapthadu Farmers MACS Ltd	1,59,081.00	
Kundurpi Farmers MACS Ltd	1,05,604.00	
Settur Farmers MACS Ltd	3,93,012.00	
Total	10,77,459.00	

Audit Reports



MAHESH, VIRENDER & SRIRAM

Chartered Accountants

"Badhe House", 6-3-788/36&37A, Ameerpet, Hyderabad - 500 016.

Tel: 040 – 23401738 Fax : 040 – 23401739 Email :mvshyd@yahoo.com

AUDIT REPORT

We have audited the attached Receipts and Payment account, Income & Expenditure account and Balance sheet as at 31st March 2020 of **Accion Fraterna**, **Ananthapuramu**, Andhra Pradesh. These financial statements are the responsibility of the Trust. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, test basis evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Trust, as well as evaluating the overall financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

Further, we report that:

1) We have obtained all the information and explanation, which to the best of our knowledge and belief were necessary for the purpose of our audit.

2) In our opinion, books of accounts as required by law applicable to Charitable Trusts have been kept by the Trust so far, as appears from our examination of such books.

3) The Balance sheet, Receipts and Payments Account and Income and Expenditure Account referred to in the report are in agreement with the books of accounts.

4) In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet, Receipts and Payments Account and Income and Expenditure Account together with the annexures thereon give the information required as per the law applicable to the Charitable Trusts in the manner so required and give a true and fair view of:

- •In the case of Balance sheet, the state of affairs of the Trust as at 31st March 2020.
- •In the case of **Receipts and Payments** account of total receipts and payments for the year ended on that date, and

In the case of Income and Expenditure account of the surplus for the year ended on that date.
5) In our opinion and to the best of our information and according to the explanations given to us, the said Receipts and Payments, Income & Expenditure Account and Balance sheet comply with the Accounting principles generally accepted in India and notified Indian Accounting Standards.

Place : Hyderabad Date : 24.12.2020 For Mahesh, Virender & Sriram Chartered Accountants Reg. No. 001939 S



(B.R.MAHESH) Partner , M.No. 018628

(A) RECEIPTS	тотац (₹)	GRAND TOTAL (₹)	(A) PAYMENTS	тотац (₹)	GRAND TOTAL (₹)
Opening Balances Cash		I	 Programme expenditure Promotion of Sust. Agri. and diversified livelihoods 		
Bank		2,29,47,262.73	Capacity building of CBOs	23,74,599.00	
			Sustainable Agricultural Practices	13,33,264.00	
Grants Received			Demonstrations on SA & Drought Mitigation	28,97,850.00	
(a) Foreign Grants -Direct			Non farm/ Off-farm livelihoods	26,53,695.00	
Bread for the World, Germany - SA&DL Program	4,67,76,082.00	4,67,76,082.00	Public Awareness building	10,84,164.00	
(b) Foreign Grants -Secondary recipient			Trainings and Meetings	22,11,224.00	
APMAS - AGEEWA program	4,58,764.00		Salaries for Program Staff	1,70,93,750.00	
Collectives for Integrated Livelihood Initiatives			Travel cost & FTA to Field staff	17,81,723.00	
(CINI) - SUSIAIN+ Program	55,00,000.00	59,58,764.00	Maintenance cost of Field offices	9,59,508.00	3,23,89,777.00
			Expenditure on SUSTAIN+ Program		11,79,731.00
			Expenditure on AGEEWA Program		6,39,645.00
(b) Government / Local Grants			(b) Expenditure on Government / Local Projects		
NABARD - SD & CCB & FPO &LEDP	16,85,766.00		NABARD - SD & CCB & FPO & LEDP		48,37,047.00
ICRISAT, Value Chain Project	1,36,32,080.00	1,53,17,846.00	ICRISAT, Value Chain Project		97,15,697.00
(c) CRZBNF- APPI Program & RySS Program	43,21,500.00	43,21,500.00	(c) CRZBNF- APPI Program & RySS Program		1,26,53,289.00
 (d) Consultancy Contract from GIZ : (German Development Cooperation Deutsche Gesellschaft für Internationale Zusammenarbeit) 	86,546.00	86,546.00	(d) Expenditure On MGNREGS-EB Consultancy Activities		I
(e) 1. APDMP Program - LFA	93,30,679.00	93,30,679.00	(e) Expenditure on 1. APDMP Program - LFA		60,72,159.00
2. APDMP Program - FA 1	32,89,500.00	32,89,500.00	2. APDMP Program - FA 1		25,18,120.00
3. APDMP Program - FA 2	32,89,500.00	32,89,500.00	3. APDMP Program - FA 2		24,78,636.00
Beneficiary Contributions		25,00,659.00	II. Administration		1,51,57,657.61
Interest/Income/Capital gains		55,33,997.90	III. Capital Expenditure		84,31,388.00
Other Receipts (EMD/Health Subsidy/Gratuity & welfare)		1,53,45,108.00	Revenue Expenditure - Other Liabiliies		1,36,31,689.69
Advances (Other Programs)		4,15,73,706.00	Advances (Program/Salary/TDS)		4,11,01,403.00
Fixed Deposits/Investments		7,66,04,295.00	Fixed Deposits/Investments		7,54,96,996.00
Inter Projects		7,66,000.00	Inter Projects		7,66,000.00
			Closing Balances		
			Cash		87,186.00
			Bank		2,64,49,930.49
			Closing Balances Subsidiary Accounts		35,093.84
TOTAL (A) in ₹		25,36,41,445.63	TOTAL (A) in ₹		25,36,41,445.63

Consolidated Receipts and Payments Account for the period from 01.04.2019 to 31.03.2020

(B) RECEIPTS	TOTAL (₹)	GRAND TOTAL (₹)	(B) PAYMENTS	тотац (₹)	GRAND TOTAL (₹)
Funds released directly to Watershed development Committees & FPOs to meet program expenses.			Funds released directly to Watershed development Committees & FPOs to meet program expenses.		
IWMP Watersheds	27,12,000.00		IWMP Watersheds	27,12,000.00	
NABARD Watersheds	37,20,000.00		NABARD Watersheds	37,20,000.00	
APDMP - FPOs	5,23,79,537.00	5,88,11,537.00	APDMP - FPOs	5,23,79,537.00	5,88,11,537.00
TOTAL (₿) in ₹		5,88,11,537.00	TOTAL (B) in ₹		5,88,11,537.00
GRAND TOTAL (A+B) IN ₹		31,24,52,982.63	GRAND TOTAL (A+B) IN ₹		31,24,52,982.63

Program costs directly transferred to Village Watershed Committees / FPOs by NABARD & IWMP Watersheds

Note: As for the NABARD and IWMP watershed projects, only Administration Costs related to Accion Fraterna are reflected in Accion Fraterna books of accounts.

Whereas the Program costs of the funds are released directly to the Village Watershed Committees/beneficiaries for spending on program activities which are being facilitated by Accion Fraterna.





Chief of Operations Accion Fraterna, Ananthapuramu

> Date : 24.12.2020 Place : Ananthapuramuamu

Statutory Auditors : M/s Mahesh, Virender & Sriram , Chartered Accountants, Hyderabad Income Tax Consultants : M/s. P.Sivaramakrishna & Co., Chartered Accountants, Hyderabad

Julia Roll

Dr. Y V Malla Reddy Chief Functionary and Director Accion Fraterna, Ananthapuramu



B.R.Mahesh Partner (M. No. 018628) For Mahesh, Virender & Sriram Chartered Accountants Reg. No. 001939 S Hyderabad

Balance Sheet as at 31.03.2020

Liabilities	Amount (₹)	Assets	Amount (₹)
Fund Account		Current Assets	
General Fund	6,01,59,132.04	Closing balance	
Capital Fund	4,46,96,100.00	Cash	87,186.00
Driving School Fund	36,94,786.00	Bank	2,64,85,024.33
Gratuity & Health Fund Account		Deposits/Investments	
Gratuity & Welfare Fund	78,83,510.12	General Deposits	4,10,87,976.00
Staff Health Subsidy Fund	1,08,15,244.00	Gratuity Fund Investments	60,34,284.81
Staff Performance Incentive Fund	84,310.00	Health Subsidy Deposits	83,95,216.00
		Driving School Deposits	25,75,200.00
Current Liabilities/Advances		Other Security Deposits	1,79,262.00
Advances from Other programs	94,06,055.00		
Unspent Specific Grants	1,12,98,930.00	Specific Grants Receivable	66,89,654.31
		Advances	
		Advances to Other Programs	79,41,000.00
		Accounts Receivable - TDS	18,68,531.71
		Accounts Receivable - Provident Fund	734.00
		Program Advances	19,82,269.00
		Salary Advances	15,629.00
		Fixed Assets	4,46,96,100.00
TOTAL in ₹	14,80,38,067.16	TOTAL in ₹	14,80,38,067.16

Herry ...

A. Srinivasulu Finance Manager Accion Fraterna Ananthapuramu

Date : 24.12.2020

Place : Ananthapuramuamu



J Murali Krishna Chief of Operations Accion Fraterna Ananthapuramu

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Dr. Y V Malla Reddy Chief Functionary and Director Accion Fraterna Ananthapuramu



Partner (M. No. 018628) For Mahesh, Virender & Sriram Chartered Accountants Reg. No. 001939 S Hyderabad

Statutory Auditors : M/s Mahesh, Virender & Sriram , Chartered Accountants, Hyderabad Income Tax Consultants : M/s. P.Sivaramakrishna & Co., Chartered Accountants, Hyderabad



Board of Trustees

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Dr. Y.V. Malla Reddy Managing Trustee

Mr. Thippeswamy Trustee

Ms. Prameela Kumari Trustee

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Accion Fraterna is exempted from Income Tax under 12A of Income Tax Act. Accion Fraterna is exempted for donations under section 80G of Income Tax. FCRA Registration is renewed with Ministry of Home Affairs (MHA). FCRA Registration No. 010120029 dated 23.03.1985 is renewed up to 31.10.2021.



We acknowledge with gratitude our partnership with Bread for the World for Sustainable Agriculture and Diversified Livelihood Program.