

Anubhava Reflections by Practitioners



A Compendium of APMAS Case Studies



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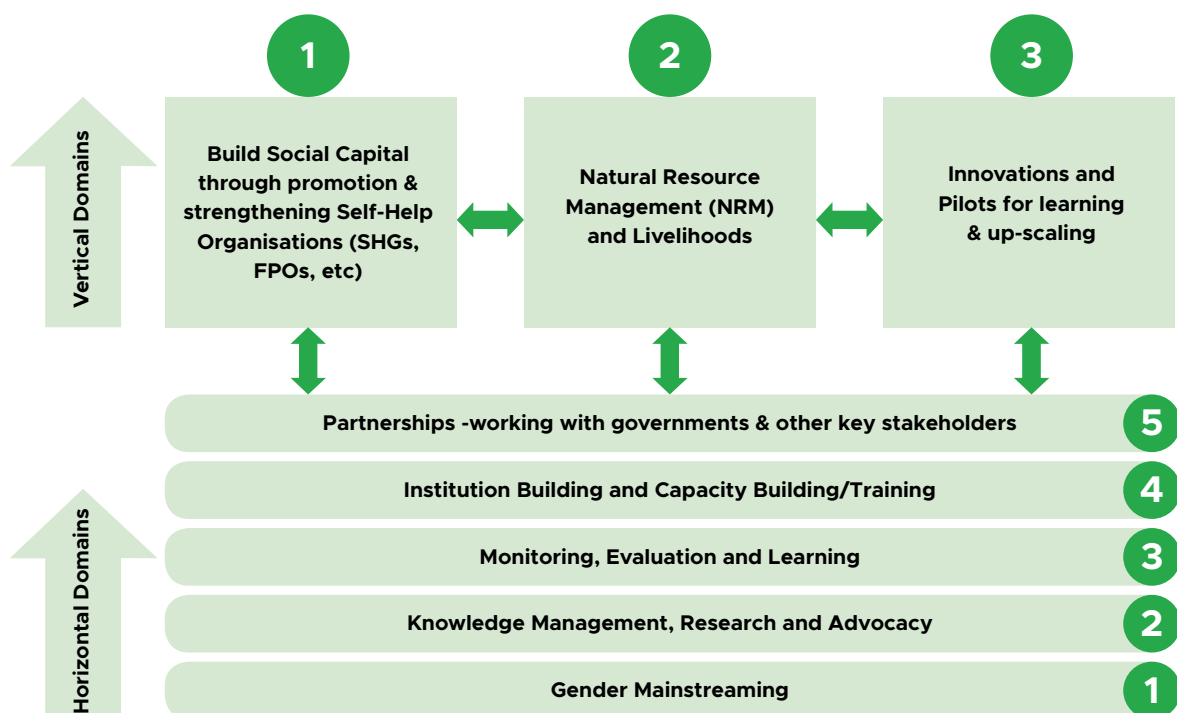
VISION

Self-reliant people's institutions result in reduced poverty and inequalities

MISSION

Promote and strengthen the institutions of women, farmers and other marginalised communities for realising their full potential towards achieving sustainable development and inclusive growth

THRUST AREAS



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A Compendium of APMAS Case Studies

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Foreword

Mahila Abhivruddhi Society, Andhra Pradesh (APMAS), since its inception in the year 2001, has been relentlessly working towards promoting and strengthening collective enterprises of the marginalized communities (SHGs, SHG federations, FPOs and federations of FPOs) built on the foundation of cooperative values and principles. In the first decade of its existence, APMAS almost exclusively focused on women Self-Help Groups (SHGs) and their federations to help them emerge as self-reliant institutions through the capacity building of SHG promoters, rating and evidence-based policy advocacy. APMAS, over the years, has played a pivotal role in facilitating Government – NGO collaboration to achieve synergies & maximise impact. In the second decade of APMAS' existence, the scope of the organization and its geographic outreach expanded to include natural resource management, agriculture-based livelihoods, promotion of Farmer Producer Organizations (FPOs) as business enterprises and agriculture-value-chain development. Over the years APMAS has engaged in diverse partnerships and alliances with national & international NGOs, State Governments, Government of India, Academic and Research Institutions, CSR Foundations, International Donors, and Networks to realize its vision of a “**self-reliant self-help movement in India**”.

Over more than a decade of intensive work of field implementation & capacity building at all levels - field, state and national - has enabled APMAS to gain considerable experience and expertise in promoting, training and mentoring women SHGs and SHG federations in Andhra Pradesh, Bihar and Uttar Pradesh as sustainable collectives based on the values of self-help, mutual benefit and self-responsibility. With this foundation, we initiated the formation of farmers groups (FGs) in watershed areas of Andhra Pradesh and Telangana where APMAS performed the role of a Project Implementing Agency (PIA). To institutionalize the informal farmers groups, village level farmers associations (***Grama Rythu Sanghams***) were registered under the Mutually Aided Cooperative Societies (MACS) Act. These village level farmers associations (MACS) that cover a specified geographic area of a gram panchayat, promoted their own FPOs which have been registered either under the MACS Act or under the Producer Company Act. APMAS supported these FPOs in the areas of governance, management, systems, improved farming practices, business development and collective marketing of agricultural produce following agriculture value chain development, to transition into viable collective enterprises.

From that humble beginning of the promotion of three FPOs in watershed areas, APMAS has come a long way and to-date has promoted 47 FPOs directly, including 8 all women FPOs and one FPO Federation. Moreover, institution development and business incubation support is being provided for around 150 FPOs in the capacity of a Resource Support Agency (RSA) of NABARD, in Andhra Pradesh and Telangana. Over five years of engagement in promoting and incubating farmers' collectives, building capacities of the FPO promoting institutions, developing required training manuals and self-learning modules for the Board of Directors of the FPOs, and participating in FPO policy formulation at the State and National Level has been an enriching and rewarding learning experience for APMAS.

Our long-term strategic partnership with DGRV Germany in developing a Sector-Owned Control (self-regulatory) system for the SHG movement (called **Swayam Niyantrana Udhayamam – SNU**) in India and piloting some of those systems with the FPOs has further deepened our understanding. We placed a very strong emphasis on system-oriented approach (good governance, bookkeeping and accounting) for the promotion of FPOs which was hitherto lacking in the sector. Women’s empowerment being a non-negotiable for APMAS, we have dedicated considerable attention to women shareholding and leadership in FPOs as well. APMAS has developed six FPO Board of Directors (BoDs) self-learning modules and 15 posters in English and seven Indian languages for wide-spread use in the country. We have developed comprehensive modules on FPO bookkeeping and financial management to establish a strong foundation for the FPOs to evolve into perpetual & inter-generational organizations of farmers. We have also developed self-learning modules on collective marketing, primary processing and secondary processing by FPOs which will be available in English & other Indian languages.

APMAS strongly felt the need to document the experience and learning in building people’s institutions in the form of **“Anubhava – Reflections by Practitioners: a Compendium of APMAS Case Studies”** for internal use and wider dissemination. The compendium consists of 10 case studies focusing on different areas of our work of building self-reliant institutions, with special focus on FPOs. The unique feature of this compendium is that it is almost entirely written by the practitioners within APMAS, during the Corona-virus pandemic nonetheless, when APMAS relief operations were at its peak. With mentoring and continuous guidance from two unique professionals, Prof. Ajit Kanitkar and Prof. Shambu Prasad, the compendium was developed over a period of six months. The deep commitment and dedication shown by Ajit and Shambu in developing the compendium in a participatory manner is absolutely praiseworthy and we fondly acknowledge their contributions.

The process of developing the case study compendium in itself has been a learning experience for all of us. On behalf of the Board of Directors and Staff of APMAS, I would like to place on record the deep sense of appreciation to more than 20 staff of APMAS and others who have been involved in the case study writing, for making this possible. As the CEO of APMAS, it has been my proud privilege to be fully involved in driving this effort to ensure that the compendium is published digitally and physically! What started as an informal conversation with Ajit and Shambu in March 2020 during a national conference on FPOs at Institute of Rural Management, Anand (IRMA) is now a publication that would hopefully be most valuable to the practitioners and policy makers!

A big thank you to Ms. Sudha Nair and her team at New Concept for editing and designing the APMAS Case Study Compendium. Ms. Varalakshmi and Ms. Kalamani need much appreciation for their continuous support, contributions and coordination in this effort.

I very much look forward to your feedback and comments and thank you for taking time to read!

CS Reddy

Founder & CEO of APMAS

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List of Abbreviations

AGEEWA	Achieving Gender Equality through Empowerment of Women in Agriculture
AEIN	Aide à l'Enfance de l'Inde et du Népal (AEIN)
ANM	Auxiliary Nurse Midwife
APMAS	Mahila Abhivruddhi Society, Andhra Pradesh
AP OILFED	Andhra Pradesh Co-operative Oilseeds Growers' Federation Limited
APSCA	Andhra Pradesh Seed Certification Agency
APSSDC	Andhra Pradesh State Seeds Development Corporation
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker
BCC	Behaviour Change Communication
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)
BoD	Board of Directors
BRC	Bio Resource Centre
CBO	Community Based Organisation
CCI	Cotton Corporation of India
CEO	Chief Executive Officer
CHC	Custom Hiring Centre
CmF	Centre for microFinance
CMSS	Community Managed Seeds System
COVID-19	Corona Virus 2019
CRP	Community Resource Person
CWC	Central Warehousing Corporation
DCMS	District Cooperative Marketing Society
DGRV	Deutscher Genossenschafts-und Raiffeisen Verband (German Cooperative and Raiffeisen Confederation)
DPR	Detailed Project Report
FDC	Farmer Development Centre
FFS	Farmer Field School
FIG	Farmer Interest Groups
FPO	Farmer Producer Organisation
FSC	Farmer Service Centre
FYM	Farm Yard Manure
GAP	Good Agricultural Practices
GHMC	Greater Hyderabad Municipal Corporation
GMM	Grameena Mahila Mandali (An NGO)
GRS	Grama Rythu Sangham
GST	Goods and Services Tax
HFs	Health Facilitators
IFA	Iron and Folic Acid

IIHR	Indian Institute of Horticulture Research
IIHRS	Indian Institute of Horticulture Research Station
IPM	Integrated Pest Management
ISMW	Indian School of Microfinance for Women
KPCS	Kamareddy Cluster Paryavekshana Samakhya
MACS	Mutually Aided Cooperative Society
MARKFED	State Agricultural Cooperative Marketing Federation Limited
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIDH	Mission for Integrated Development of Horticulture
MoU	Memorandum of Understanding
MPDO	Mandal Parishad Development Officer
MSP	Minimum Support Price
MVK	Mana Vitthana Kendram
NABARD	National Bank for Agriculture and Rural Development
NAFED	National Agricultural Marketing Federation of India Limited
NBFC	Non-Banking Financial Company
NCDEX	National Commodity & Derivatives Exchange Limited
NGO	Non-Governmental Organisation
NRLM	National Rural Livelihood Mission
PACS	Primary Agriculture Cooperative Society
PLW	Pregnant and Lactating Women
POPI	Producer Organisation Promoting Institution
PPC	Primary Processing Center
PRP	Professional Resource Person
PSS	Price Support Scheme
RARS	Regional Agricultural Research Station
RBI	Reserve Bank of India
RKVY	Rashtriya Krishi Vikas Yojana
RM	Rythu Mithra
SAP	State Anchor Person
SBCC	Social and Behaviour Change Communication
SERP	Society for Elimination of Rural Poverty
SFAC	Small Farmer Agri-Business Consortium
SHG	Self-Help Group
SHGPF	Self-Help Group Promotional Forum
SHPI	Self-Help Group Promoting Institutions
SLF	Slum Level Federation
SNU	Swayam Niyantrana Udyamam
SOP	Standard Operating Procedure
SRLM	State Rural Livelihoods Mission
SWC	State Warehousing Corporation
ToT	Training of Trainers
UHND	Urban Health and Nutrition Day
WAASAN	Watershed Support Services Activities Network
WFPO	Women Farmer Producer Organisation
ZBNF	Zero Budget Natural Farming

Building Viable/Self-Reliant Institutions of Collective Enterprises

Mr. Ajit Kanitkar & Mr. C. Shambu Prasad

There is a new momentum for promoting farming as an enterprise. Farmer Producer Organisations and Farmer Producer Companies (FPOs/FPCCs) are seen today as the key vehicle for doubling farm incomes by the Government of India through its new 10,000 FPO policy. The policy though is less clear about the over 8-9,000 FPOs that have been already promoted by different FPO promoters in the country with many of them requiring significant incubation & mentoring support after the project period. A key element of ensuring these farmers' organisations' success is the institutions' quality on the ground that would bring about this transformation. The Producer Company format seems to have become the default form of building institutions even as many promoting organisations are struggling to maintain the board of directors' strict compliance in remote rural/tribal areas that the format demands. The experiences of forming FPOs through the liberal cooperative law, through the Mutually Aided Cooperatives Societies (MACS), especially in Andhra Pradesh and Telangana, has been insufficiently researched or reported. Given the increasing number of unsuccessful FPOs, post-project period grant support of promoting institutions and donors, the adage on FPOs and cooperatives today would most likely read as "FPOs have failed, but co-operation must not".

The set of cases in this volume that we have reviewed are largely on FPOs (refer to the summary table). While the FPOs are relatively young (the average months since formation is 35 months), the case studies in the volume indicate significant

membership and business growth. These FPOs have an average paid-up capital of Rs. 7 lakhs, with nearly 1000 shareholders in each FPOs.

APMAS promoted six of the seven FPOs featured in this volume under MACS Act, and one is under Producer Companies Act, that we think are unique in its FPO promotional process with possible lessons for the rest of the country. APMAS has been known for its contribution in nurturing SHG Federations, initiating watershed development projects and many other projects of promoting sustainable people's institutions. However, over the last few years, APMAS has not only promoted over 47 FPOs in Andhra Pradesh and Telangana but is also a leading resource support agency (RSA) of NABARD in Andhra Pradesh & Telangana for training & providing business incubation support to FPOs and for capacity building across the country. The case studies documented in this volume are an opportunity for the 'constructive workers' to use a Gandhian phrase, share their excitements, and frustrations, build and nurture these institutions with farmers exploring means to enhance their incomes / livelihoods. It is also an opportunity for many who are part of the FPO ecosystem to appreciate significant efforts involved in FPO institution-building and market linkage challenges.

The process of knowledge building: Reflective practitioners

Writing the case studies is a departure from the 'normal' practice of documentation and knowledge building. Typically an outsider, 'expert' researcher visits a field location, talks to the actors, including communities,

field personnel and project staff. Based on those interactions, the researcher 'writes' and publishes! Another possible alternative is where the practitioners themselves take time out from their action-packed days, they come together to reflect and are facilitated in a group environment to write about their experiences. The discussion is not about writing a 'success story' again a theme that many NGOs are obsessed with but reflecting on what went well and what can be done differently. We call this process as a **Writeshop**, a workshop to come together, reflect and write experiences.

The preliminary conversations on the volume happened at APMAS and IRMA before the spread of the Covid 19 pandemic and the subsequent lockdown. We anticipated and were hoping to meet the case writers and discuss their cases face to face through a workshop. Unfortunately, though this was not possible. However, there were a series of virtual seminars starting from April 2020, roughly one every month. Many first-time case writers were encouraged to express themselves by articulating key messages, working on their cases' main body, and discussing these in subsequent facilitated meetings either together or in smaller groups. It is to the credit of the authors of this volume that they have shown both *Shraddha* and *Sabr* (trust and perseverance) in this long journey in the last few months despite their (actually) busy schedules in providing Covid relief to communities or making a difference in the field.

Decoding what works well and what does not

If FPOs as new generation farmers organisations have to succeed, they need to use popular Startup terminology, 'fail fast'. They have to learn from the success and failures of older cooperatives and MACS and learn fast from the successes and

failures of the many FPOs in the country. There are illustrations of FPOs aggregating their farming inputs requirements in this volume, thereby adding to their bargaining power with suppliers of those inputs. This has led to affordable prices with more convenience of fetching those inputs on time and assured quality. Thus, for an FPC to be central to its members' lives, it is the Trinity of Access, Assurance and Affordability seems to be the key. Farmer members need to be assured that they would have access to affordable inputs, technical advice, market information, and services to raise the income. While many private sector players might provide access to all of the above services, what makes FPO's work critical is the guarantee that such services are available for the last mile and that too at an affordable cost for each one of them (and not just a few resource endowed farmers.)

Similar experiments have been reported for aggregation of output and interacting with consumers directly or with private sector organisations. The partnership with the private sector marketing organisation would hopefully prove beneficial to the FPOs and its farmer members. It has been observed that farmers are mostly at a disadvantage when marketing their produce.

Farming as a business, farmers as agripreneurs

This volume, besides case-studies of FPOs, has a couple of stories on individual farmers. These are important trends as there is a renewed national debate on looking at agriculture not just as a vocation where discourse till a few years ago was dominated by increased productivity and therefore emphasised on improved inputs and applying the most efficient (and often most extractive) package of practices (POPs). With a new focus on farmers' income (and net income hopefully) and

backed by the government schemes such as “Doubling farmers’ income”, the ‘how’ part of such grand visions is sometimes not spelt out. A few case studies that we present here indicate possibilities where individuals, by consciously pursuing certain activities, lead to desired outcomes. Their actions are those of a new generation of farmers, farmer-entrepreneurs or agripreneurs who while taking risks as entrepreneurs, also manage their operations effectively, thereby mitigating risks in operation.

The volume has important stories of women entrepreneurs and women member-owned FPOs. While women continue to do most of the work in agricultural operations, studies do not narrate their contributions except that the lament is of women’s diminishing role in decision-making in many of these studies. In contrast, the real burden of ‘driving’ agriculture continues to increase every year. Women are also invisible in many policy level meetings that discuss women’s role in agriculture and development. Through these cases, women’s active roles give us a different lens to look at the much-debated phrase ‘Feminisation of agriculture’.

This volume provides a welcome break from these trends. Women entrepreneurs, be it the landless a few years ago, have ventured to become the proud owner of a small enterprise. Similarly, women farmers have joined an FPO and in some situations are also managing their organisation’s operations. Women-owned and governed and managed FPOs and agripreneurial activities have set a new vision for many such prospective aspirants in the country.

From economic prosperity to wellbeing: Behaviour change is the key

There are two case studies focus on nutritional outcomes, and enable. Both

FPCs as organisations and individual entrepreneurs aspire for economic prosperity, additional income and healthy cash flows. However, the pursuit of economic prosperity would remain incomplete if a simultaneous emphasis does not accompany improved health, better nutrition and gender parity between men and women programmed in the traditionally patriarchal mindset. These case-studies narrate women’s positive experiences in the federation caring to work on better nutrition, increased awareness of men in sharing responsibilities in the family, etc.

For such a leap in behaviour to happen is a long and arduous process. The processes begin and stay in the minds of individuals. The case studies narrate inspiring efforts of such processes. We do hope that these processes remain sustainable even after the closure/ end of particular project intervention.

Looking ahead

The eight case studies out of ten presented here offer a glimpse of new forms of organisations taking roots in the emerging context of Indian agriculture. APMAS, as a lead facilitating organisation, has taken the initiative in sowing the seeds of these initiatives. Many well-wishers have supported their efforts and generous grants contributed by leading donor organisations such are GIZ, BftW, DGRV, BMGF and AEIN. These initiatives need to grapple with two key challenges that we present below –

- a) Graduating from project status to a permanent going concern: Development literature has narrated numerous ‘exit strategies’ once a particular form of funding is over. In our limited but long experience of working with such ‘projects’, our painful realisation is that while there

is no shortage of 'intent' of continuing beyond the 'project', there are very few examples where those initiatives sustain after the grant period is over. The stakeholders involved in writing these case-studies and those about whose efforts, the narration is written, should be duly cautious and pro-active in ensuring that the institutional initiatives, be it an FPO or MACS federation, continue to remain functional at the end of the grant period. Sustainability of these institutional initiatives is an important challenge.

- b) A closely related aspect of the above process is building an agency of the so-called "beneficiaries", of the project, and making as not just active participants but also owners and drivers of the change process. It is much easier to theorise than to practice. This transition in thinking of the communities as also of the intervening agency is probably the only guarantee to ensure that

sustainability is built. The only and probably the only robust way is to ensure that the onus of responsibility of running such initiatives transfers from a 'promoting organisation' such as 'APMAS' to the 'people's organisation' such as an FPO or a MACS or even a business enterprise, resulting true member-ownership.

We earnestly hope that APMAS and its team of dedicated staff are successful in unleashing these two positive processes, more rigorously in the months to come. With such efforts on the ground, and thus hopefully the presence of multiple such robust institutions on the ground working for their member farmers would truly be a 'living documentation' beyond the 'pen-paper led' documentation we facilitated through this volume. We wish best for such "living institutions".

Mr. Ajit Kanitkar and Mr. C. Shambu Prasad
January 2021

Summary Table

S. No.	Item	Ramasamudram FDC	Nallamada FPO	Dheeshali FPO	V-Kota FPO	Gudibanda FPO	Bhulakshmi FPO	Dharani FPO
1	Name of the FPO/FPC	Ramasamudram Mandal Agricultural Producers Mutually Aided Cooperative Federation Ltd	Nallamada Mandal Agricultural Producers Mutually Aided Co-operative Federation Ltd	Dheeshali Raithu Mahila Producer Company Ltd	V. Kota Mandal Agriculture Producers Mutually Aided Cooperative Federation Ltd	Sri Siddheswara Agriculture Producers Mutually Aided Co-operative Society Limited, Mandhalapalli	Bhulakshmi Farmers Producer Mutually Aided Cooperative Society Ltd	Dharani Agriculture Producer Mutually Aided Cooperative Society
2	Date of Registration	4-21-2018	4-17-2017	17-09-2018	9-14-2017	4-24-2018	26-04-2018	2-8-2018
3	Total number of shareholders	2123	1040	432	1000	724	555	768
4	Commodities traded through the FPO	Vegetables and fruits	Groundnut and Redgram	Paddy and Vegetables	Tomato, Ridge & Bitter gourd, French bean, Cucumber and Chilli	Seeds, Cattle feed and Bio fertilisers	Ground Nut Bussiness, input Saleand Navadhanya Sale	Papaya
5	What was the total volume traded (QtI)	448000	1973	34.32	342	100	1450.6	21,266
6	What is the total value traded (Rs)	Rs. 30,41,000	Rs.94,33,000	Rs. 1,07,282	Rs. 40,26,103	Rs. 3,00,000	Rs. 24,71,698	Rs. 1,28,58,000
7	Turnover	Rs. 60.71 Lakhs	Rs. 79.2 Lakhs	Rs. 14.14 Lakhs	Rs. 81.21 Lakhs	Rs. 55.2 Lakhs	Rs 91.18 Lakhs	Rs. 121.1 Lakhs
8	Profit	Rs. 4.75 Lakhs	Rs. 2.21 Lakhs	Rs. 0.2 Lakhs	Rs. 1.6 Lakhs	Rs. 0.34 Lakhs	Rs 2.18 Lakhs	Rs. 5 Lakhs

Ramasamudram FDC: A Viable FPO Enterprise Supplying Agri-Inputs

Dr. S. Prahallada¹ & Ms. Padmasri Nivedita²



1. Background

Ramasamudram mandal is located in the northern region of Chittoor district of Andhra Pradesh. As the mandal shares its border with Karnataka state, the people of Ramasamudram follow diverse cultures and speak both Kannada and Telugu. Agriculture is the main livelihood of the people in the mandal. Major agriculture crops grown include paddy and groundnut. Major horticulture crops include tomato, brinjal, bitter gourd, ridge gourd, cauliflower, cabbage, carrot, cucumber, potato, muskmelon and watermelon. Dairy is the second major

Ramasamudram FPO has established a Farmer Development Centre in partnership with eFresh Agribusiness Solutions Ltd to provide quality inputs to farmers at competitive prices. In the past one year, the FDC supplied inputs to 1500 farmers and made a turnover of Rs. 44,50,000.

livelihood, especially for the small and marginal farmers.

There are, however, some major issues and challenges faced by the farmers in Ramasamudram:

- ⊙ High probability of crop failure due to erratic rainfall in the region
- ⊙ High volatility of tomato prices
- ⊙ Lack of availability of quality fertilisers
- ⊙ Dependence on unqualified salespersons at the input shops for suggestions
- ⊙ Higher prices of inputs as main dealers are not available in the vicinity
- ⊙ Middlemen sell seeds, fertilisers and other inputs to the farmers on credit basis and buy their produce after harvest. Though this arrangement provides a cushion to the farmers in terms of not having to pay for inputs immediately, the produce from the farmers is bought at prices much lesser than in the open market.

¹ Dr. S. Prahallada - Project Manager, APMAS

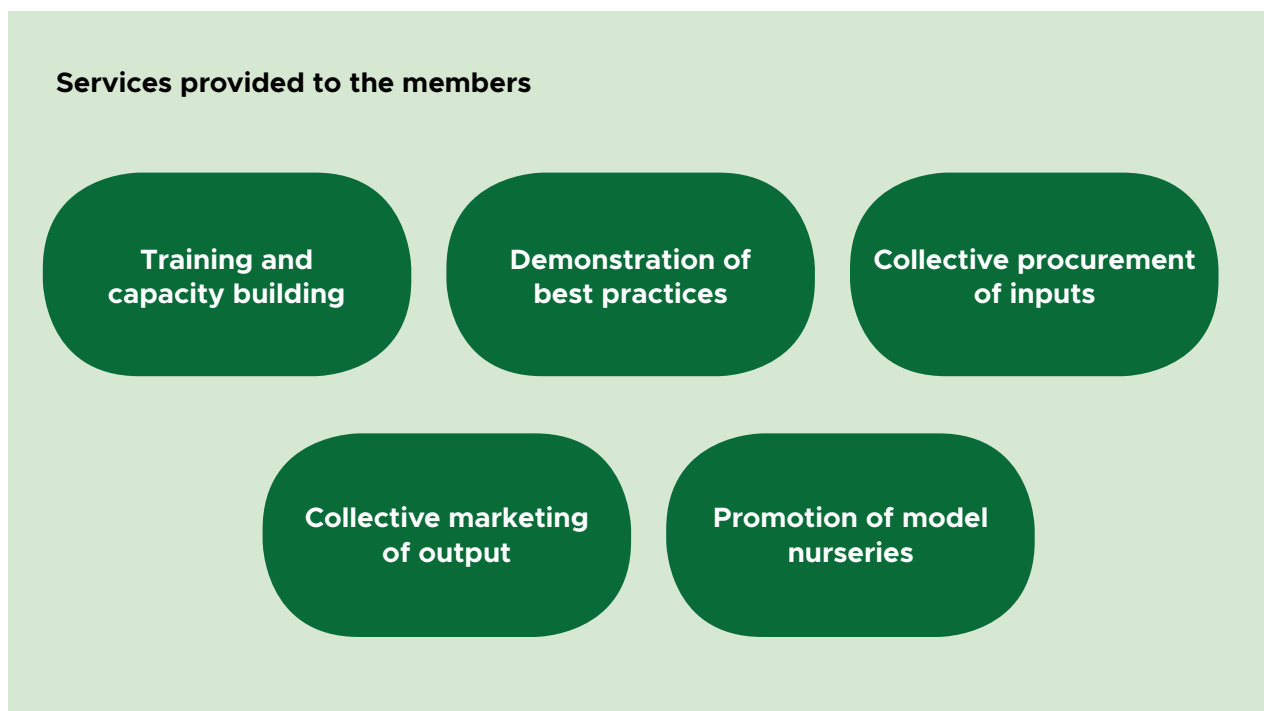
² Ms. Padmasri Nivedita - Project Manager, APMAS

To support the farmers of Ramasamudram, Mahila Abhivruddhi Society, Andhra Pradesh (APMAS)³ promoted a Farmer Producer Organisation (FPO), 'Ramasamudram Mandal Agricultural Producers Mutually Aided Cooperative Federation Ltd', with panchayat level primary societies as member organisations. The FPO was registered under APMACS Act 1995 on 21 April 2018, with the objectives of increasing the farmers' income, reducing the expenditure, improving productivity and minimising risks as part of the "Green Innovation Centre" project under "One World–No Hunger" initiative of the German Federal Ministry for Economic Cooperation and Development (BMZ).

The total membership of the federation is 2123, including 355 women farmers. The

FPO currently offers a variety of services to its members, including input marketing, output marketing, demonstration of best practices in cultivation, training, awareness creation, infrastructure development, etc. APMAS, the promoting agency of the FPO, provides technical and financial support to the FPO in delivering these services to the farmer-members and facilitates further development of the FPO.

As a step towards increasing the income of the farmers and reducing the cost of cultivation, the FPO decided to set up an input shop to sell fertilisers, pesticides, seeds, small agricultural implements & machinery, cattle feed and other inputs. The vision behind setting up the shop was to provide a wide range of services and inputs to the farmers at competitive prices.



³ APMAS is a not-for-profit organisation registered in 2001. It works to promote and strengthen people's institutions, such as self-help groups and farmer producer organisations. (<http://apmas.org/>)

FPO Profile

Name of the FPO/FPC	Ramasamudram Mandal Agricultural Producers Mutually Aided Cooperative Federation Ltd
Date of Registration	21-04-2018
Registration type	APMACS Act 1995
Total number of shareholders	2123
Authorised capital	Rs. 25.0 Lakhs
Paid-up capital	Rs. 13.26 Lakhs
BoD members	14
Name of the Promoting Institution (PI)	APMAS
Licenses Obtained	FPO Has three licenses Fertiliser : (CTR/36/ADA/FR/2018/23839 Valid up to : 27/12/2021) Pesticides : (2203/2020) Seeds: (CTR/36/JDA/SD/2019/16222. Valid up to : 20/09/2024) GST : 37AALR1612H1Z7
Channels of Marketing	BigBasket, Metro-Cash & Carry, More and local markets
Trading	The FPO is enrolled on e-NAM and NCDEX. The FPO has traded through NCDEX platform
Source of Finance	Equity grant from CoH, Govt of Andhra Pradesh
Turnover	Rs. 60.71 lakhs
Profit or loss	Profit of Rs. 4.75 lakhs

2. Need and Importance of Farmer Development Centre (FDC)

At the initial stage, input business was done by the panchayat level cooperatives, which was further scaled up, leading to the establishment of the FDC. Based on demand from the farmers, the FPO started the business of supplying tarpaulins and agricultural implements like sprayers. With further diverse demands from the farmer-

members, the FPO decided to expand its products and services.

Through the experience gained from procurement and marketing of inputs, the FPO's board of directors realised that it would be beneficial for them to tie-up with a third-party. As the FPO was still in its nascent stage, it was deemed more practical to establish an input shop in partnership with another

institution having the required market experience and technical expertise. While Ramasamudram FPO manages the FDC, the work of market research, identifying vendors and negotiating with vendors was outsourced to a third-party.

2.1 Collaboration with eFresh Agribusiness Solutions

APMAS provided support to the FPO in identifying various entities involved in agriculture business. Meetings were held with identified institutions and the FPO decided to collaborate with eFresh Agribusiness Solutions⁴ to establish an FDC as a franchise.

Ramasamudram FPO, APMAS and eFresh signed a tripartite memorandum of understanding (MoU), in November 2018 in Tirupati, in the presence of Shri S. Chandramohan Reddy, Minister for Agriculture, Government of Andhra Pradesh, followed by the setting up of the FDC in February 2019.

The FPO hired a building with a go-down facility for storage in Ramasamudram village (mandal headquarters) at a rent of Rs. 7,500. As of November 2020, the FDC owned the following infrastructure:

- ⊙ 6.5 ton capacity transport vehicle
- ⊙ Computer
- ⊙ Printer
- ⊙ Television
- ⊙ CCTV camera
- ⊙ LCD projector

The FPO acquired the necessary licenses to sell seeds, fertilisers, pesticides, and shops & establishments license to run its input business.

The MoU lists out the key products, activities and services of the FDC, and the roles and responsibilities of the three parties involved (provided in the box given below).

eFresh

- ⊙ Branding of FDC
- ⊙ Handholding of FPO/FDC staff in collaboration with APMAS
- ⊙ Monitoring FDC operations
- ⊙ Supplying agriculture inputs, products, farm machinery & tools, etc. for sale and custom hiring at FDC
- ⊙ Arranging product demonstrations to associates/suppliers
- ⊙ Advisory and capacity building services to the FPO on FDC management
- ⊙ Guidelines on accredited good agricultural practices, and promotes model farmers
- ⊙ Guidance to the FPO on required legal compliances.

⁴ eFresh Agribusiness Solutions is a Private Limited company incorporated under the Indian Company's Act. The company has its headquarters in Hyderabad. It is supported by the National Bank for Agriculture and Rural Development (NABARD) and International Crop Research Institute for Semi-Arid Tropics (ICRISAT). eFresh has come up with the idea of establishing one-stop shops for all the needs of the farmers. (<https://www.efreshglobal.com/>)

APMAS

- ⦿ Building capacity of the directors and staff of the FPO to serve the members by providing need-based products and services in the most efficient manner, adhering to all legal compliances, and helping them access the relevant schemes of the government
- ⦿ Ensuring effective cooperation and coordination between eFresh and the FPO
- ⦿ Supporting the FPO to build other partnerships and collaborations which are complementary to FDC to provide wide range of services to FPO farmer-members, with the mutual consent of eFresh.

Ramasamudram FPO

- ⦿ Collecting data from farmers
- ⦿ Preparing business plan for FDC
- ⦿ Establishing infrastructure and other facilities at its own cost
- ⦿ Incurring operational and maintenance expenditure of FDC
- ⦿ Obtaining and maintaining statutory licenses for FDC operations in its name
- ⦿ Recruiting and monitoring the staff, as required
- ⦿ Nominating a person to coordinate with eFresh and manage the FDC
- ⦿ Identifying products and services needed by the farmers and local villagers on an ongoing basis
- ⦿ Promoting the sale of agri-inputs, products, farm machinery and tools, etc. at FDC and custom hiring services as mutually identified and agreed
- ⦿ Maintaining records for purchases, sales, inventory and services on an ongoing basis
- ⦿ Complying with all the statutory requirements laid down by the state and central governments and other regulatory organisations
- ⦿ Participating in capacity building programmes organised by eFresh/its associates and APMAS from time to time
- ⦿ Projecting the brand image of eFresh and the sale of authorised products at FDC as mutually agreed
- ⦿ Owning and managing the FDC

2.2 Business Development Plan (BDP)

With technical support from APMAS, Ramasamudram FPO prepared a BDP for five years. It includes plans for financials, marketing, operations, human resources and risk management.

The document also gives a clear picture of the market opportunities, potential for business and demand from farmers

for various products. It also mentions the sources of finance for investment in business development activities.

2.3 Mobilisation of resources

The required financial planning for the establishment of FDC was done in the FPO meeting. As the FPO is in its nascent stage, it has limited resources to invest in its business activities. For

this, Ramasamudram FPO requested APMAS to provide financial assistance for the initial investment and thus, APMAS provided Rs. 150,000 worth of infrastructure which included TV, CCTV and iron racks, while the working capital for the purchase of inputs was borne by the FPO from its equity.

The table below gives the sources and utilisation of financial resources for the establishment of the FDC:

The human resources of the FDC include one salesperson-cum-accountant and a Project Manager. eFresh deployed a Project Manager who acts as a point person between eFresh and the FPO, and provides the necessary market information after due research.

Sources of financial resources for the FDC

Particulars	Source	Amount (in Rs.)
Purchase of inputs	☉ Share capital of FPO	7,00,000
	☉ Grant from promoting institution	2,80,526
	☉ Equity grant from Govt of AP	3,00,000
Purchase of transport vehicle	☉ Subsidy from Govt of AP	4,87,500
	☉ Grant from promoting institution	2,00,000
	☉ Share capital of FPO	6,00,000
Purchase of furniture and other equipment	☉ Grant from promoting institution	1,50,000
Total		27,18,026

Figure 1: Services offered at the FDC



2.4 Other services offered at the FDC

In addition to the sale of agriculture inputs, advisory services are also offered to the farmers at the FDC. Technical Coordinators (employees of APMAS who are graduates in agriculture sciences) visit the FDC regularly to provide suggestions to farmers on the usage of fertilisers and best practices in pre-production and production-related aspects. Informative videos on best practices in vegetable cultivation are played on the television at the shop. Various posters depicting value-chain activities, benefits of joining the FPO, services available at the FDC, etc. are displayed for the information of farmers.



3. Collaborations with Other Institutions

As the main motive of establishing the FDC is to ensure the availability of high quality inputs at competitive prices, partnerships and collaboration with companies other than eFresh are also explored frequently. So far, Ramasamudram FDC has established partnerships with Andhra Pradesh Marketing Federation to procure fertilisers and cattle feed on free-on-load⁵ basis. Also, APMAS has an MoU with Coromandel International which enables the supply of inputs to Ramasamudram FDC at discounted prices. Through these partnerships, the farmers can order custom-made tarpaulins which are not available in the open market. Moreover, farmers can purchase inputs from the FDC at 10% lesser price compared to the retail market. They have expressed their satisfaction over the quality of products available at the FDC.

4. Management of FDC

In February 2019, a one-day orientation on 'FDC management' was provided to the

FPO Board of Directors and sales assistant by eFresh and APMAS.

Marketing sub-committee: Manages input and output marketing, responsible for periodic monitoring of the FDC, taking indent from all GRSs (Grama Rythu Sangams - the panchayat level farmer cooperatives) and submitting it to the Project Manager. The sub-committee is also responsible for promotion of sales at village level through GRS meetings.

Project Manager: Sends the indent to the Marketing Director of APMAS who places an order with Coromandel International Company and provides necessary guidance regarding accounting, bookkeeping and management of FDC.

Sales Assistant: Responsible for accounting and bookkeeping.

FPO CEO: Coordinates with APMAS, partners and collaborators for demand generation and stock management.

FPO BoD: Discusses the progress in terms of sales and expenditure, and strategies to improve the performance during every monthly board meeting.

5. Turnover and Margins of FDC

Since its establishment in February 2019 till August 2020, the FDC has made a significant turnover of about Rs. 44,60,000 through input sales. Partnerships with AP MARKFED and Coromandel Ltd have further boosted sales. This also brought in active participation from the members and strengthened the social trust within the institution.

⁵ Free-on-load: Andhra Pradesh State Cooperative Marketing Federation Ltd is currently supplying fertilisers to Ramasamudram FPO and other FPOs promoted by APMAS in Chittoor and Anantapuramu districts without charging transportation costs. Thus, these fertilisers are available to farmers at cheaper prices, which is a relief for small and marginal farmers.

There are 43 varieties of fertilisers, cattle feed (Annexure-1) and eight varieties of pesticides (Annexure-2) that are available at the FDC for purchase.

Month-wise turnover and margin data are depicted in the figures below:

The trends in turnover depict a gradual increase in the initial four months (February to May 2019) followed by a drop in the

next two months (June and July 2019). Initially, the FPO staff and Board of Directors advertised about FDC and sale of inputs in the meetings of GRS. This resulted in attracting the customer base. As the turnover and sales went down in the subsequent months, there was an effort to diversify the available products. In August 2020, AP MARKFED started the supply of fertilisers to Ramasamudram FDC which resulted in increased sales.

Figure 2: Monthly turnover

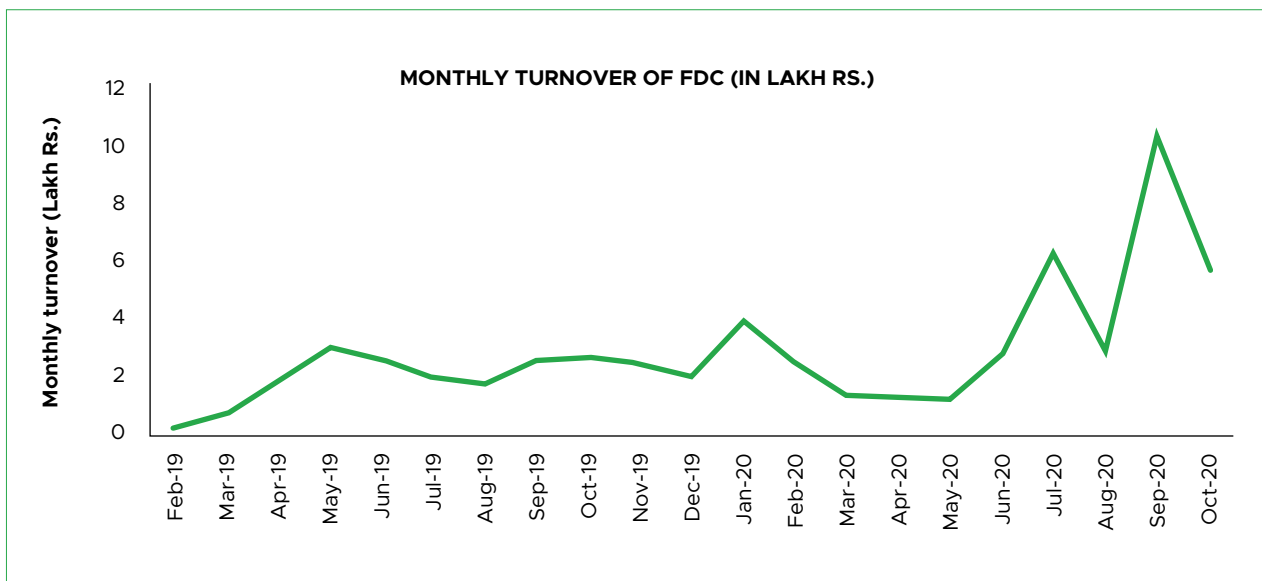
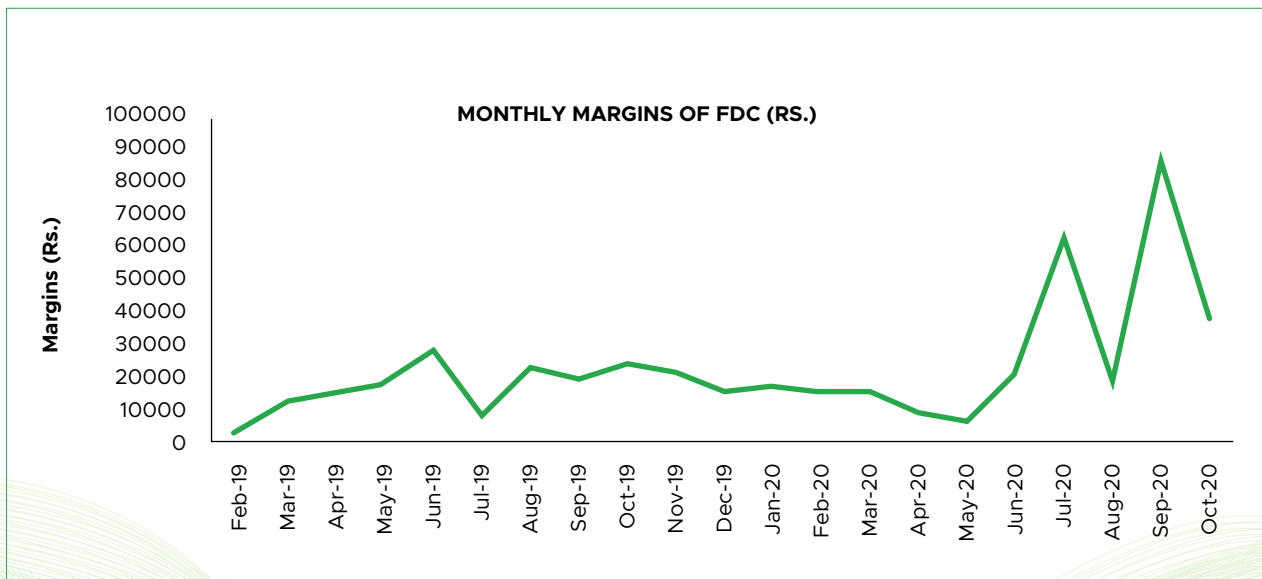


Figure 3: Monthly margins



However, there have been some delays in the supply of fertilisers from AP MARKFED due to the unavailability of stock which has affected sales. Moreover, when there is heavy rainfall and higher availability of green fodder for cattle, there is a dip in the sale of cattle feed.

To attract more customers and increase the sales, Ramasamudram FPO shifted its shop to a different location near the main road in the mandal headquarters, which is more visible and accessible to farmers.

The nation-wide lockdown and mobility restrictions due to Covid-19 pandemic in India had a negative effect on the business of the FDC. However, after the restrictions were eased out, the FDC was reopened and the inputs were made available to the farmers in time for the Kharif season.

6. Issues and Challenges

- ③ Competition from local dealers: There is tough competition to the FDC from local dealers and retailers. Reputed fertiliser manufacturing companies like Gromor and Jaikisan have opened their retail stores at mandal headquarters where the FDC is located, and six other retailers have established their business in the same locality. In addition, three retailers started their business in Chembakur, which is one of the major gram panchayats in the mandal and is geographically closer to five other gram panchayats. About 30% of the households in these areas are purchasing products from these three outlets.
- ③ Competition from shops in Karnataka: Ramasamudram mandal shares its border with Karnataka state. Fertilisers and agricultural implements are available at relatively cheaper prices in Karnataka as compared to Andhra Pradesh because they sell



Narayana Reddy,
Farmer, Yarapasettipalli

VOICE OF THE CUSTOMER

“Ramasamudram FDC is selling quality products from reputed fertiliser manufacturing companies at lesser rates. At FDC, fertilisers are available during lean season as well. During Covid time, FDC maintained the stock of urea when there was no stock available in other shops.”



Reddemma, President of
Ramasamudram FPO

VOICE OF THE MANAGEMENT

“Ramasamudram FPO, that manages the FDC, caters to all types of inputs like fertilisers, pesticides, seeds, cattle feed and agri-implements like sprayers with high quality standards. Ramasamudram local shop owners are selling local company products, but the FPO procures inputs from reputed companies and provides quality services to the farmers. Further, the technical coordinators are providing support to identify the diseases and fertiliser needs. The member-farmers are happy with the services of the FPO.”

products without charging GST. The competition and availability of material at lesser prices is a great challenge to the FDC.

- ⊙ Demand for multiple brands: Due to advertisements by various manufacturing companies, there is a demand from the farmers to stock products of various brands at the FDC. However, at this stage, it is difficult for the FDC to meet this demand as there is a cap on minimum quantity to place an indent with the wholesaler. At times, this has resulted in the FDC losing its customer base.
- ⊙ Technical issues of electronic products: Technical issues with usage of electronic products such as sprayers have been a challenge sometimes. In some cases, ineffective usage and lack of required training for the utilisation of the product were the main reasons.

7. How the Challenges were Overcome

The FPO has adopted various strategies to overcome the above-mentioned challenges. Some of them include the formation of internal committees, maintaining the quality of the products, providing inputs at competitive prices and capacity building of the farmers.

- ⊙ Strengthening internal committees to build better ownership within the FPO: A three-member committee was formed within the FPO Executive Committee to take care of the FDC activities. The committee reviews the progress of activities, discusses on various operational issues and gives suggestions to the FPO and FDC staff.

- ⊙ To deal with the competition from open market, the FPO ensured that the prices of the products sold are relatively cheaper in comparison to other outlets. The selling price of the products is decided based on the cost price and a small margin to cover the operational expenditure of the FDC.
- ⊙ No compromise on the quality of products so that the customers are retained. There were instances where the customers mentioned about specific products available at the FDC, such as the cattle feed, that resulted in increased yield.
- ⊙ Capacity building of farmers on technical aspects of various products and their effective usage.

8. Way Forward

The business of FDC is continuing in its second year and has established more partnerships in addition to eFresh. The Board of Directors of the FPO are planning to strengthen the FDC by providing multiple brands of products to cater to the needs of the farmers. Moving forward, they want to:

- ⊙ Expand their business and attract a wider customer base by delivering the products to villages where there is bulk demand.
- ⊙ Use different platforms to provide information to the farmers on the availability of products, and on the difference in prices of FDC and the open market.
- ⊙ Distribute dividends to shareholders to increase the participation of members in the FPO activities.

Annexure 1: List of Products Available at the FDC

S. No.	Name of the Product	S. No.	Name of the Product
1	Agri Mini Max 1 K.G.S	23	Mulching Sheet
2	Agri Mini Max 500 G.M.S	24	Tarpaulins (18*24)
3	Agri Mini Max 250 G.M.S	25	Cattle Feed Supplement (Yea-Sacc)
4	Agri Mini Max 100 G.M.S	26	Nose mask
5	Boron 20	27	Hand gloves
6	Ferti Max 13-00-45 (N.P.K)	28	Apron
7	Ferti Max 12-61-00 (N.P.K)	29	Goggles
8	Ferti Max 00-52-34 (N.P.K)	30	Gum Boot Shoe
9	Ferti Max CN 15.5-18.8 (Calcium Nitrate)	31	Water traps
10	Fertisol	32	Yellow Sticky
11	Hydro Pro Gold	33	Blue Sticky
12	Phosphocop	34	Urea
13	K Phonic	35	D.A.P
14	Solubor	36	19.19.19 Complex
15	Macro Fert 20:20:20	37	Solar Lamp
16	Tata Sickles	38	Solar Lantern
17	K4	39	S.K.M. Cattle Feed
18	K7	40	Sprayers
19	Cocopeat	41	Tarpaulins
20	Mobile Operated Pump Starters (Agri Control Units)	42	Growpusti Cattle Feed
21	Commando 708 Sprayers	43	Nandi Cattle Feed
22	Protective Gear		

Annexure 2: List of Pesticides Available at the FDC

S. No.	Product	Quantity
1	Amnon	100 grams
2	Amnon	500 grams
3	Cymagan	300 grams
4	Macoban	500 grams
6	Metrigan	100 grams
7	Nimrod	250 milliletre
8	Harrier	100 grams
9	Svscon	250 grams
10	Weedblock	1 litre

The Journey of V. Kota FPO: Partnering with Private Retail Chains

Mr. G.R. Amarendrudu¹ & Ms. Madhu Manjari²

1. Introduction

V. Kota Mandal Agriculture Producers Mutually Aided Cooperative Federation Ltd is a farmer producer organisation (FPO) located at V. Kota, Chittoor district, Andhra Pradesh. It has 1000 shareholders, mostly consisting of small and marginal farmers, representing eight gram panchayats (GPs) of the mandal. The FPO got registered under the Mutually Aided Cooperative Societies (MACS) Act in 2017.

The FPO members are mostly involved in the cultivation of vegetables crops (tomato, French beans and gourds), fruit crops

(mango, banana) and flower crops. The rich geographical and climatic conditions of the mandal make it favourable for fruits and vegetables cultivation.

By building their skills in supply chain management with the help of the promoting agency, Mahila Abhivruddhi Society, Andhra Pradesh (APMAS), the FPO has benefitted around 30% of its shareholders by supplying their produce to supermarkets like Metro and More, and online retailers like Big Basket. In the last three years, the cumulative turnover of fruits and vegetables (F&V) alone reached around Rs. 41.81 Lakhs.

FPO Profile

Name of the FPO/FPC	V. Kota Mandal Agriculture Producers Mutually Aided Cooperative Federation Ltd
Date of Registration	14-09-2017
Registration type	MACS
Total number of shareholders	1000
Authorised capital	Rs. 10 Lakhs
Paid-up capital	Rs. 5 Lakhs
BoD members	12
Name of the Promoting Institution (PI)	APMAS
Licences Obtained	Fertilizers and seeds

¹ Mr. G.R. Amarendrudu - Project Manager, APMAS

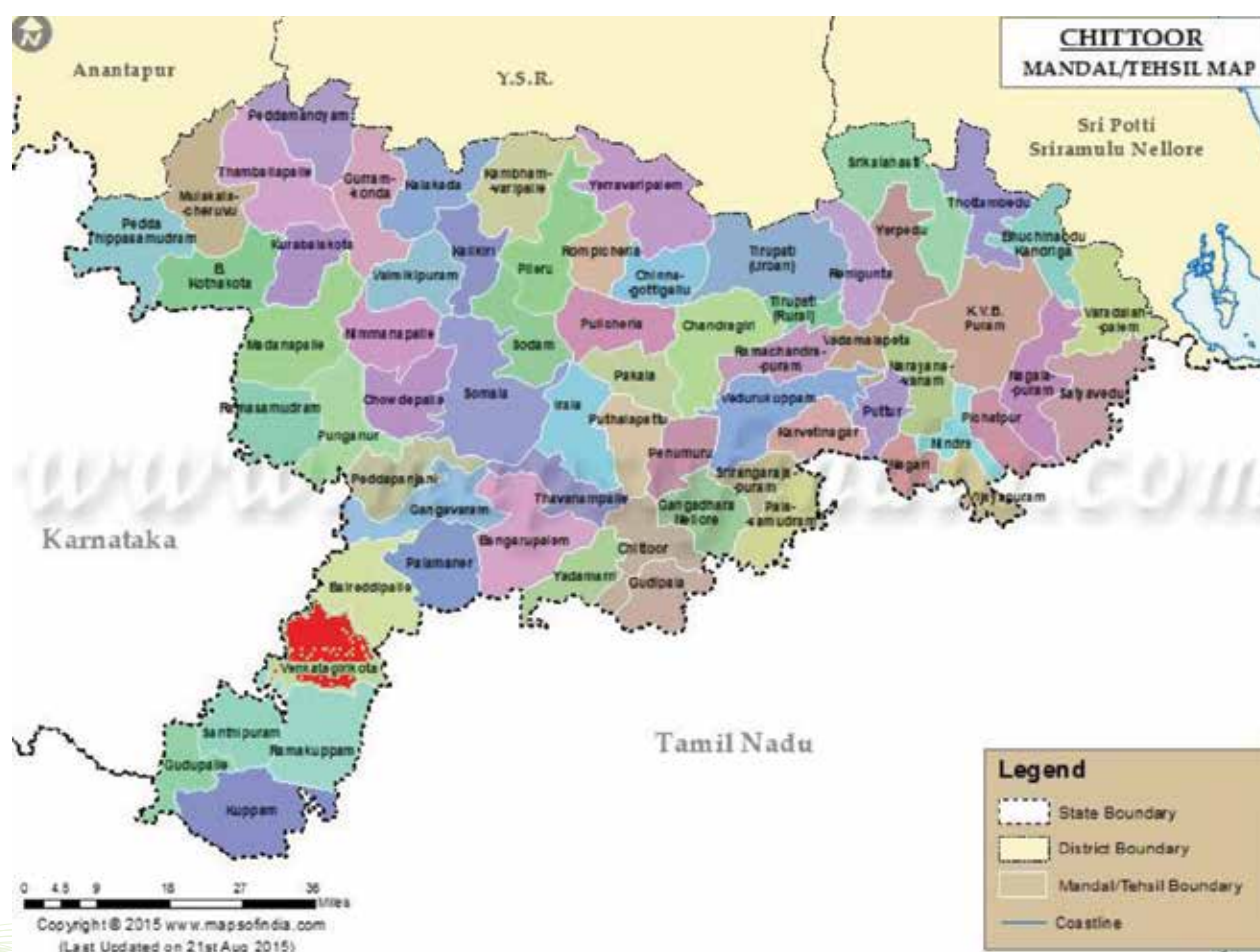
² Ms. Madhu Manjari - Marketing Director, APMAS

Total number of farmers covered	Input services : 5121 Output marketing : 637
Channels of Marketing	Processors, Supermarkets and Wholesalers
Source of Finance	Project Funding and Department of horticulture support for infrastructure and Matching grant
Turnover	Rs. 81.21 Lakhs
Profit	Rs. 1.65 Lakhs

2. Mandal Profile

Venkatagiri Kota or V. Kota is located at 13.0000°N and 78.5000°E. It has an average elevation of 764 metres (2509 feet) above sea level. V. Kota Mandal falls under the drought prone area of Chittoor and the farmers mostly cultivate vegetables, flowers,

mango and banana. Farmers follow year round cultivation (three seasons) in case of ground water availability. Majority of the farmers sell their produce in the wholesale markets of Chennai, Tamil Nadu as the mandal is very close to Karnataka and Tamil Nadu state borders.



3. Situational Analysis and Problem Identification

As mentioned, V. Kota FPO members are mostly small and marginal farmers with fragmented landholdings. Most of the farmers cultivate fruits and vegetables which have good market value. But the challenge is marketing of smaller quantities of harvested produce. Being perishable in nature, F&V supply chain involves several intermediaries and players such as cold storage providers, logistics providers, *arhatiya* (middleman), etc. The inefficiency of the F&V supply chains is marked by lower share of farmers in the consumers' rupee. The state governments have provided good infrastructural facilities for taking up marketing of fruits and vegetables across Andhra Pradesh. V. Kota mandal has an Agricultural Produce Market Committee (APMC), a regulated agriculture market yard, and is also closer to the wholesale markets operating in Tamil Nadu and Karnataka where the farmers can sell their vegetables. In these wholesale markets, trade is based on fixed market commission. The process involves farmers selling the stock to a commission agent or *arhatiya* who takes the risk of selling the stock in the wholesale market for a fixed commission. In the whole process, farmers are totally dependent on the commission agent and traders for their returns. It is a vicious cycle where the commission agent, who supports the farmer by providing inputs on credit during sowing time, purchases the final produce at lower prices compared to the nearby markets and adjust the credits in the selling price.

The process is in practice for years and no innovations/interventions have brought any change so far. Given this backdrop, V. Kota FPO got registered and started emerging slowly. The FPO's basic objective is to help the farmers

by improving their revenues, either by reducing the cost of cultivation and/or providing better market prices for the harvested produce. On various occasions, issues like high middlemen commissions, low farmers' share and improper weighing, etc. were witnessed by the promoting agency and the FPO.

Even though the FPO was confident of helping the farmers as well as making this venture economically feasible, there were challenges such as lack of infrastructure, working capital, etc.

To address these pertinent issues of member-farmers, the FPO with the help of APMAS decided to explore other alternative marketing channels like wholesalers, processors, retailers, etc.

4. Buyer Identification and Tie Up

4.1 Identification of buyers

After studying the markets and understanding the marketing issues, it was clear to the FPO and APMAS that the major challenge is lack of negotiating power at farmers' end because of their miniscule quantities to sell. After several discussions, the FPO decided to take up 'direct procurement of vegetables' from farmers and sell the same to various institutional buyers. This model provided the farmers with remunerative prices, opportunities for negotiation, avoidance of commission and weighing discrepancies. In this model, instead of focussing on primary and secondary markets, the FPO concentrated on the consumer hubs/terminal markets and also utilised the market price spread between the two markets.

As major F&V processors in Andhra Pradesh are located in Chittoor district, the option/s of supplying the produce to them was also given a thought. But

the processors procure only during the flush season at lowest prices and they do not look for any grade. As the FPO was planning for year round procurement, they were forced to look for other options too.

The FPO decided to go unconventional with a calculated risk. As 'V. Kota FPO' was located near Chennai and Bengaluru markets, options of never tried channels with an existing procurement system were explored, such as supermarkets. After a structured analysis and elongated discussions, the following were selected:

- ③ **M/s Srini Food Industries:** The FPO, with the support of APMAS, approached the processor for seasonal procurement, but due to certain disagreements in the terms and conditions, the discussions remained inconclusive.
- ③ **Visit to Chennai and Bangalore wholesale markets:** The FPO and APMAS teams visited the nearby major wholesale markets/*mandis*/APMC in Chennai and Bengaluru and discussed with various stakeholders, including several traders and commission agents. All the APMCs or regulated markets in the cities have same set of marketing system as in secondary or town level markets, viz. commission, weight loss, pricing based on average grading, jackpot (few commodities), etc. In FPO operational area, the individual farmers had been selling their produce through this channel for years. Therefore, new business through this channel was ruled out, as there were few chances of value addition at any level.
- ③ **Supermarkets and e-commerce:** After analysing the emerging trends and buyers' behaviours, new emerging marketing channels such as supermarkets, online markets, etc.



were identified. These markets have 'transparent procurement systems' in place which reduces the risks associated with marketing the produce and are highly sought after.

4.2 Tie up with identified buyers

APMAS team took a lead role in identifying such buyers at consumer hubs/tertiary/terminal/urban markets in Bengaluru and Chennai cities. The relationship started by building formal associations (by obtaining a vendor code for the FPO) with two major retail chains, Metro Cash & Carry and BigBasket. These two have a good business volume, with a significant market share in the organised retail market spectrum (especially F&V), in the specified terminal market.

Once the relationship was formally established, the following activities were taken up broadly: market profiling, vegetable profiling, GP selection, harvesting plans, farmer database, etc.

A simple analysis was presented to the board of directors (BoD) and farmers to make them understand the entire process of procurement, prudent selection of players and future plans.

Particulars	Wholesale	Retail	Institutional or HORECA segments	End user/ Customers
Probable delivery point	At mandi/APMC in city	At nearest collection centre	At their centralised kitchens, viz. city outskirts	Doorstep/One-stop-shop
Minimum demand/day	10 MT	4 -5 MT	3-4 MT	Subject to overall demand and supply
Pricing	Monopolistic-Cartel pricing and very dynamic	Dynamic but no cartel system	Fixed and tender system	Depends on daily market price and customer relation
Transparency in trade	Non-transparent	Transparent	Transparent	Highly transparent and negotiable
Feasibility and viability	Feasible if FPO acts as a trader with a set infrastructure	Feasible in scale and variety	Yet to be tried	Yet to be tried
Innovativeness	Conventional	Innovative	Very innovative	Very innovative
Marketing channel	Indirect through commission agent	Direct where FPO acts as a trader	Direct where FPO is a vendor	Direct where FPO is a supplier

Based on the indicators provided in the above table, a discussion was held with the BoD to finalise the tie up with the best buyer/s. The criterion was as under in order of priority:

- ⊙ **Transparency in rate quote:** If major buyers are compared in terms of transparency in rate quote, modern supermarkets/retail stand apart and better.
- ⊙ **Quantity and volume :** The demand and volume of commodities are highest in the wholesale market among other buyers. But considering the pricing and experience of the FPOs in the supply of F&V, the retail market with a small volume appeared to be best.
- ⊙ **Value chain intervention and role of FPO:** The F&V market is highly fragmented and involves many players

who add the value of place, time or form at each stage. For FPOs to be one of the value chain operators by adding minimum value in terms of change in place only, i.e., procurement in one market and sale in other markets, transaction through retail chain was best.

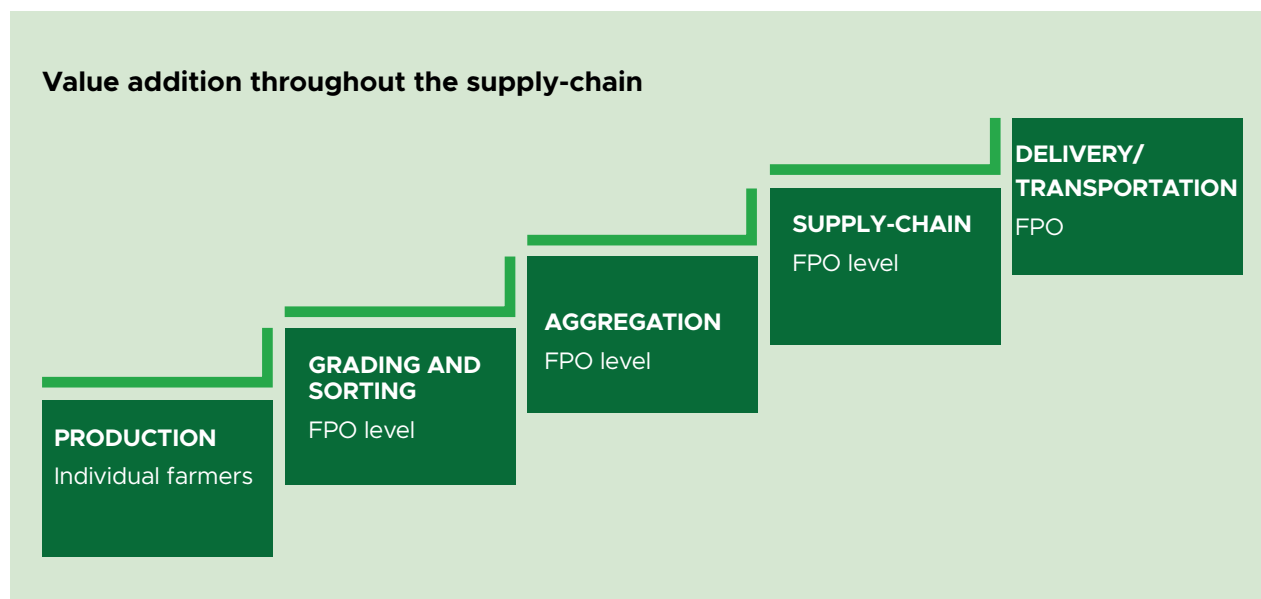
In view of the above indicators and analysis, a resolution was passed by the FPO to take up the least risky and innovative business of supplying to the “Retailers” (Metro, More, BigBasket, etc.).

The FPO planned to extend its support to small and marginal farmers in aggregating the harvested produce and supplying the same to the selected supermarkets and e-commerce giants by optimising the supply chain, to the extent possible.

5. Business Commencement, Operations and Infrastructural Set Up

The selected business model for supplying F&V envisaged direct supply of selected vegetables from the FPO to retail chains without any intermediaries. The idea behind exploring this model was to

ensure that the FPO has a larger share in consumers' rupee by entering into the vegetable value chain, and also to enable each farmer to receive a premium price for the commodities sold to the FPO. The diagram below depicts the role of each actor and value addition at each step:



To take it ahead, during January 2018, before commencing the supplies, the officials from BigBasket and Metro Cash & Carry were requested to provide technical knowhow on crop-specific specifications which are as under:

1. Method and time of harvesting
2. Commodity-wise cleaning, sorting and grading

3. Packing and supply chain
4. Time of supply
5. Other specific information

A few dedicated field trainings were conducted to make the farmers understand the required quality specifications of each commodity by BigBasket procurement team. The trainings were attended by technical

coordinators of APMAS, FPO BoD and member-farmers. As part of the training, exposure visits were also conducted to the collection centres of BigBasket, Metro Cash & Carry and other e-commerce retailers.

As the farmers and FPO staff gained practical knowledge on sorting, grading, packaging and other post harvest management practices, interested farmers were engaged strategically for regular and unbreakable supplies of selected commodities.

On 11 January 2018, V. Kota FPO started supplying selected commodities to e-commerce retail giant BigBasket and store-based retail giant 'Metro Cash & Carry', a first-of-its-kind in Chittoor district.

Initially, all the major vegetables from the farmers, with minimum processing like sorting and grading, were supplied to the two retailers thrice a week. Gradually, other seasonal fruits were also added and quantities of the supplies picked up. The supplies were made to BigBasket and Metro Cash & Carry at the nearest collection centres.

Though the business started with good pace, the absence of infrastructure and lack of own transportation vehicles affected the business growth. These problems were addressed partially by arranging a small collection centre at the FPO and purchasing a vehicle by utilising the existing government schemes.

Pictorial representation of the processes followed for the marketing of fruits and vegetables to retail chains



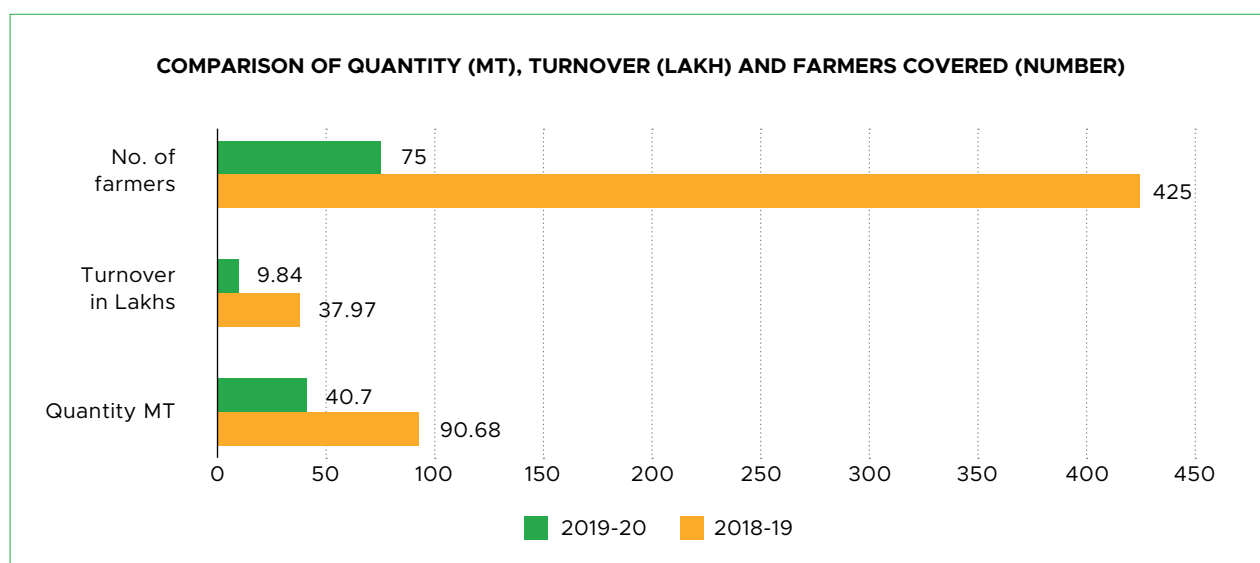
6. Business Turnover and Transaction Details

V. Kota FPO has been engaged in the business of collective marketing since last two years, and gained enough experience

and moved from single market segment to multiple buyers in the same segment and also in multiple segments. The summary of the business taken up along with the list of commodities handled is given under:

Particulars	Details
Types of F&V transacted	Tomato, Beans, Potato, Radish, Sweet Corn, Mango, Custard Apple, Carrot, Beetroot
Average frequency of transaction	Once in a week
Total turnover	47.81 lakh
Total tonnage	133.38 MT
Incentive paid to the farmers	11%
Percentage margin	3.60%
No. of farmers benefited	637
No. of buyers	BigBasket, More, Metro Cash & Carry, Azista, Sunsip and others

Year-wise Comparison of Quantity (MT), Amount (INR in lakhs) and Number of Farmers

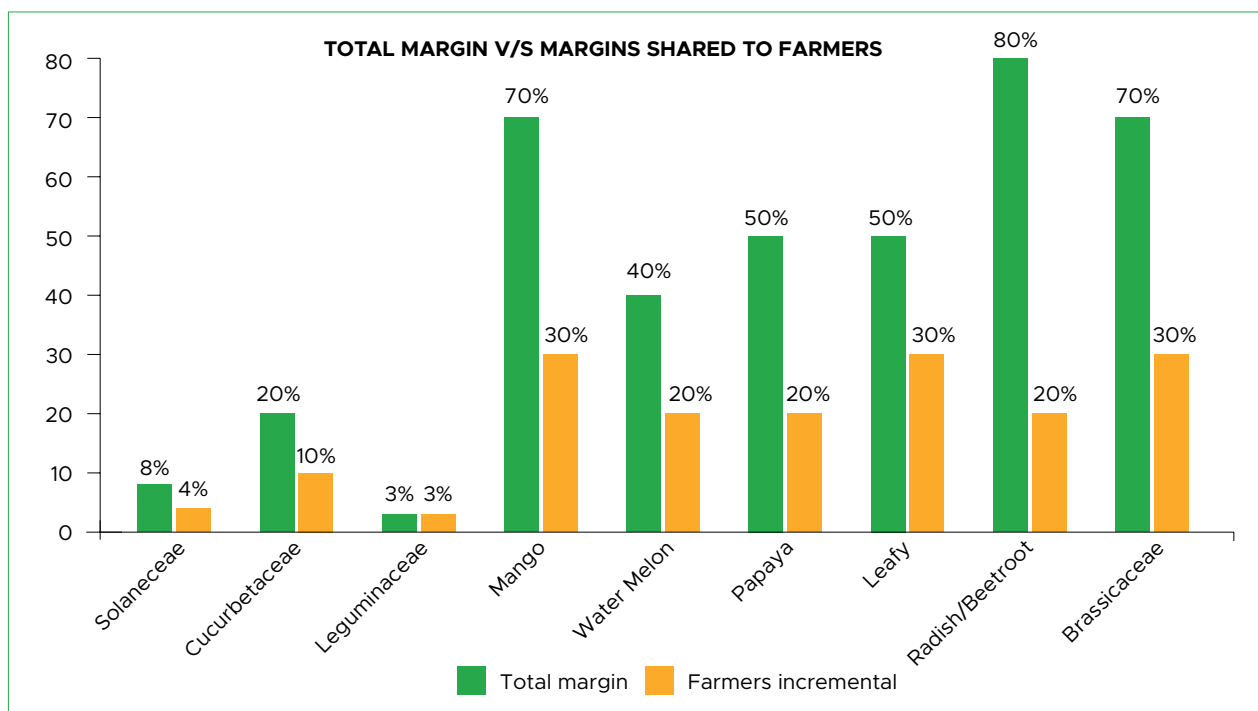


The above graph shows the performance of the FPO in collective marketing of F&V during the last two financial years. The business volume and turnover during second consecutive year decreased significantly due to issues as listed below:

- ⊙ Drought condition in V. Kota which led to reduced vegetable production

- ⊙ More competitive rate in local market as compared to Karnataka market
- ⊙ Relatively better production in the surroundings of collection centre, leading to reduced demand.

Share of Margin with Farmers and FPO – Commodity-wise



7. Challenges and Probable Interventions

The first-hand experience of dealing with major retailers in the organised market segment taught the farmers several things, such as post-harvest practices, sorting and grading, better handling processes of various commodities, managing various stakeholders in the channel, etc. **This was a major learning where the farmers got to know how to fish rather than getting fish in subsidised scenarios.**

The FPO gained a good deal and visibility among the members by providing better,

incremental rates to the farmers as compared to the local market rates. In few cases, for commodities such as mango and radish, the farmers got double the rate as compared to the local market.

However, as the business involves the transaction of perishable commodities and dealing with retail channels that are in the neighbouring state, it had its own challenges, both internally at the FPO level and externally at the buyers' level. Following are the challenges faced by the FPO while handling the collective marketing business by retail:

A	INTERNAL CHALLENGES	INTERVENTIONS
	<ul style="list-style-type: none"> ⊙ Ownership ⊙ Business orientation ⊙ Human resource ⊙ Working capital ⊙ SOP and sticking to the rules ⊙ Mono cropping/Single commodity ⊙ Lack of effective database 	<ul style="list-style-type: none"> ⊙ “Farmers’ interaction meetings” to inculcate ownership and business orientation ⊙ Ploughing back the business revenue and utilisation of grant proposals through equity grant proposal ⊙ Crop diversification included gourds, cucumber along with seasonal fruits ⊙ Technical Coordinator and Rythu Mithras trained to maintain mandal-wise, commodity-wise data and harvesting patterns

B	EXTERNAL CHALLENGES	INTERVENTIONS
	<ul style="list-style-type: none"> ⊙ Product specifications and stringent timings ⊙ Local demand and supply ⊙ Limited volumes and single market segment ⊙ Continued drought: less supply in peak season ⊙ Higher operation cost 	<ul style="list-style-type: none"> ⊙ Hub and Spoke arrangement (CC) ⊙ New markets/segment and crop diversification ⊙ Engaging new players (More supermarket, Reliance, etc.) ⊙ Combination with fruits ⊙ Single focal point for supplies

Over and above the internal challenges indicated in the table, the challenges with respect to following the basic “processes and systems” were also there. The non-compliance of the “processes and systems” set for particular business may affect the overall intervention and its result. Considering this, for better management of F&V business, APMAS staff developed a Standard Operating Procedure (SOP) for the FPO in a collaborative manner with the BoD.

8. Way Forward

⊙ **Combination of two business models (sales and service charge model):**

The business model, which is currently in practice, is a sales model where the FPO buys the produce and sells it by retail on its own risk, irrespective of the profit and loss. Whereas the service model, which is mostly followed by typical traders, can be adopted by the FPO so as to pass on the risk to the individual farmer. Voluminous products where too much grading is not required like potato and tomato, FPO can work on service charge model.

⊙ **Increase in product portfolio:** Currently, the FPO is engaged in selling the whole product, i.e., F&Vs in bulk to retail chains. Slowly, the FPO should move from only bulk supplies to packed product supplies like packs of 5, 10 kgs of vegetables, and processed vegetables like cut vegetables, etc. (1, 2 kgs).

⊙ **Establishment of infrastructure:** Due to lack of infrastructure facilities like

collection centre and pre-processing unit, sorting, grading and pick-up at each farm gate takes time. Once the collection centre (along with Primary Processing unit PPC) is established, the whole supply chain becomes a seamless work and hence, the problem of rejection due to late supplies will be mitigated drastically.

⊙ **Supply of specialised product:** Currently, the FPO is supplying the commodities which are grown in the operational area, whereas most of the buyers demand supply of specialised product or area specific product like Beneshan Mango or Kiran watermelon, etc. from Chittoor. Under specialised product category also, buyers are interested to buy products with minimum processing in case of fruits like ripen banana and mango. The FPO, in future, shall work on these ideas and increase its portfolio.

⊙ **Empanelment of the FPO as vendor:** The FPO will get itself registered as a vendor with several retail chains. It will not only build the trust with buyers, but also increase the business volume due to rigorous follow up and change in business model, i.e., by working on service charge on fixed quantity and few commodities to mitigate risk.

⊙ **Combined effective training with retail chain (production and post-harvest management):** Joint and combined training to farmers and FPO members will increase the effectiveness in working due to common understanding for mutual benefit.

All Women Dheeshali FPO: Promoting Innovative Farming Practices

Ms. Vijayalakshmi¹ & Ms. Bhavani Belaganti²

1. Introduction

With the recent emerging focus on Farmer Producer Organisations (FPOs) in policy, practice and research, there is a renewed emphasis on women's empowerment. There is recognition of the increasing need for capacity building and

empowerment of women farmers. The viability of such initiatives is being proven by various accounts of success stories of women FPOs from across the country. Dheeshali is one such women-run FPO in Bommaramaram Mandal of Bhongir-Yadadri district, Telangana.

FPO Profile

Name of the FPO/FPC	Dheeshali
Date of Registration	17-09-2018
Registration type	Producer Company
Total number of shareholders	432
Authorised capital	Rs. 5 Lakhs
Paid-up capital	Rs. 4.32 Lakhs
BoD members	10
Name of the Promoting Institution (PI)	APMAS & Grameena Mahila Mandali
Licenses Obtained	Fertiliser, Seed
Total number of farmers covered	530
Channels of Marketing	MSP Procurement of Paddy
Source of Finance	APMAS & NABARD
Turnover	Rs. 14.14 Lakhs
Profit	Rs. 0.2 Lakhs

2. About Dheeshali FPO

Dheeshali Raithu Mahila Producer Company Ltd was registered under the Companies Act on 17 September 2018. The producer company has its farmer-members from five gram panchayats of Thimmapur, Boinpally,

Solipet, Cheekatimamidi and Parwathapur of Bommaramaram mandal, Yadadri district. As it is a women's FPO, membership and shareholding are open only to women farmers in the project area. The FPO has 530 members registered with membership

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Dheeshali FPO is promoted by Grameena Mahila Mandali (GMM) with technical support from Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) and financial support from AEIN, Luxembourg as part of AGEewa Project. The objective of the project is to empower women farmers by strengthening Women Farmer Producer Organisations (WFPOs) as a viable and sustainable business enterprise, to work in close coordination with the government agencies, quasi government agencies and private partners to leverage the capacities of the WFPOs.

fees of Rs. 100, and 402 members among them are shareholders who paid the share capital of Rs. 1000.

Structure and governing bodies – The FPO consists of 10 Board of Directors (BoD), elected by the FPO's shareholders: each shareholder having one vote. The BoD is chosen from five FPO gram panchayats and across all the social and economic classes. From among the 10 directors, they elect a President, Secretary and Treasurer. They form the executive members of the board who approve, by consensus, all the decisions made by the FPO board members.

2.1 Overview of Thimmapur village

Thimmapur village, located in Bhongir-Yadadri district of Telangana, is situated 23 km from the district headquarters, and 52 km from Hyderabad, the state capital. During Rabi and Kharif seasons, majority of the farmers in the village were involved in paddy cultivation. Small and marginal

women farmers in the village either cultivated paddy or worked as paid labour in the paddy fields of large farmers. There were many barren fields in the village as paddy cultivation requires a lot of water. The uncertainty of rainfall had driven many farmers into debt.

2.2 Role of women as farmers in Thimmapur village

Women contribute considerably to household income through farm and non-farm activities, as well as through work as agricultural labour. Women in Thimmapur village are engaged in any of the three ways mentioned below, depending on the socio-economic status of their family:

1. Paid labour
2. As a cultivator doing labour on own land
3. Managing certain aspects of agricultural production by way of labour supervision and participating in post-harvest activities.

3. Shift from Paddy to Vegetables – The Pandal System

In Telangana, there is a huge gap between the demand and supply of vegetables. Because of this, vegetables get imported from neighbouring states. The Horticulture Department focuses on promoting diversification of agricultural crops to include high-value crops like vegetables, flowers, etc. The concrete efforts of the Horticulture Department towards ensuring vegetable cultivation all year round and increase in farmers' income have triggered new hope among the farmers.

Vegetable cultivation using pandals³ is a technological improvement for creeper vegetables like ridge gourd, bitter gourd, bottle gourd, sponge gourd, etc. The weak climbers utilise the pandal as

³ Pandal is a fabricated structure of canopy or big tent, either temporary or permanent. Here, pandal refers to a structure to support the growth of weak climbers.

support, which protects the produce from getting soiled. It also results in increased exposure to sunlight and aeration, thereby increasing the number of flower buds, ultimately resulting in more fruit of superior size and quality.

A shift was observed in the cropping pattern in the village in 2018. Along with paddy, farmers started cultivating varieties of vegetables using the pandal system. The subsidy provided for pandals by the Horticulture Department, Government of Telangana, with assistance from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), motivated many small and marginal women farmers of Thimmapur village to cultivate vegetables in their own land. The women members of Dheeshali FPO gradually made their way from being a group of agricultural labourers with small and marginal landholdings, to self-sufficient vegetable farmers.

This transition happened as the FPO members leveraged Rs. 48 lakhs worth 'pandals' as subsidy for vegetable cultivation from the Horticulture Department. Now women farmers have also taken up collective marketing of the vegetables being cultivated by them.

All of this could take place as a result of the advocacy done by Dheeshali FPO in the villages.

3.1 Government subsidy scheme

The Horticulture Department, with support from MGNREGA, provides 100% subsidy for setting up the pandals on landholdings of less than 0.5 acre for the benefit of small and marginal farmers. The total estimated cost of constructing permanent pandals on 0.5 acres of land is Rs. 1,10,000. Part of the labour cost is to be borne by the farmer by working in her/his own farm for setting up the pandal. The unit cost for subsidy

is restricted to Rs. 1,00,000. Farmers who receive the subsidy have to set up the pandals with the support of a third-party dealer registered with MGNREGA. MGNREGA village assistants closely coordinate the process of setting up the pandals.

3.2 Construction of pandal

The pandal is established by using cement or stone pillars of height 10 ft and 20-25 cm girth. At a spacing of 15x15 m distance, 30x45 cm pits are dug to erect the pillars. Approximately 195-200 pillars are required in one acre. Approximately 1.5 ft of pillar is kept in the pit and covered with concrete mixture. Remaining 8.5 ft of pillar is above the ground. Training and pruning practices are followed to facilitate growth on the pandal, resulting in higher yield as compared to open field cultivation.



4. Process of Applying for Pandal Subsidy by Dheeshali FPO Women Farmers

Usually, individual farmers apply for pandal subsidy with support from cluster level horticulture officers. After the approval from the Horticulture

Department, the farmer has to set up pandals in her field at her own cost by coordinating with MGNREGA village assistants. The Horticulture Department transfers the subsidy directly to the account of the farmers mentioned in the application form.



Documentation and application process for subsidy from government

- ① The Cluster Level Horticulture and Sericulture Officer (CLH&SO)/Mandal Level Horticulture and Sericulture Officer (MLH&SO) identifies the beneficiaries and collects the application forms along with all the necessary documents such as proof of ownership of land, copy of Aadhar card, copy of bank passbook with IFSC code, photograph of the vacant land with farmer, and six notarised affidavits (on Rs. 100/- Stamp paper) from the farmers, stating that the beneficiary/farmer shall be responsible for the erection of the pandal and shall take up the cultivation of vegetables on the pandal for a minimum period of five years from the date of release of subsidy, and if the pandal is removed before the completion of five-year period, the amount is liable to be recovered from the beneficiary.
- ② The District Horticulture and Sericulture Officer (DH&SO) issues administrative sanction (within 15 days from receipt of application) with the approval of the District Collector, indicating a maximum time frame of 3 months (90 days) for the completion of permanent pandal.
- ③ After receipt of administrative sanction, the farmer then constructs/erects a permanent pandal and submits the completion certificate to the DH&SO concerned along with photographs at three stages (i.e. 1st - open/plain/bare land, 2nd - at the time of pandal erection, and 3rd- after completion of pandal erection) of newly erected permanent pandal.
- ④ On receipt of a completion report from the farmer, the CLH&SO and MLH&SO inspect the field personally, and they record the GPS coordinates for ascertaining the actual area of permanent pandal construction in the field, and record the same in the invoice to be submitted to the DH&SO.

- ⊙ CLH&SO takes the field photographs and obtains the concerned bills (material/labour charges, etc.) from the farmer, certifying the same, and uploads the bill details on the HORTNET/RKVY web portal.
- ⊙ The DH&SO submits financial sanction proceedings with the approval of the District Collector to the Director of Horticulture, TS, Hyd.
- ⊙ The subsidy amount is directly credited into the accounts of the beneficiaries (as per the account details filled in the HORTNET/RKVY web portal) from the state head office through online transfer (DBT).

4.1 Financial hurdles encountered in setting up pandals

Though the small and marginal farmers were aware of the process of applying for pandal subsidy, they were not willing to apply for the subsidy scheme as the process is tedious, and often, the subsidy amount gets delayed, sometimes indefinitely. Also, farmers have to pay an initial amount for the pandals costing up to Rs. 1,10,000 to set it up. For this, they usually take loans from private moneylenders at 24% interest per annum. When the subsidy transfer gets delayed by a year or more, which happens often, it becomes a huge burden on farmers, pushing them into debt.

4.2 Role of FPO in application and setting up of pandals

Dheeshali FPO has made the process of application and receiving subsidy money hassle free for its women members. Horticulture and agriculture officers in the mandal and district attended the Dheeshali FPO's mandal and district level convergence programmes to acquaint themselves with Dheeshali FPO's work. They interacted with women farmers to provide information about the available government schemes and timely support on crop production aspects. In addition, the village level officers attended the project's sustainable agricultural training on various crop production systems.

The FPO CEO and Rythu Mithras⁴ collected the list of farmers interested in cultivating vegetables and to apply for pandal system (0.5 acre – Rs. 1,10,000). They collected around 76 applications of small and marginal farmers in the project area, and submitted them to the District Horticulture Department. The FPO did a thorough job of:

- ⊙ Selection of women farmers interested in pandal cultivation, based on the criteria shared by the Horticulture Department.
- ⊙ Collection of data from women farmers as per the requirements given in pandal subsidy application.
- ⊙ Convergence with the Horticulture Department and MGNREGA to create awareness among farmers about pandal vegetable cultivation, its benefits and process of application for subsidy.
- ⊙ Advocacy with MGNREGA and banks to pay the subsidy immediately, where funds transfer was delayed by six months up to a year.

4.3 Convergence with Horticulture Department, MGNREGA and local banks in the mandal

The FPO intervened by bringing about convergence between MGNREGA and local banks such as APGVB, SBI and Canara Bank to provide loans towards payment for initial set up cost of the pandals. This was made possible with the

⁴ Rythu Mithras are ground level leaders who assist, guide and support the farmers. They are usually members of farmer interest groups/self-help groups/village level institutions/any other village level producer organisations.

help of GMM, an FPO promoting agency and APMAS, through AGEewa project with the support of AEIN, Luxembourg. The directors of Dheeshali FPO and women-farmers played a crucial role in creating awareness about the FPO, and negotiating with the local bank officials to grant loans till they received the subsidy amount. The FPO also succeeded in availing loans for its women farmers to set up the pandals.

Women farmers who got the pandals sanctioned under the subsidy scheme needed to pay a processing fees of Rs. 6,000 and bank interest of Rs. 6,600 in advance for a period of six months, including the initial set up cost of Rs. 1.1 lakh. The FPO made such an arrangement that the banks pay directly to the third-party vendors registered with MGNREGA to set up pandals, and MGNREGA transfers the subsidy amount directly to the banks, when they receive it from the Horticulture Department.

Year-wise total pandals approved through subsidy scheme of Horticulture Department

Year	Name of village	No. of pandals approved	Land under pandal cultivation (in acres)	Total grant amount (Rs.)
2018 -19	Thimmapur	36	22.0	48,40,000
	Solipet	5		
	Parvathapur	3		
Total		44		
2019 – 20	Thimmapur	3	1.5	3,30,000

In 2020, farmers of Dheeshali FPO applied for 18 pandals with the Horticulture Department, which are yet to be approved.

The process of getting pandals set up for the farmers depends on MGNREGA field assistant. If the village field assistant is active, the process is faster and pandals are set up without any hassles. For example, in Cheekatimamidi village, the application for pandals got rejected due to the absence of MGNREGA field assistant.

5. Pandal System of Cultivation by Women Farmers of Dheeshali FPO

In Thimmapur village, total land under vegetable cultivation has increased in the last few years - around 550 acres is under vegetable cultivation now. Creeper vegetables like bitter gourd, bottle gourd, ridge gourd and snake gourd are cultivated on nearly 50 acres of land. Many farmers concentrate on the cultivation of vegetables because of guaranteed returns on a daily basis. This has improved the livelihood of women and their families in the village.

Crop distribution in Thimmapur village during 2020

#	Crop type	Crop spread (in acres)
1	Paddy	1,440
2	Vegetables	550
3	Fruits	180
4	Pulses	30
	Total land under cultivation	2,200

As other farmers in the village saw their neighbours profiting from pandal cultivation, they were also encouraged to take up vegetable cultivation. In Bommalamaram mandal, apart from the cultivation of creepers under pandal system, the cultivation of other vegetables has also increased and improved, including green leafy vegetables. Taking Thimmapur as an example, few women farmers in Parvathapur and Cheekatimamidi villages of

the project area have also started vegetable cultivation using pandals.

A total of 281 women farmers of the FPO are cultivating vegetables, along with paddy, in the project area. On an average, each woman farmer of the FPO has 2-3 acres of land. They have diversified their crops by cultivating paddy in one acre of land and vegetables in another acre of land. Crop diversification helps in reducing the risk of challenges faced by farmers.

Success Story of Kavitha: Women Entrepreneur from Thimmapur village

Kavitha from Thimmapur village used to grow ridge gourd's hybrid varieties through traditional methods. Over a period, she made very less profits and waited for an opportunity to access the latest technologies and multiply her net profits. Through the FPO's convergence meeting with the Horticulture Department, she became aware of the pandal subsidy system. Kavitha was provided a subsidy of Rs. 1,10,000 per acre to meet the expenditure for the erection of poles and setting up of pandals for further increase of yields. Subsequently, by using fertigation technique, she not only increased the efficiency of fertiliser usage but also minimised the cost on fertilisers – benefiting on account of saving time and labour.

At the same time, she did double-cropping and cultivated tomatoes in half-acre of land and sold to locals in the village while also keeping some for self-consumption. This has helped to rotate the money to meet the daily needs.

At present, the market price of ridge gourd is Rs. 35/kg and she expects 4 tons of produce at the end of harvesting.

Cost incurred to fix pandal system and for cultivation

#	Purpose	Quantity
1	Area implemented in	1 acre
2	Total cost of the pandal	Rs. 1.50 lakh (increased cost is due to increase in labour cost, which is expected to be done as family labour)
3	Subsidy amount availed	Rs. 1.10 lakh
4	Farmer contribution	Rs. 0.40 lakh

Crop cultivated: Ridge gourd

Irrigation method adopted: Micro irrigation

Other practices followed, if any: Mulching

Transportation to mandi: Collective Marketing

Her gross income is Rs. 2.40 lakh, with an expenditure of Rs 1.80 lakh incurred towards cultivation and installation of drip irrigation system. The farmer has expressed her confidence to increase the net returns in the ensuing seasons, when she would no longer have the burden of paying for the installation of drip irrigation systems.

She is a role model for other farmers to adopt modern technology and cultivation methods.

Success Story of Madhavi

Madhavi, who belongs to Peddaparvathapur village in Yadadri-Bhongir district, uses the pandal system to cultivate bottle gourd in half-acre of land. She received a subsidy Rs. 1,10,000 from MGNREGA to set up the pandal, with help from Dheeshali Mahila Raithu FPO.

Cost incurred for the construction of pandal

#	Purpose	Quantity
1	Area implemented	0.5 acre
2	Total cost of the pandal	Rs. 1.40 lakh (cost exceeded due to increase in labour charges, which is expected to be done as part of family labour)
3	Subsidy amount availed	Rs. 1.10 lakh
4	Farmer contribution	Rs. 0.30 lakh

Crop cultivated: Bottle gourd

Irrigation method adopted: Micro irrigation

Other practices followed, if any: Mulching

Total cost of crop cultivation: Rs. 50,000/-

Madhavi plucks vegetables from the pandal spread in 20 cents* of land, every day. She gets 300 pieces of bottle gourd from one plucking. She sells them at the Reliance store and Kushaiguda market. For the first slot that she sent to the stores, it fetched Rs. 8 per piece. At the rate of 300 pieces per day, she sold nearly 9000 pieces to Reliance Fresh supermarket in one month. She received a sum of Rs. 72,000 from Reliance in accordance with the grading system that they follow. She made a profit of Rs. 22,000 from 20 cents of bottle gourd.

She also grows other vegetables in 30 cents of land set up with pandals.



Challenges of selling produce at mandi: When she sold her produce at Kushaiguda market, it fetched Rs. 10 per piece. But it involved more transportation charges, labour charges and the risk of not getting the right price in the market. When she sold to Reliance store, there were no labour charges, transportation costs and no risk factor, and she received the money instantly. Reliance store management comes to the field, and chooses the pieces and plucks according to their grading system.

*100 cents equals 1 acre

5.1 Benefits to farmers from pandal system of cultivation

- ⊙ Increase in cultivation area and production of vegetables, a step towards self-sufficiency in the state
- ⊙ Encouragement to new farmers to take up vegetable cultivation and cover non-traditional areas under vegetable cultivation
- ⊙ Reduced the gap between demand and supply of vegetables, thereby increasing self-sufficiency
- ⊙ Improved capability to cultivate vegetables throughout the year, which further resulted in increased profits to the farmers
- ⊙ Produced more crop with less water by using water saving technologies
- ⊙ Savings in labour and energy
- ⊙ Alternative source of income for farmers throughout the year to meet basic necessities
- ⊙ Minimised incidents of diseases and pests
- ⊙ Control of weeds.

Nowadays, farmers in Bhongir district are shifting towards vegetable cultivation because it has more advantages compared to agricultural crops. It can be done on dry lands by using drip irrigation. As a result, water utilisation is low and has a lower chance of crop failure. The horticulture farms can be much smaller, allowing marginal farmers to boost their earnings from their small landholdings. The farmers often plant two or three crops simultaneously to maximise yield from each acre. So, the farmers' income doubles after transition to vegetable cultivation.

5.2 Collective marketing

The women farmers of Thimmapur and Parvathapur villages have also started collective marketing of vegetables to nearby markets by pooling their produce. A small group of four or five farmers plan to harvest their produce on the same day. Produce is harvested during early hours of the day

(around 6 am) or during the evenings (around 3 pm), based on purchase tie in the market. They hire a Tata ACE (2 Metric Tons) vehicle to transport the produce to the market. There are around 10 Autos/Tata ACE available in the village. They transport the produce to nearby markets of Alwal and Kushaiguda in Hyderabad city. Produce is sold based on the market rate and payment is done immediately to farmers. This has increased their profit margins largely.

6. Innovative Measures Adopted by Farmers of Thimmapur Village

6.1 Cropping pattern

Most of the farmers take up inter-cropping and crop rotation alternately.

6.2 Use of technology and human resources

Most of the farmers in Thimmapur use tractors for soil preparation. It was found that a few farmers owned a tractor and the remaining hired a tractor on rent basis. The cost of hiring a tractor for one acre of soil preparation is between Rs. 1100-1300. They hire labour according to their need, i.e., during the times of cultivation and harvesting. They hire a group of 4-5 members at Rs. 1,200 to Rs. 1,400 per day.

6.3 Irrigation

In Thimmapur village, it was found that the irrigation system mainly depends on personal bore wells. Methods like drip irrigation system, sprinkle irrigation system and surface irrigation technique to cultivate vegetables and fruits, based on need, are used.

6.4 Post-harvesting process

Harvesting is mostly manual. Post-harvest produce is usually stored to sell at a good price later. But as horticulture produce is highly perishable and they do not have access to proper storage facilities, they end up selling it immediately after harvest at whatever price they quote in the market.

They were unable to take advantage of the fluctuating prices as they cannot store their produce for a longer period of time.

7. Challenges

Delay in subsidy payment to banks by the government: The delay in subsidy payment, sometimes by more than a year, causes losses to the farmers as the banks deduct the additional interest for the delayed period from the savings account of farmers. Banks also deduct the interest amount for pandal subsidy, when the farmer's account gets credited with the amount from Raithu Bandu scheme of Telangana state government or even Dwakra loans. This has led to many disputes between the bank employees and farmers.

Lack of storage facility: Horticulture produce is highly perishable. Proper storage facilities are required to store the produce for a longer period of time. It costs a huge amount of money to build a storage facility and purchase required equipment, which are not affordable by small and marginal farmers. They suffer losses when they store produce in their homes. The villagers have submit petitions to the government several times for a storage facility.

Marketing: Marketing has always been a huge problem for farmers of Thimmapur village. The nearest market available is at Kushaiguda in Hyderabad which is 60 km away. The smaller mandis in villages are unable to absorb all the produce cultivated. As a result, farmers end up being dependent on middlemen and other suppliers. The middlemen take advantage of this and buy the produce at very low prices, and sell them in the city at a higher price. The villagers proposed a mini market to sell the horticultural produce because 70% of villagers depend on horticulture.

Small landholdings: This is a common problem faced by majority of the farmers in India. In Thimmapur too, small and marginal

farmers are maximum in number. The problem with small landholdings is that they fail to return the costs needed for the use of modern agricultural implements and technology. Hence, they stick to traditional methods of farming, resulting in low productivity.

Price of the crop: The MSP (Minimum Support Price) of crops is fixed and declared by the government. But the farmers hardly ever get the price that the government has declared, especially small and marginal farmers. Middlemen and supplying agents enjoy the major benefit of crops produced by the farmers. They buy from the farmers at low prices and sell at much higher prices in the city markets (citing quality or low demand as an excuse).

Financial problem: Money is needed to buy good seeds, fertilisers, buy or hire modern agricultural implements, etc. Small and marginal farmers are the ones who suffer because they do not have access to cash at short notice. In the study sample, it was found that financial problems are a major cause of worry for the small and marginal farmers. Apart from a subsidy of Rs. 1,20,000, the investment for cultivation remains high.

8. Conclusion

FPOs are proving to be an apt institutional form of aggregating small and marginal farmers that can tackle various challenges effectively. The evident focus on FPOs recently is proof of this. The capacity building of farmer-members of FPOs is of utmost importance to strengthen backward and forward linkages for value chain interventions. Capacities and linkages of FPOs can be fostered through several best practices in key areas of action, which include skill development, business planning, extension management, technological platforms, market intelligence and exposure visits. There is also a need to focus on women FPOs particularly, to give them a boost, and provide recognition and visibility.

Dharani FPO: Emergence of a Member - Driven Farmers Collective

Mr. G. Srinivas¹, Mr. Kishore Kumar² & Ms. Sarika Singh³

1. Introduction

Agriculture is the mainstay of Indian economy and plays an important role in its growth and development. Over two-thirds of the Indian population is directly or indirectly dependent upon agriculture and its allied activities. Small and marginal farmers constitute a large group of cultivators (85%) in Indian agriculture. They are poorly-equipped in terms of technology, extension, information, credit and markets. On the other hand, the food industry finds it difficult to procure agricultural produce directly from the farmers because of high transaction costs. This makes the supply chains inefficient and creates concerns of food safety, lack of transparency and traceability. If the increasing number of agricultural suicides is any indication, these farmers are struggling to survive. While indebtedness is often cited as the immediate reason for their distress, dig a little deeper and you will realise that there are other issues involved, such as low scale of operations, lack of information, poor communication linkages with the wider market, etc. Alongside these associate factors, the farmers also experience extreme exploitation by the intermediaries in procuring inputs and marketing their produce.

This situation calls for major structural reforms and transformational initiatives towards the revitalisation of agriculture. It includes stepping up investments for productivity enhancement as well as reforms in agricultural marketing and post-

harvest logistics for boosting agricultural growth at micro, meso and macro levels. Several organisational prototypes are emerging to integrate the farmers into the value chain. One such initiative is the Farmer Producer Organisations (FPOs) that aim to help the farmers reap benefits of economies of scale via collectivisation and aggregation.

This case study attempts to document the journey of Dharani Agriculture Producers Mutually Aided Cooperative Society Ltd (Dharani FPO), formed in 2017 and registered in February 2018 under the MACS Act, 1995. It takes a deeper look into the step-by-step process adopted by Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) for promoting Dharani FPO—from its inception to becoming fully functional. It also throws light on the FPO's structural aspects and financial status.

The case study is divided into two sections - the first section covers the process followed in the formation of the FPO, and the second section discusses about the ecosystem in which the FPO exists, and concludes with the key challenges and learnings picked up in the process of its formation, and the current institutional interventions needed and recommendations for going forward.

Sadashiva Nagar is a mandal in Kamareddy district of Telangana. It is spread over an area of 3,651 sq.km. The average size of landholding is 1.53 acres and around 91% of the farmers in the area are small and marginal farmers. The soil here is either red

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loamy or medium black or deep black. The soil quality is poor and lacks micro-nutrients. The main sources of irrigation are the canals and the tanks. Major crops grown are paddy, soybean, sugarcane, cotton and maize. The deficiency in micronutrients is widespread and has resulted in limited crop yields. The farmers face issues of pest and wild animals attacking the crops. Due to varied problems, small and marginal farmers are losing interest in agriculture and migrating to nearby cities in search of livelihood.

In Kamareddy region, farmers are primarily production-oriented rather than market-oriented. This has put them in a disadvantageous position as they are not engaged in the entire agriculture value chain which leads to middlemen taking over their profit share. The value chain studies conducted by APMAS in Kamareddy district reveal that the farmers are not collectivised as a group to address market related issues. Unlike self-help groups (SHGs) and their federations, farmers lack proper institutions who can take up their issues related to farming (pre-production, production & post-production).

In recent times, the Government of India has focussed its efforts on promoting and

strengthening the FPOs. Reliance Foundation is actively promoting and guiding the FPOs in the nearby areas, but Sadashiva Nagar was left out of the picture. Due to the good work done in the past by APMAS in the area with SHG/SHG federations, in 2017, the District Collector of Kamareddy proposed to APMAS to initiate and promote farmers groups into an FPO which provides input and output services through collectivisation. This resulted in the formation of Dharani FPO.

Dharani means 'mother earth'. The FPO's journey began in **January 2017**. It has been promoted by APMAS with the main objective of encouraging and strengthening self-reliant FPOs in Telangana state to engage in agriculture value chains. APMAS has assisted Dharani FPO at every stage - mobilisation, registration, capacity building, creating linkages, business planning and operations.

This case study is an **attempt to understand the journey of Dharani FPO** from its date of inception to reaching maturity, and the various developments it underwent throughout this journey. It has been crafted to assist in placing a set of recommended guidelines that can facilitate the setting up of more FPOs, based on the success and learnings of Dharani FPO.

FPO Profile

Name of the FPO/FPC	Dharani Agriculture Producers Mutually Aided Cooperative Society Limited
Date of Registration	08-02-2018
Registration type	MACS
Total number of shareholders	786
Authorised capital	Nil
Paid-up capital	Rs. 7.86 Lakhs
BoD members	15

Name of the Promoting Institution (PI)	APMAS
License Obtained	Seed, Fertilizer and Pesticide
Total number of farmers covered	786 farmers in 10 Panchayats
Channels of Marketing	TS Markfed, Akashaya patra Foundation and Metro Cash & Carry
Source of Finance	Nil
Turnover	Rs. 121.1 Lakhs
Profit	Rs. 5 Lakhs

2. Life Journey of Dharani FPO

Stage 1: Pre-Project Implementation/Incubation

S. No.	Key activities	Achievements	Means of verification
1	<ul style="list-style-type: none"> Conducted a baseline study on value and market access, centrality analysis, identification of product specific clusters, feasibility analysis, break-even estimates, and creation of project implementation plans including input procurement, storage and marketing. 	<ul style="list-style-type: none"> Detailed project report (DPR) List of product specific clusters identified Database on farmers prepared 	<ul style="list-style-type: none"> Submitted DPR to DGRV Minutes and photographs of meeting Inception report

APMAS has been working actively with SHG/SHG federations in Sadashiva Nagar for over 10 years in strengthening and institutionalising self-regulatory and supervisory systems. Thus, the team was familiar with the on-ground realities of the agrarian system and distress situation. All this information came in handy when the decision to form an FPO was made. However, in spite of APMAS's proximity with the local people, there was initial resistance from the farmers to form into formal groups and into an FPO. This was largely due to their bitter experiences with other organisations earlier.



To address this resistance, promotional activities were undertaken by APMAS.

- Step 1:** Mobilised the farmers and conducted awareness meetings in 10 villages of Sadashiva Nagar
- Step 2:** Conducted soil testing in the area in order to determine the soil health
- Step 3:** Shared the lab reports with the farmers

Currently, Dharani FPO has 786 farmer-members. APMAS is the promoter of Dharani FPO under the project '**Sector Own Control**', funded by DGRV, Germany. The FPO helps its farmer-members increase their income, enhances their capacities and institutions to manage their own affairs effectively, promotes improved production practices, introduces collective procurement of inputs & marketing, and networks with farmer institutions and other non-governmental organisations (NGOs) to make collective representations to policy makers on farmers' rights and entitlements.

Stage 2: Enhancing Capacity and Surplus Farm Production Plan (phase-1)

Key activities	Achievements	Means of verification
<ul style="list-style-type: none"> ⊙ Village meetings - identify potential farmers, opinion leaders ⊙ Identification and formation of FIGs (Farmer Interest Groups) ⊙ Handholding support for productivity increase ⊙ Explaining the logic of collectivisation and value proposition of setting up an FPO ⊙ Organising exposure visits of farmers and opinion leaders 	<ul style="list-style-type: none"> ⊙ Local resource persons interviewed and selected (Rythu Mithras) ⊙ Formation of FIGs, Rythu Sangams – a cluster of 10-15 farmers ⊙ Imparted necessary training on improved agriculture practices to FIGs through Farm Field Schools (FFS) ⊙ Farmers realised the benefits in terms of increased yield and less expenditure 	<ul style="list-style-type: none"> ⊙ List of Rythu Sangams ⊙ List of trained and ready for deployment Rythu Mithras ⊙ Training curriculum, training reports and participants' list ⊙ List of farmers adopting package of practices ⊙ Number of farmers ready to join the FPO

At this stage, APMAS was faced with twin challenges. On one hand, it had to convince the farmers of the benefits of joining the FPO, and on the other hand, there was Kamareddy Progressive FPO, just 20 km away from Sadashiva Nagar, which was established five years ago and has been involved in input and output marketing in five neighbouring mandals.

The mandal level information has helped APMAS in identifying the potential interventions required and understanding the specific project implementation context. On the structural front, premises are rooted in the principle of sustainability and self-reliance. APMAS and its team worked hard and relentlessly to enlighten the farmers, and informed them about the key benefits

of collective action, such as the possibility of sharing knowledge and learning from various stakeholders who are part of the collective.

A cooperative approach relies heavily on the local knowledge of stakeholders and on the possibilities to integrate this knowledge into the decision-making process. Thus, collective action increases the credibility and legitimacy of decision-making, and allows the collection and sharing of information at lower costs, compared to individual approaches. Another important benefit of collective action is the possibility of efficiently tackling local issues. APMAS also created awareness about different FPOs by showing videos on the success of existing formal collective organisations like Mulkanoor Cooperative Society; Green Foundation, Bangalore; and CCD in Anantapur, Jai Sardar FPC, Jeevan Sangini women’s FPC in Malkapur, Maharashtra.

2. Social Mobilisation for Dharani FPO

The foundation for the formation of mandal level FPO is the formation of



village level FIGs. Therefore, firstly, the FIGs were formed in five villages of Sadashiva Nagar mandal.

During the initial stages, gaining the trust of farmers proved to be a challenge as they had faced multiple issues with other organisations and groups which worked in the area. After a series of orientation meetings with the farmers, individual farmers joined the groups at village level. APMAS team also created awareness among the members on the importance and methods of collectivisation.

Stage 3: Growth of the FPO

Key activities	Achievements	Means of verification
<ul style="list-style-type: none"> ⊙ Gram Rythu Sangam’s meeting and orientation on FPO scoping, vision building & exposure visits initiated ⊙ Generation of crop-wise household information with surplus, deficit and gaps that existed ⊙ Initiation of statutory process required for the formation of Dharani FPO ⊙ Finalisation of the list of farmers willing to join the FPO and pay share capital ⊙ Framing of By-laws/MoA/AoA, incorporation of FPOs 	<ul style="list-style-type: none"> ⊙ Opened a bank account in the name of the FPO and deposited the share capital ⊙ Institutional arrangements made for MSP procurement centre ⊙ Entered into an MoU with eFresh and MARKFED for the supply of inputs to FPO members 	<ul style="list-style-type: none"> ⊙ Gram Rythu Sangam meeting registers ⊙ List of shareholders ⊙ FPO bank account statement ⊙ PAN card

3. Farmer Development Centre

APMAS collaborated with **eFresh Agri Business Solutions Ltd** for the establishment of a Farmer Development Centre (FDC) which is owned and managed by Dharani FPO. FDC acts as a one-stop centre which enables local farming communities to access knowledge, technology, inputs, financial & risk mitigation services, farm machinery through Custom Hiring Centre (CHC), value chain integration, market information and linkages, etc.

The FDC conducts regular FFS called '**Polam Badi**' on maize crop for the members of Dharani FPO. Model farms have also been set up for teaching and demonstrating good agricultural practices (GAPs). Few farmers are selected as model farmers who are supported with the advisory services, scientific methods and technology interventions. These model farmers act as

brand ambassadors to showcase the best practices to other farmers. Along with this, farmers are given training on the preparation of ghana jeevamrutham (organic pesticide) and vermicompost. Rythu Mithras are also given training on preparing Kharif action plans. Linkages have been established with agriculture universities and research stations such as Agriculture Research Station, Nizamabad to train the farmers and facilitate the extension of successful technologies and demonstrations in the village.

As a commercial entity, the FPO has to submit GST to the auditor on a monthly basis. In the first month of GST submission, Dharani faced many problems as they were not equipped with the skills and knowledge on FDC inputs and GST. With continuous handholding and inputs for three months by APMAS team, the FPO started submitting GST to the auditor accurately.

Stage 4: FPO Establishment and Stabilisation Phase



Key activities	Achievements	Means of verification
Physical establishment of FPO	Office, CHC, outlets for supply of various inputs established	Regulatory approvals for FPO activities
Implementation of business plan of FPO	Obtaining necessary licences for seeds, fertilisers and pesticides needed to carry out business activities	Farmer Field Book Increased business turnover of FPO reflected in the balance sheet

4. Procurement Business

The main business of FPO is supplying agricultural input to its 1500 farmer-members. The input supply through FDC includes fertilisers, seeds, bio-inputs and pesticides. The FPO has a license for the sale of various inputs, and charges a nominal amount of Rs. 10-15 on each bag of seeds and 8-10% margin on pesticides. Its farmer-members avail the inputs at 85% less cost than market price. Non-members also avail these services. The numbers could increase if the FPO offers credit sales, but currently, it only sells on cash and carry basis.

As Dharani FPO started taking up various business activities, the farmer-members were benefitted. The non-member farmers also came forward to pay the **share capital** and become members of the FPO, as they witnessed the benefits of being a member. During the season of Kharif 2018, Dharani FPO received a procurement acceptance letter from the State Agricultural Cooperative Marketing Federation Limited (MARKFED). A business committee was formed to oversee the procurement and other activities of the FPO. Below are the details as of June 2020:

#	Season	Commodity	Quantity in quintals	Amount (Rs.)	Beneficiaries	Service charge (Rs.)
1	Rabi-2018	Maize	1,219	12,23,000	60	12,230
2	Kharif-2019		7,400	1,25,80,000	300	1,25,800
3	Rabi-2020		3,566	62,76,160	108	60,622
4	Kharif-2019	Paddy	6,222	1,14,17,370	217	1,99,104
5	Rabi-2020		2,859	52,46,265	120	91,518
6	Kharif-2020	Maize	3,193	59,07,050	99	59,070
7	Kharif-2020	Paddy	4,397.6	83,02,669	232	1,40,723
		Total		5,09,52,514	1,136	

5. Linkage with Akshaya Patra Foundation

Dharani FPO entered into an agreement with Akshaya Patra Foundation for the supply of vegetables. On 2 June 2020, a vendor code was also created for depositing service charges to Dharani FPO. The **Akshaya Patra** Foundation is an NGO, headquartered in Bengaluru, India. Today, **Akshaya Patra** is

the world's largest (not-for-profit run) Mid-Day Meal programme serving wholesome food every school day to over 1.8 million children of 19,039 schools across 12 states and 2 Union Territories of India.

Dharani FPO supplies vegetables to Akshaya Patra kitchen situated in Kandi (mandal), Sangareddy district.

Procurement of Vegetables with Akashaya Patra Foundation- Sangareddy

#	Season	Commodity	Quantity (in kg)	Amount (Rs.)	Beneficiaries	Service charge (Rs.)
1	Rabi	Vegetables	2,280	31,920	10	18,240
2.	Rabi	Vegetables	2,043	32,688	10	12,642
3.	Rabi	Vegetables	850	13,600	5	5,200
Total			5,173	78,208	25	36,082

Table 1: Strength of Dharani FPO

	Factors	Observations
OWNERSHIP	Farmer-members are the owners of the FPO	Farmer-members claim the ownership and any member can put forth his/her views on business via representatives.
	Farmer-members manage the FPO themselves	Dharani is managed by professional, paid staff with the help of the resource institution (APMAS).
	Frequency of attendance in meetings	More than 80% attendance in sangam meetings is witnessed as per records.
	Accountability	The business decisions and monthly profit statements are shared with farmer-members.
AWARENESS OF ROLE AND FUNCTIONS OF THE FPO	Farmer-members are aware of the FPO's structure	Farmer-members are aware of the structure, role and responsibility of BODs, but not completely in tune with the management of the FPO.
	Farmer-members understand their role in running the FPO	Farmer-members consider their responsibility to produce organic and sell it to the FPO.
SATISFACTION	Satisfaction amongst farmer-members	High satisfaction based on high return on investments, and support in newer technologies of farming.
PROCESSES AND PROTOCOLS	Maintenance of records, by-laws and their effective implementation	All records of attendance, input transaction, crop procurement and business are duly maintained.
CAPITAL AVAILABLE	% of produce sold to the FPO by farmer-members	All the produce by farmer-members is sold to the FPO, except milk and vegetables, which are currently not procured by the FPO.
	Physical capital	Dharani has an FDC with operational CHC.
	Financial capital	Dharani has not yet taken loan from formal financial institutions, but took one voluntary financial help from an individual.

6. Share Capital Mobilisation

Initially, farmers in five villages were mobilised based on business activities, such as procurement of maize, paddy

and input supply, thus increasing the number of shareholders and expanding the FPO services to the remaining five villages.

Table 2: Rythu Sangams and financial status as of December 2020

Village	No. of groups formed	No. of members in groups	No. of women in groups	No. of bank accounts opened	Amount of savings (Rs.) in Sangams	Share capital (Rs.)
Modegam	7	89	16	7	1,91,500	89,000
Thimmojiwadi	9	111	46	9	2,49,280	1,11,000
Kalwaral	5	57	15	5	1,04,550	57,000
Thukkojiwadi	10	118	24	10	2,76,900	1,18,000
Daggi	3	31	12	3	40,550	31,000
Padmajiwadi	11	132	29	11	3,00,950	1,32,000
Mallupet	02	21	05	2	21,300	21,000
Kuprial	04	53	09	4	88,900	53,000
Thirmanpally	09	103	02	9	2,44,830	1,03,000
Dharmaraopet	06	71	06	6	76,350	71,000
Total	66	786	164	66	15,95,110	7,86,000



7. Organisational Structure of Dharani FPO

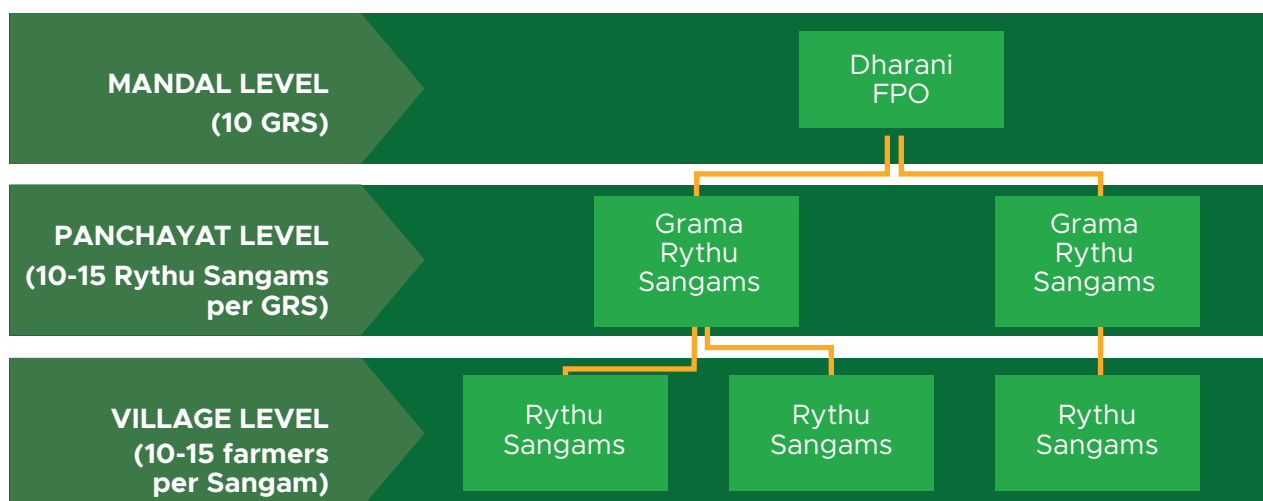
Village level Rythu Mithra (RMs)*

There are 10 RMs, one for each village. They maintain books at village level, collect information from the farmer-members about their need for seeds and fertilisers as per Rabi and Kharif action plans, and communicate it to the

governing body in their monthly review meeting. On the basis of this report, FDC makes arrangements for the purchase of seeds and fertilisers, to be dispensed later at its store to the farmer-members.

Business committee of Dharani FPO

For smooth functioning and sharing of responsibilities, there are three sub-



committees. The decision of the sub-committees is accepted by the board, unless it requires any further review. Dharani management has applied and successfully secured licenses to supply fertilisers, pesticides and seeds to the FPO members:

Dharani FPO also has a Farmer Service Centre (FSC) since 30 December 2017 at Kalwar village where it rents farm equipment. It extends funds for the purchase of all the farm machinery at the CHC. The FSC provides essential services like land

preparation, seeding, weeding, etc. by renting out its machinery through the CHC.

The FPO is involved in the procurement of maize with support from TS MARKFED. To meet the demand for sprayers, the FPO supplies sprayers to the farmer-members at 30% lesser price compared to the market. Non-member business forms 83% of their business turnover. The FPO did not get any grants or bank loans, but has had market linkages with some success. The member patronage and satisfaction level is fairly high.

Table 3: Farm equipment in the CHC

Farmer Service Centre, Dharani as of December 2020

S. No.	Particular	2018-19 (Rs.)	2019-20 (Rs.)	2020-21 (Rs.)	Total turnover (Rs.)
1	Farmer Service Centre	84,053	68,011	47,695	1,99,759

Table 4: Business performance of the FPO (input & output marketing) as of December 2020

S. No.	Particular	2017-18 (Rs.)	2018-19 (Rs.)	2019-20 (Rs.)	2020-21 (Rs.)
1	Purchase		2,80,444	65,29,744.9	53,81,168
2	Sales		1,48,023	63,87,316	56,60,576
3	FSC		84,053	68,011	47,695
4	Turnover	8,69,202	24,86,904	1,16,84,588	57,08,271
5	Profit/Loss	14,034	-1,10,621	3,17,900	2,50,369

Table 5: Output (maize & paddy procurement): 2017-20 (Turnover Rs. 36742795/-)

S. No.	Output (maize & paddy procurement)	2017-18	2018-19	2019-20	June 2020
1	Maize & paddy procurement Commission from Civil Supply Dept and TS MARKFED	Maize Rs. 14,230	Maize Rs. 1,25,800	Paddy Rs. 1,99,104	Paddy & Maize Rs. 1,52,140 (Rabi)

Table 6: Performance on benefits to farmer members by Dharani Farmers' Cooperative

Capital	Factor	Reflections
NATURAL	Water availability	Choice of crop - maize, cotton, soya - is done keeping in mind the water availability in the region
	Soil quality	Organic practices promoted by Dharani focus on maintaining and nourishing the soil with nutrients
HUMAN	Knowledge of practice	Support for regular training and technical expertise is always available.
	Weather information, mandi/market price knowledge	M-kisan gives information on weather, pest management, market locations, dealers and prices.
FINANCIAL	Increase in income by reducing costs	Locally produced manure has reduced the costs of inputs; fixing of MRP for each crop prior to the harvest helps in income security.
	Increase in income by rise in price	Value addition to the produce and better market linkages have led to higher price offered for the produce.
PHYSICAL	Agriculture equipment	FDC has a CHC through which Dharani is providing equipment to its farmer-members along with other agriculture inputs.
SOCIAL	Financial inclusion	About 33 Rythu Sangams have been formed; 26 of them have opened bank accounts and are operational.
	Enhanced capabilities	Networking with farmer institutions and other NGOs to make collective representations to policymakers on farmer's rights and entitlements.

8. Challenges and Key Learnings

Constraints faced

- ⊙ Mobilisation of individual farmers into a formal structured organisation is a huge task. It requires high skills to convince individual producers/growers to form organisations.
- ⊙ As organisational development is an innovative activity, the target group is not willing to pay for services.
- ⊙ After the incorporation of the FPO, raising share capital and developing a business plan are important challenges.
- ⊙ Legal and technical knowledge about acts and regulations is crucial; many times, expert advice is needed.
- ⊙ There is competition with other FPOs that are promoted by National Bank of Agriculture and Rural Development (NABARD).

- ⊙ Establishing a procurement centre was difficult due to existing Primary Agriculture Cooperative Society (PACS) in the project area.
- ⊙ Competition due to unstable cost price on the products and credit system with the existing local dealers.

Solutions

- ⊙ It is imperative to provide a vision regarding the benefits of an organised farmers' institution to the farmers. Once they are convinced about the benefits of a collective, they are ready to go the extra mile to make the FPO a success.
- ⊙ Initiate short term, financially viable activities with small changes in the existing production practices, such as cluster-based approach, to determine potential business plan.
- ⊙ An integrated frame of looking at agriculture from the point of view of business, environment sustainability and livelihood of the farmers is making Dharani FPO a win-win in all dimensions of sustainable development.
- ⊙ Strong awareness, involvement and ownership among farmers, as indicated by regular attendance, transparency and faith in communities regarding the FPO, are enablers to a strong institutional foundation of the FPO.

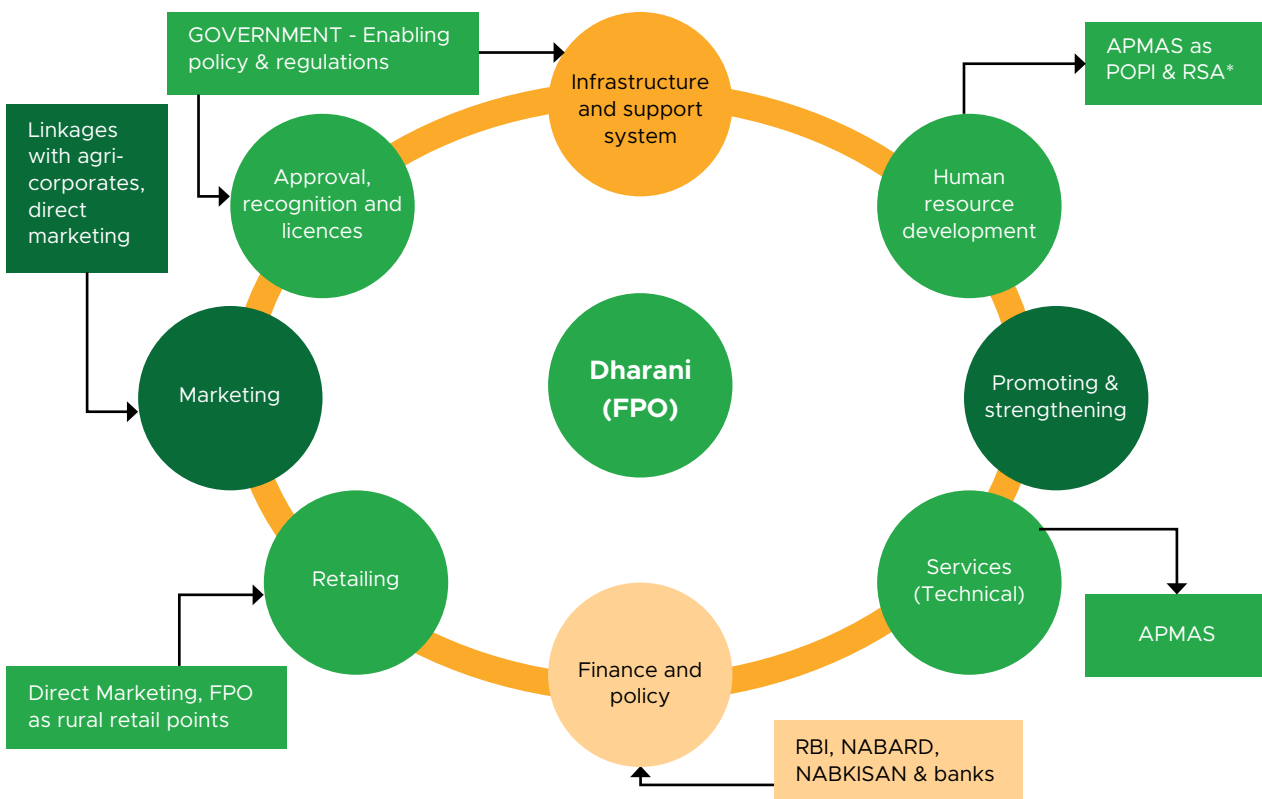
Lessons learned

- ⊙ Farming communities will support the collective if provided with tangible solutions to their problems.
- ⊙ For sustainable development of any community organisation, small fund generating activities are to be promoted.
- ⊙ Through community organisations like Society for Elimination of Rural Poverty (SERP), NABARD, Reliance Foundation, PACS and local governing bodies, encouraging services like capacity building to strengthen the institutions, providing farm equipment (CHC),

supporting local agriculture by focusing on maize, paddy, soya, and marketing will help make the FPO successful and sustainable in the long run.

- ⊙ FPO capacity building is an incremental approach, i.e., taking on different functions without complicating the work. The FPO should enjoy small success before taking on more complicated issues, for instance, the FPO can be a procurement centre and sell products at Minimum Support Price (MSP).
- ⊙ Value chain development is an ongoing process - procurement, sorting, grading, value addition need to have a long-term vision to be fruitful. An FPO needs at least 5-7 years of handholding and support to become self-sustainable organically.
- ⊙ It is imperative to shift towards making the existing FPOs self-sustainable by building better business models, rather than concentrating purely on scaling up.
- ⊙ There are significant barriers to access credit and regulatory compliances which are difficult for nascent FPOs to meet. The FPOs are bound by the statutory compliances under their respective registration acts. Relief to the FPOs from penal provision in case of certain non-compliances for the first five years would boost growth.
- ⊙ Treating FPOs as agri-start-ups will give a great boost to the growth of the FPOs. They should thus be given access to similar benefits as start-ups. Debt is a huge issue for the FPOs as most financial institutions require collaterals and at least three years of balance sheets for credit assessment. There is a requirement for designing tailor-made loan products for the FPOs which was done in the case of SHG-bank linkage programme earlier. Lending to the FPOs needs to be seen as a business opportunity.

Ecosystem of Dharani FPO



Research around the performance indicators of the FPOs could lead to developing a rating tool for the FPOs. A rating tool would serve the dual purpose of facilitating credit assessment and further underwriting. Rating parameters reflecting the state of governance, management, risks mitigation and sustainability would prove very beneficial. These scores would help establish credibility with the investors and formal financial institutions.

*POPI-Producer Organisation Promoting Institution

An FPO requires an effective and responsive ecosystem of support to prosper and provide wide-range of services to its members. It has to deal with the most vulnerable part of the agri-value chain, i.e., from farm to processing and then the far-away markets. The success of an FPO will depend on establishing backward and forward linkages with various stakeholders

such as banks, retail-chains, corporate sector, government agencies, supply chain management agencies, academic and research institutions, etc. The agriculture value chain required for the effective functioning of the FPOs as business entities cannot be done by one player. It is a transformative tool which has the potential to achieve the visionary goal of doubling farmers' income in the coming years. The key staff of FPOs must view themselves as members of a start-up imbibing the lessons of being lean and nimble so that they adapt, respond and innovate in a rapidly changing external environment.

NABARD, Small Farmers Agri-business Consortium (SFAC), state departments, a large number of NGOs, technical resource agencies and private agencies have been facilitating training programmes for the Board of Directors (BoD), office bearers and managerial staff (CEO, technical team)

of FPOs. These training programmes will have to be provided over a period, as FPOs emerge from a nascent stage to sustainability phase.

In addition to the continuous capacity building and capability development of the FPOs, there is a need for a strong financial linkage to access required capital for investment and working capital to effectively develop and implement the business plan. There is a need for a strong policy from the Reserve Bank of India (RBI) directing banks to finance the eligible FPOs as per their business plans. Other innovative financial instruments like credit guarantee, re-financing, risk management need to be offered. The FPOs require mentoring and incubation support for longer periods of time to evolve into sustainable business enterprises. Such incubation support shall be provided by professional agencies that

have business orientation, and the ability to serve as a sensitive support system for FPO development based on the values and principles of the cooperative enterprises. Such agencies are called Producer Organisation Promoting Institutions or POPIs.

The FPOs also require necessary infrastructure like CHC, Primary Processing Centre (PPC), FSC, warehousing facilities, etc. Infrastructure needed by the FPOs will have to be supported by the national and state governments through various schemes and programmes - Rashtriya Krishi Vikas Yojana (RKVY), Mission for Integrated Development (MIDH) of Horticulture, etc). Governments will have to recognise the FPOs as legitimate agencies for input supplies to farmers and also as procurement agencies of farm produce under MSP/Price Support Scheme (PSS), on their behalf.

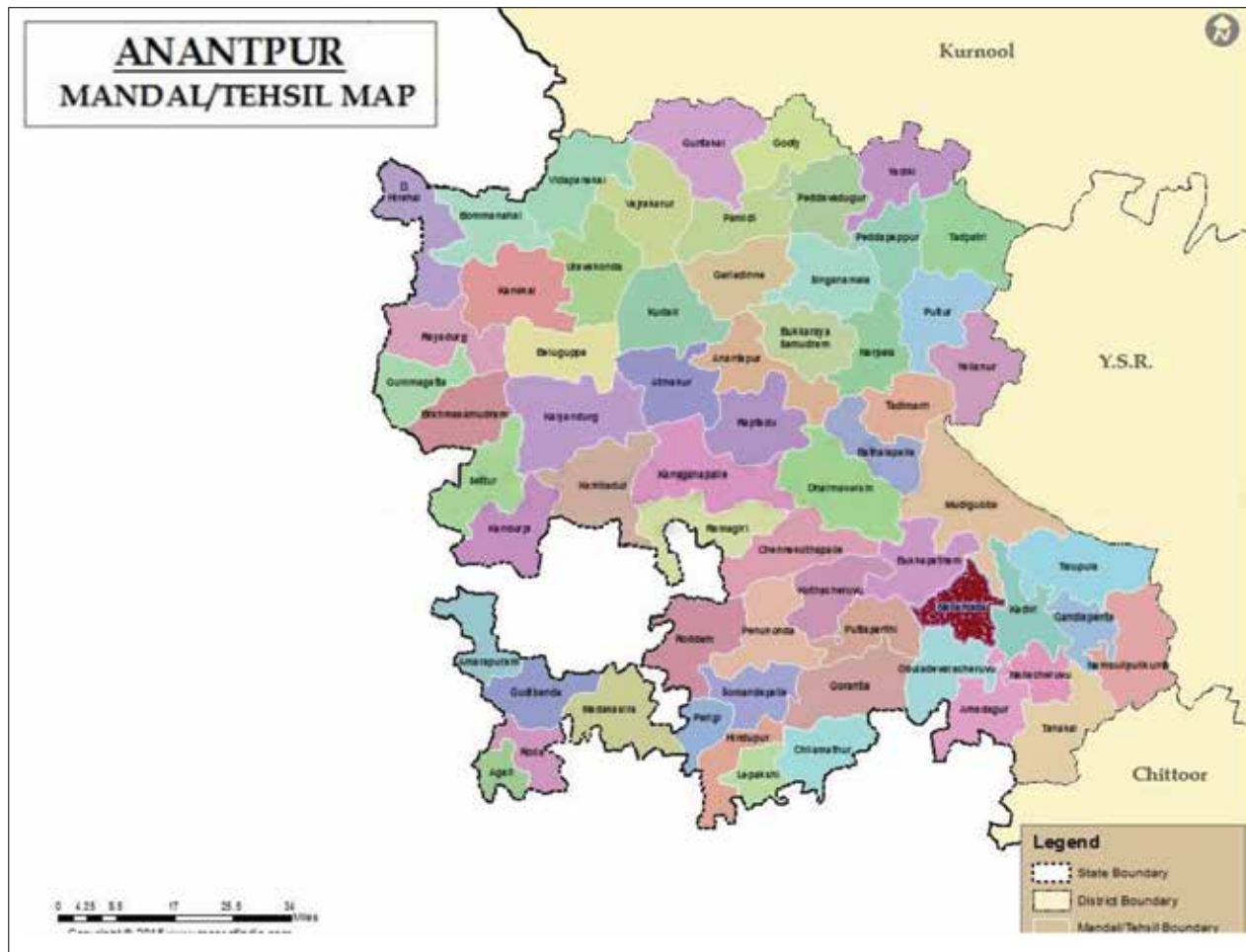
Nallamada FPO Managed Price Support Scheme: Procurement of Red gram – Experience and Learning

Mr. Gopal Raju¹ & Ms. Madhu Manjari²

1. Introduction

Anantapur is a drought prone district in Andhra Pradesh. In Anantapur, Nallamada mandal is the most drought prone among all its blocks. The basic livelihood of almost all the farmers is rainfed agriculture, as 80% of agriculture land is rainfed.² The farmer producer organisation (FPO) members

are mostly involved in the cultivation of groundnut, red gram, Bengal gram, paddy and millets. Pulses and groundnut are sown in Kharif season only and in case of good rains, Rabi cultivation of groundnut is also taken up. Annual rainfall in Anantapur district is 560 mm and in Nallamada mandal alone, it is 527 mm.



¹ Mr. Gopal Raju - Project Manager, APMAS

² Ms. Madhu Manjari - Marketing Director, APMAS

FPO Profile

Name of the FPO/FPC	Nallamada Agriculture Producers Mutually Aided Cooperative Federation Ltd
Date of Registration	17-04-2017
Registration type	MACS
Total number of shareholders	1040
Authorised capital	Rs. 10 Lakhs
Paid-up capital	Rs. 5 Lakhs
BoD members	12
Name of the Promoting Institution (PI)	APMAS
License Obtained	Seed, Fertilizer and Pesticide
Total number of farmers covered	3074
Channels of Marketing	MARKFED and NAFED
Source of Finance	Nil
Turnover	Rs. 79.2 Lakhs
Profit	2.21 Lakhs

2. About Nallamada FPO

Nallamada Agriculture Producers Mutually Aided Cooperative Federation Ltd is a mandal level FPO in Nallamada, characterised by small and fragmented lands and lower income farming groups, i.e., small and marginal farmers. It is operational in eight gram panchayats, and has the experience of working with WASSAN and the Department of Agriculture in managing the procurement centre under the Community Managed Seeds System (CMSS)³ (Mana Vitthana Kendram). With a membership of 1040 farmers, the FPO has achieved a business turnover of Rs. 74 lakhs in just three years by providing services to the national level procurement agencies for

implementing the Price Support Scheme (PSS) and also by taking up CMSS.



³ CMSS is a step towards decentralised seeds system for rainfed agriculture, managed by farmers' organisations in partnership with the Department of Agriculture and WASSAN Network.

Break-up of Turnover of Nallamada FPO (2017-20)

Year	Business activities	Turnover (Rs.)	Remarks
2017-18	CMSS, Navdhanya programme and PSS	24,94,447	FPO handled groundnut stocks under CMSS worth Rs. 2.90 lakhs which was under “Direct Beneficiaries Transfer” to farmers.
2018-19	PSS operations, CMSS, Non-License input sales	22,40,143	FPO handled groundnut stocks under CMSS and red gram stocks under PSS worth Rs. 2.25 crore, which was under “Direct Beneficiaries Transfer” to farmers.
2019-20	Output marketing of groundnut, sale of license items, PSS and CMSS	26,68,423	FPO handled groundnut stocks under CMSS and red gram stocks under PSS worth Rs. 94.33 lakhs, which was under “Direct Beneficiaries Transfer” to farmers.
TOTAL		74,03,013	Total DBT stocks worth Rs. 3.23 crore was handled during three years.

3. How and what ignited the idea of operating a procurement centre?

The member-shareholders of the FPO are dependent on rains for crop production and grow majorly rainfed crops. Even if the production is good due to rains, the problems associated with the marketing of produce remain the same.

Farmers are at a disadvantage in selling the commodities and also in bargaining the price because of their small quantities. Even the transportation costs (for individual farmer) to take the produce to the nearby market are high. For example, for an individual farmer like Ms. Eeshwaramma, who owns an acre of land and grows red gram, the nearby market is Kadiri which is 23 km away and takes an hour to reach. Based on experience (when one deals in bulk), transportation including loading costs around Rs 1.5/kg. In addition to the actual transit cost, the farmers need to bear further expenses of commission and cutting in total weight, etc. There are many operational problems also which further increase the costs. In rainfed situation, the average productivity of red

gram is 2.5 to 3 quintals/acre for sole crop. For Ms. Eeshwaramma, taking 6 bags to Kadiri market incurs more transportation cost, resulting in reduced returns. Similar is the case of Srinivasulu who has 2 acres of rainfed land under pulses. He needs to go to the mandal level market for purchase of basic fertiliser like urea or complex fertiliser to cultivate red gram.

In the process of identifying the problems, several rounds of discussions were held with the farmers at gram panchayat level and during the monthly board of directors (BoD) meetings of the FPO. Most of their problems were related to marketing, as listed below:

- ⊙ Most of the farmers sell red gram directly to the traders who lift the stock at village level itself.
- ⊙ The nearest notified Agricultural Produce Market Committee (APMC), established by the state government’s marketing department for sale and purchase of red gram, is at Kadiri, which is 23 km away.
- ⊙ The commission charges at APMC as per government guidelines are 2%, whereas the farmers pay 10%.

- ⊙ Small farmers generally sell stock at farm or to traders who aggregate the produce at village level. In general, only the big farmers afford to go to the APMC.
- ⊙ Big farmers also sell stock to the millers directly, and the millers provide credit towards the cost of production.
- ⊙ As per farmers' perceived experience, the malpractices such as weightment cutting (2kg/bag), issues with payment, price discovery, non-transparency in auctioning, etc. are generalised as unspoken rules in the mandi (market).
- ⊙ The FPO never procured red gram from the stakeholders, as the stocks need to be milled after procurement. So the role of FPO was not clear and it was yet to gain visibility at mandal level.

In view of the above and to reduce the fixed costs and gain bargaining capacity in the market, all farmers of the FPO, along with the BoD and Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) team, decided to go with the following commercial activities:

- ⊙ Output marketing
- ⊙ Sorting and grading
- ⊙ Input marketing
- ⊙ Cattle feed market

Traditionally, the practice of selling the produce in APMC has been the norm for many years in Anantapur district. Also, the Government of India, in collaboration with the state government, takes up procurement across the states under PSS to support the farmers, where the government fixes the Minimum Support Price (MSP) before every season and procures the commodity at MSP when the market prices drop below the MSP, thus ensuring that the farmers get the minimum price for their produce and not sell in distress.

The Government of India calculates the MSP at the beginning of the season, considering

the agronomic practices, net sown area and previous year's market prices in the major APMCs. Whenever the government observes a drop in the market price in a particular state, it starts procuring the commodity using its procurement network.

The government has appointed various central level nodal agencies for operationalising the PSS across India. Different agencies are involved in procuring different commodities: Food Corporation of India (FCI) procures cereals; National Agricultural Marketing Federation of India Limited (NAFED) procures pulses and oilseeds; Cotton Corporation of India (CCI) and NAFED procure cotton; etc. Other supporting agencies that are also involved include Central Warehousing Corporation (CWC), State Warehousing Corporation (SWC) and testing agencies for smooth functioning of the procurement centre. At state level, the state marketing federations are appointed for undertaking the operations, like State Civil Supplies Corporations, Marketing Federations, etc. The state level agencies engage the district and village level organisations for procurement. The entire operation covers ~25% of the total production in India.

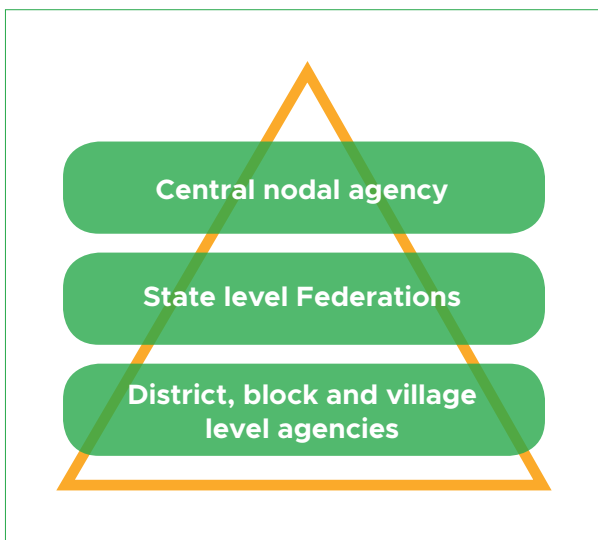
Most of the FPO member-shareholders were not aware of the MSP procurement system. The procurement centres were very far from Nallamada mandal and most of the farmers did not carry the stock to the allotted centre. The MSP procurement was handed over to the Primary Agriculture Credit Society (PACS) and Village Organisations (VOs) of SHGs by state agencies like MARKFED, OILFED, etc. However, now an effort is being made to designate the FPO also as a village/mandal level procurement agency.

As explained in the example, transporting smaller quantities and selling at mandi with

so many malpractices does not generate revenue for the farmers. Thus, the farmers usually sold to the aggregators who came to the village and procured the crops at farm level at lower prices. So essentially, the system that was created to check the exploitation of small farmers failed to do so.

With the help of APMAS team and the efforts of BoD, the FPO passed a resolution to set up its own procurement centre in the village itself. The idea was novel and promising as this was expected to solve several problems, but not simple and never taken up by any FPO before.

Figure 1: Pattern of procurement and agencies involved under PSS/MSP



4. Steps to obtain the sanction for MSP Procurement Centre from the State Government

AP MARKFED is a state government owned marketing cooperative federation which works with the District Cooperative Marketing Society (DCMS) and PACS for the benefit of farmers. It is engaged in offering various agri-marketing services (both input and output) to farmers. Under the state government quota, AP MARKFED procured red gram, jowar, Bengal gram, etc. in Anantapur district.

In December 2017, with the support of APMAS, Nallamada FPO submitted a proposal to AP MARKFED for allotting a procurement centre to the FPO, indicating the overall area under red gram, number of farmers, working capital, go-down facilities, etc. The department had never allotted a procurement centre to any FPO before 2018 to undertake procurement under PSS operations. Only once, during 2015-16, under PSS, some FPOs were involved by NAFED and Small Farmers' Agri-Business Consortium (SFAC) for procuring the commodities in the state, but not from Nallamada mandal.

The proposal was submitted directly to the Managing Director as there was no precedence of allotting a procurement centre to an FPO, other than PACS. It was also submitted to the District Manager, AP MARKFED, Anantapur for reference and recommendation.

Usually, the mandal and village level procurement is handled through a well established system by PACS on behalf of AP MARKFED. The approval for allotment of centres to FPOs becomes more difficult when an active PACS is operationally present in the same proposed area. As per the process, PACS are the sole village level bodies which take up procurement and few DCMS at the district level.

Across the state, each district manager, based on feasibility, submitted the recommendations to their respective Joint Collectors with a copy to their Head Office at Guntur. The submission of proposal was followed up with regular follow up at both district and state level offices. While APMAS officials were following up with the state level MARKFED office, FPO BoD also did not leave any stone unturned while following up with the district office, i.e., following up with officials at all levels, monitoring the operation, supporting the release of money to farmers and the FPO.

The BoD members followed up on a daily basis and made almost 10 visits to the district office of AP MARKFED.

Finally, during the first week of February 2018, the District Manager, AP MARKFED sanctioned and allotted two procurement centres to Nallamada FPO for procuring 500 tonnes of red gram from Nallamada and Obuladevaracheruvu ODC Mandal farmers. The process of representation till the allotment of centre roughly took two months. Nallamada FPO agreed with AP MARKFED for complying with the terms and conditions of the PSS. The specifications are as under:

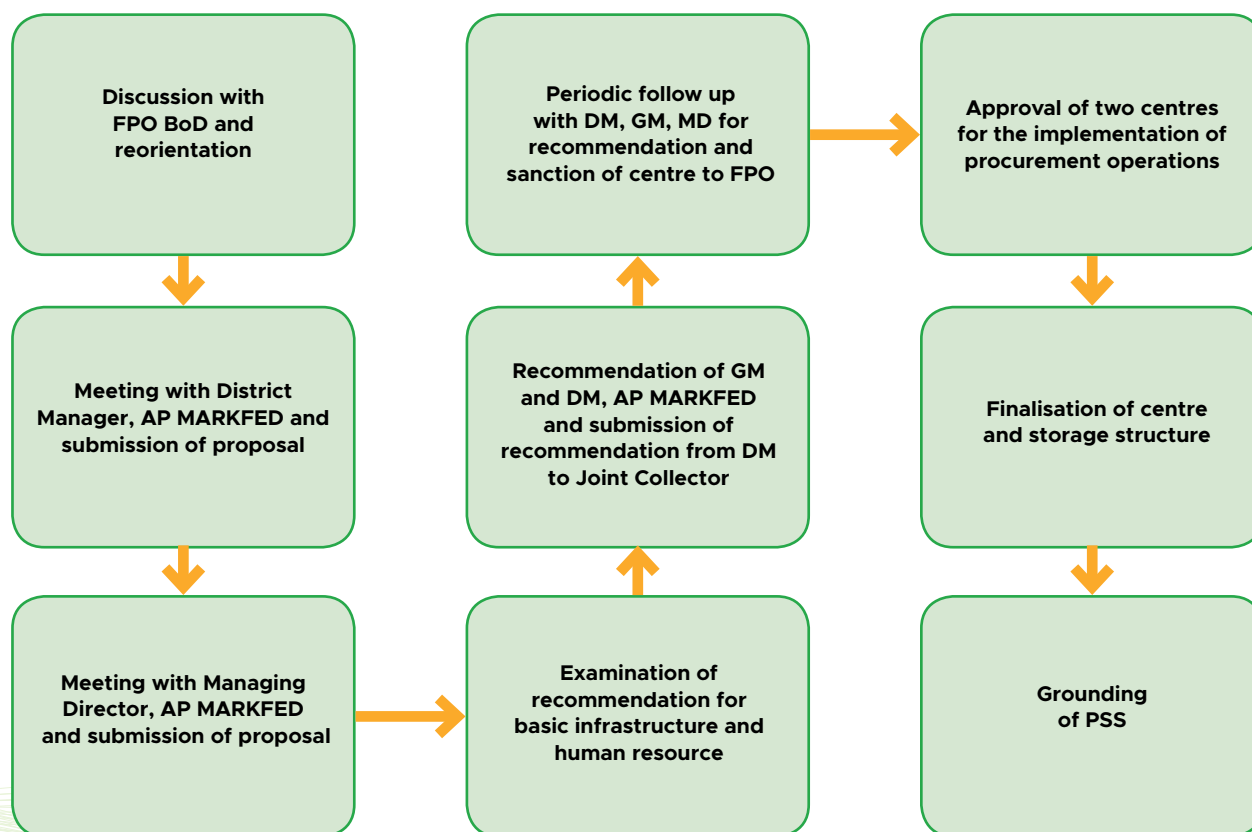
The specification for procurement of red gram under PSS are Foreign matter 2%, Admixture 3%, Damaged pulses 3%, Slightly damaged pulses 4%, Immature and Shrivelled pulses 3%, Weeviled pulses 4% and Moisture 12%.

Having a warehouse is a basic criterion for centre allotment and Nallamada FPO assured AP MARKFED to lease out/ arrange the required space, immediately, to meet the criteria.

5. Procurement Operations

The procurement of red gram under PSS through AP MARKFED happened during 2018. The experience of procurement, overall operations, involvement of BoD members, etc. was quite satisfactory. Based on experience and learning, BoD submitted a representation for the allotment of a centre in 2019 also. But due to less rains, lower overall production and higher market prices (at par with MSP), AP MARKFED allocated only two centres in the district, and Nallamada FPO was chosen.

Figure 2: Process flow of PSS proposal



6. Operational Arrangement and Logistics

AP MARKFED provides 1% of total value of procurement towards service charges. The operational arrangements like daily labour for cleaning, sewing, bagging, weighing, loading and temporary stage have been taken up by the FPO.

The staff of APMAS and FPO BoD mapped out the available buildings suitable for red gram procurement and storage in Nallamada mandal. Based on their exploration, they were able to identify unused Social Welfare residential hostel which was most suited for the purpose. For temporary storage and centre space, FPO sought permission from MD, Social Welfare – Guntur; DD, Social Welfare, Anantapur; and MPDO, Nallamada to use the space at the hostel for three months as the hostel building was not in use since last few years. Once the FPO got approval from the Social Welfare department, they made a few renovations for the space to be ready for procurement and storage of red gram.

The FPO did wide publicity in two mandals through hand pamphlets, announcements through auto and loudspeakers for four days along APMAS staff.

After arranging the space for storage and for the centre, an agreement was signed between MARKFED and Nallamada FPO on 19th February 2018 for the procurement of ~500 MTs of red gram from Nallamada and ODC Mandal centres. The procurement centre was inaugurated on 20th February 2020 at the Social Welfare Hostel with the participation of public representatives, along with MPDO and farmers.

On a daily basis, 10 women/landless labourers were hired for cleaning and other operations. The FPO formed three sub-

committees of the Board to monitor the procurement process regularly:

- i. Procurement Committee: Overall document checking like Aadhar card, pattadar passbook, online entry, etc.
- ii. Quality check and processing committee: Quality checking of the stocks, weighing, stencilling, stitching and marketing
- iii. Logistics committee: Committee took care of storage, token issue, bookkeeping and transportation up to the godown.

Since the procurement centre was allotted for the first time to Nallamada FPO, DM, AP MARKFED and Agriculture Officer from the respective mandals also visited it frequently for inspection, and provided necessary guidance and support. The DM of AP MARKFED was impressed with the bookkeeping system and quality control taken up by the FPO. He reported the same to the higher officials and also advised few other PACS to visit the centre as a model.

A total of 3521 quintals red gram was procured from 348 farmers from two mandals up to May end 2018. On a weekly basis, the procured stocks were transported to the nearest SWC.

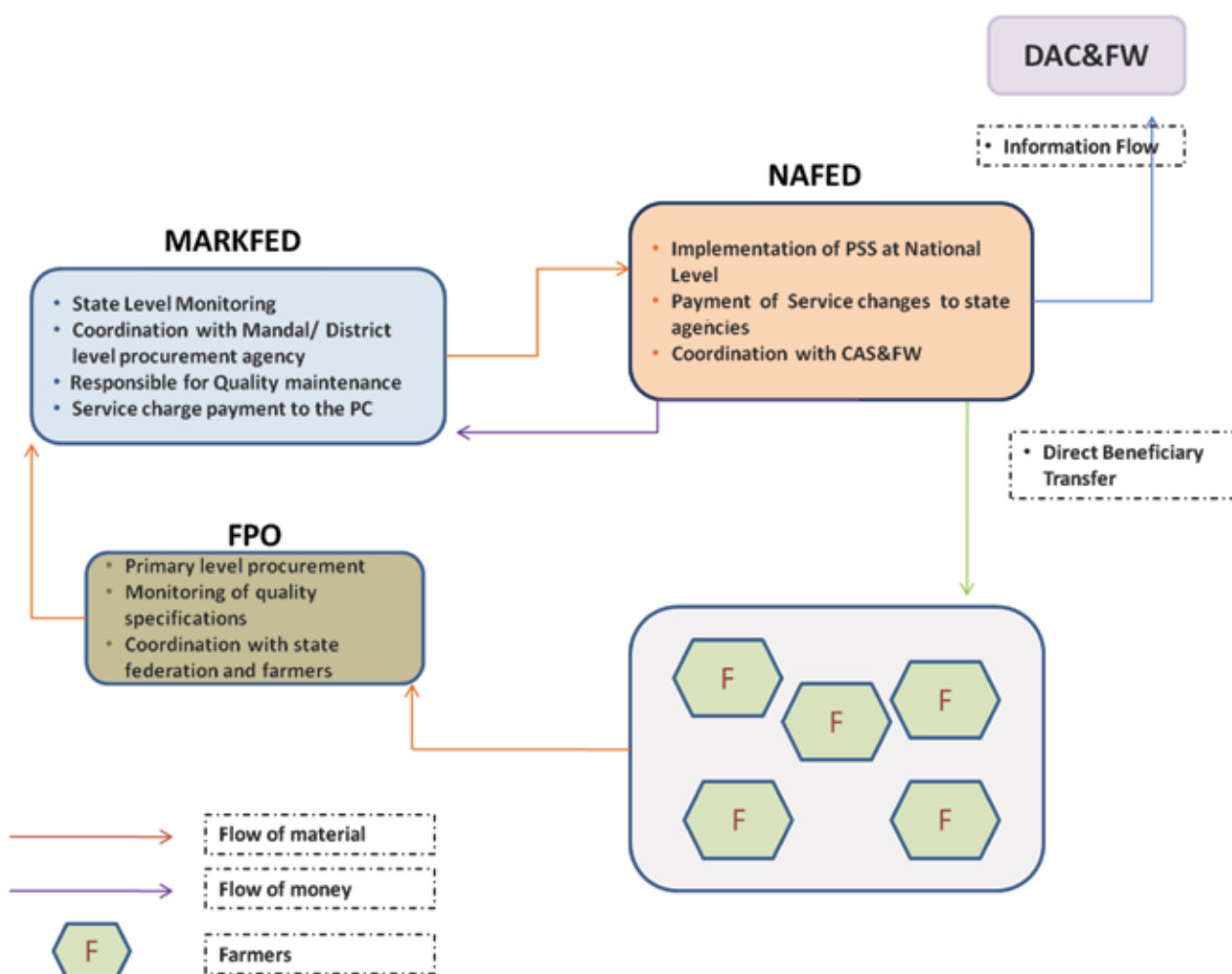
During 2020, due to COVID lockdown across India, the centre was only operated for 20 days with a procurement volume of 70 MT, valuing Rs. 40.60 lakh.



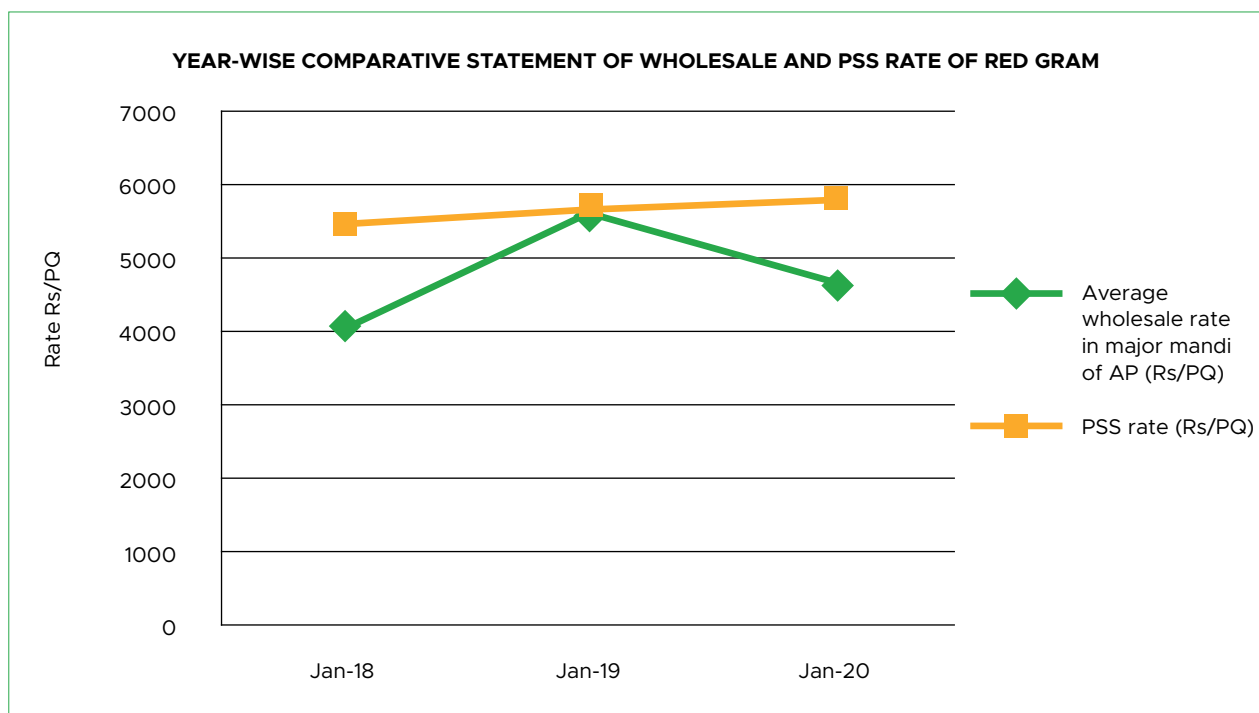
Quality Specification for Red Gram under PSS

S. No.	Special Characteristics	Maximum limits of tolerance (% by weight per qtl) for FAQ
1	Foreign matter	2
2	Admixture	3
3	Damaged pulses	3
4	Slightly damaged pulses	4
5	Immature and shrivelled pulses	3
6	Weevilled pulses	4
7	Moisture	12

Overall Operational Arrangement (in pictorial form)



Year-wise difference between wholesale price and PSS rate



7. How the procurement helped the farmers

The market price for procurement at the nearest mandi was Rs. 4500 per quintal, while the FPO, under the scheme, procured at Rs. 5450/- per quintal, that is, the farmers got additional Rs. 950 per quintal for the produce. During procurement, a total of Rs. 1,91,89,450/- was directly credited to the concerned farmers' accounts under 'Direct Beneficial Transfer' scheme. The individual farmers received

payment within 48 hours after depositing the stock at the designated warehouse. The system was fully automated and all the records were kept online with the allotment of bills and invoices based on acceptance of stock, etc.

Apart from the benefits from procurement, the intervention also provided income opportunities to around 10 landless women farmers to participate in supporting activities, such as cleaning, weighing, etc.

#	Particulars	Details
1	Month and year	2018
2	No. of farmers	348
3	Quantity (Qtls)	3521
4	PSS rate Rs./per quintal	5,450
5	Total procurement value (DBT to farmers Rs.)	Rs. 191.9 Lakhs
6	Service charge to FPO (Rs.)	Rs. 1.86 lakhs
7	Other/Remarks	Net Profit to FPO was Rs. 75,000/-, after deduction of processing charges, misc., etc.

8. Experience: Pros and Cons

For Nallamada FPO, getting a procurement centre was a great achievement. Apart from getting a remunerative business, it was all about getting exposure and experience of participating in a central scheme which made them learn standards of procedures, handling of operations, making of reports, being supervised, etc. However, the whole experience was not a smooth one. The FPO faced many challenges but, at the same time, it learned a lot through these experiences. Few of them are mentioned below (apart from income generation to the FPO).

9. Benefits to the FPO

1. AP MARKFED released an amount of Rs. 1,86,720 to the FPO towards service charges. Out of the total service charge, the FPO earned a net profit of Rs. 75,000 in three months after deducting procurement related expenses.
2. The FPO also earned a good name among the government systems for their efficient procurement and ensured good business opportunities for the future.
3. The operations brought much needed visibility in the operational area to the FPO, in terms of providing remunerative prices to small and marginal farmers who are not able to go to the procurement centre located far away. The activity was undertaken for both members and non-members.
4. The FPO BoD **learnt and understood the operations** which involved primary processing of the stock, digital data feeding, documentation, supply chain management, storage, negotiation with labourers and transporters, billing process, visits to CWC and SWC, negotiations with AP MARKFED officials, etc.
5. The FPO has got the procurement centre for the third consecutive year also, as the authorities were impressed with their work and the way they follow the process.
6. During operations, the FPO involved several landless women as workforce for pre-processing and bagging on daily basis, which helped them in supporting their livelihood activities. For this work, women labourers were paid at par with the labour union rates specified for the mandal, which was equivalent to the labour charges paid to their male counterparts for same work (Rs. 30 per quintal).
7. The operations helped APMAS staff in understanding the process of the government schemes and the required support needed for an FPO in accessing benefits through such schemes and streamlining the activities.
8. As the operation involves only operational costs, i.e., incidentals, it was one-of-its-kind where huge quantities of commodity were procured from farmers without any capital invested and no price risk.
9. Apart from the above stated incidentals, the only working capital involved was honorarium to the BoD committee members involved in the procurement on a daily basis, i.e., 3 members each for 40 days.

10. Challenges

1. Significant dedication of time and energy: The sanction of procurement centre took great deal of time and energy of the APMAS team (10) as well and the FPO, at times, felt disappointed due to lack of response from the government officials (2 months).
2. Storage centre criteria for allotment of centre: As the FPO did not have any storage facility to store the stock till it was shifted to the CWC/SWC warehouse, identification of space

and approval from the government department delayed the approval process from AP MARKFED.

3. Identification of genuine farmers: The PSS operations follow strict criteria to check any misappropriation where the implementing agency needs to comply with strict norms, i.e., collection of documents from farmers like Pattadhar Passbook, Aadhar card, bank account details, etc. In case the farmer fails to produce these, the implementing agency is not authorised to procure. So, at the centre, FPO and APMAS faced a lot of pressure from locals to procure from few individuals, though they were not having the required documents. However, BoD ensured not to procure a single grain from any until the required documents were produced as per the guidelines.
4. There are restrictions on procurement quantity also, depending on acreage. For red gram, only 3 quintals per acre are allowed to be procured from any individual farmer. Sometimes it so happens that the farmers bring more than 5 quintals of produce/acre and pressurise the BoD to procure the stock. But the FPO followed the guidelines strictly despite the pressure and procured only the set quantity from genuine farmers.
5. Release of service charge: The service charges amount to 1% of the naked procurement value. Ideally, the service charges should be released once the stocks reach/are handed over to MARKFED in CWC or SWC and after the submission of agency bill. Unfortunately, after the completion of operations and submission of bills, it took **almost one year** to release the service charges to

the FPO from AP MARKFED.

6. Complying with the product quality and rejections: The FPO BoD and officials faced a lots of criticism and pressure as they were following the PSS guidelines strictly. Such pressures took a political turn when the stocks belonged to the big farmers. Somehow, FPO managed such pressures.

11. Way Forward

1. Alignment with the existing scheme: Based on the experience of undertaking PSS operations for red gram, as the shareholders and non-members in Nallamada mandal also grow groundnut, the FPO will start working with OILFED to take up groundnut PSS operations.
2. Development of infrastructure: For non-perishables, having storage space or godown is one of the basic criteria. This not only allows the FPO to take up government schemes like CMSS, PSS, MIS, but also provides an opportunity to hedge the produce and do “futures trading” to get a better price in the lean season. So, going ahead, the establishment of godown/storage structure would be one of the priorities and a long term plan.
3. Primary processing of groundnut for supply to retails and branding will surely reap the benefit to the farmers and build a strong name for the FPO.
4. More aggressive input sales and services: Currently, the FPO is engaged in input supply to FPO members only. To make the FPO a more sustainable and viable enterprise, more aggressive marketing strategy like B to B sales, i.e., FPO to other small groups or other FPOs is very much required.

FPO Business Activities



Community Managed Seed System by Bhulakshmi FPO

Mr. Jayaram¹ & Mr. Gangadhar²

1. Introduction

Anantapur district of Andhra Pradesh ranks second in terms of aridity, among all the districts in India, having an average annual rainfall of 526 mm. Its climate is characterised by prolonged dry spells, followed by few and irregular days of rainfall. Anantapur has been consistently facing drought conditions over the past many years, causing severe stress on the local economy, especially agriculture. An analysis of rainfall data for the past 10 decades reveals that in every decade,

almost seven years are prone to drought. In the present decade, almost six years were rainfall deficient, resulting in severe drought conditions. These characteristics have forced the farmers in Anantapur to cultivate only those crops which can withstand drought conditions and can be sustained with limited water resources. The rich crop diversity in the district (particularly in millets and pulses that are naturally drought resistant) has eroded over time, giving way to monocropping of groundnut.

FPO Profile

Name of the FPO/FPC	Bhulakshmi FPO
Date of Registration	26-04-2018
Registration type	MACS
Total number of shareholders	555
Authorised capital	Rs. 10 Lakhs
Paid-up capital	Rs. 5.5 Lakhs
BoD members	15
Name of the Promoting Institution (PI)	Annadatha
Licenses Obtained	Seed Licenses
Total number of farmers covered	555
Channels of Marketing	APSEEDS
Source of Finance	Farmer Share Capital, Loan from Friends of Women World Bank, Loan from Jeevana Jyothi FPO
Turnover	Rs. 91.18 Lakhs
Profit	Rs. 2.18 Lakhs

¹ Mr. Jayaram – Director, Livelihoods

² Mr. Gangadhar - Project Manager, APMAS

2. Status of Groundnut Seed System in Anantapur District

Over time, groundnut has survived and expanded as the single largest crop grown in Anantapur, with over 8,00,000 hectares of cultivated area being brought under the crop. However, groundnut crop is also faced with frequent failures due to droughts, forcing the groundnut farmers to depend heavily on the government-supplied subsidized seeds.

In addition, there are other major challenges faced by the groundnut seed system that affect the adoption of newer varieties. High seed rates (about 100 kg/acre against the recommended seed rate of 60 kg/acre), low seed multiplication ratios and quick loss of seed viability are some of them. Seed is sourced from corporations against the intent of the Department of Agriculture. Discrepancies and delays in seed procurement and seed distribution often lead to distrust against the government. Such impediments have deepened the seed crisis in Anantapur. This crisis formed the backdrop for the community managed seeds system (CMSS) initiative.

To deal with the seed crisis, setting up a seeds system that provides the required quantities of quality seeds on time and at affordable prices at the farmers' doorstep was a challenge. Moreover, ensuring the availability of seeds after crop failures, as well as the availability of seeds of diverse crops were additional requirements.

As groundnut seed has low value proposition, it is not attractive for private sector companies. Groundnut seed production was done mostly by informal agencies. The ratio could be 25% and 75%, that is, about 75% of the seed supply might be to the informal/indiscreet agencies including farmers.

Popularising new varieties and achieving 33% seed replacement rate were the challenges that needed to be addressed. Legal compliances in the seed supply chain system are laborious and require a lot of effort. The seed certification process demands vast amounts of documentation, reporting and inspections. This is further impeded by the shortage of human resources at the seed certification agency.

Recurring droughts and crop failures often break the seed chain. Delay in Kharif sowings due to delay in the onset of monsoon leads to delayed harvest, and seed growers may not supply seeds in Rabi season. The seeds produced in Kharif season in such cases are then sold as grains. Delays in announcing the price for seeds by the government and delay in procurement of seeds also lead to distress sale, as grains.

3. Community Managed Seed System (CMSS)

CMSS is a step towards the decentralization of seeds for rain fed agriculture, managed by Farmer Producer Organizations (FPOs) in partnership with the Department of Agriculture and facilitated by a local non-governmental organisation (NGO). Seed production, distribution and subsidy administration are localized within a cluster



of villages where farmers' organisations have effective control over the process. The idea was conceptualised by Watershed Support Services – Activities Network (WASSAN).

Timely availability of quality seeds of locally adapted diverse crops and varieties is a prerequisite for rainfed agriculture. This requires farmers to be in control of the seed system. CMSS works within the operational framework of the Department of Agriculture and its programmes.

The main objectives of CMSS are to achieve seed self-sufficiency at mandal/cluster level, popularise new varieties and achieve 33% seed replacement rate. CMSS supports diversification of crop systems. It enables diversification of seed source to make the seed market more competitive. It is an attempt to establish a robust seed system managed by the FPOs.

The Seed Village programme and seed subsidies are integral to CMSS. All the

guidelines set under the Seed Village programme apply to CMSS. Seeds (foundation and certified) are produced and consumed within a cluster of gram panchayats (GPs). Annual seed plan is developed at the cluster level. Breeder/ Foundation seeds are distributed to the farmers with irrigation facility for seed production. Seed producers are registered with the state seed certification agency. Post-harvest, seed processing, packaging and storage are done at the cluster level. Farmers pay full price at the time of procurement of seeds and the subsidies are transferred to the farmers' accounts directly.

3.1 Process of establishing CMSS

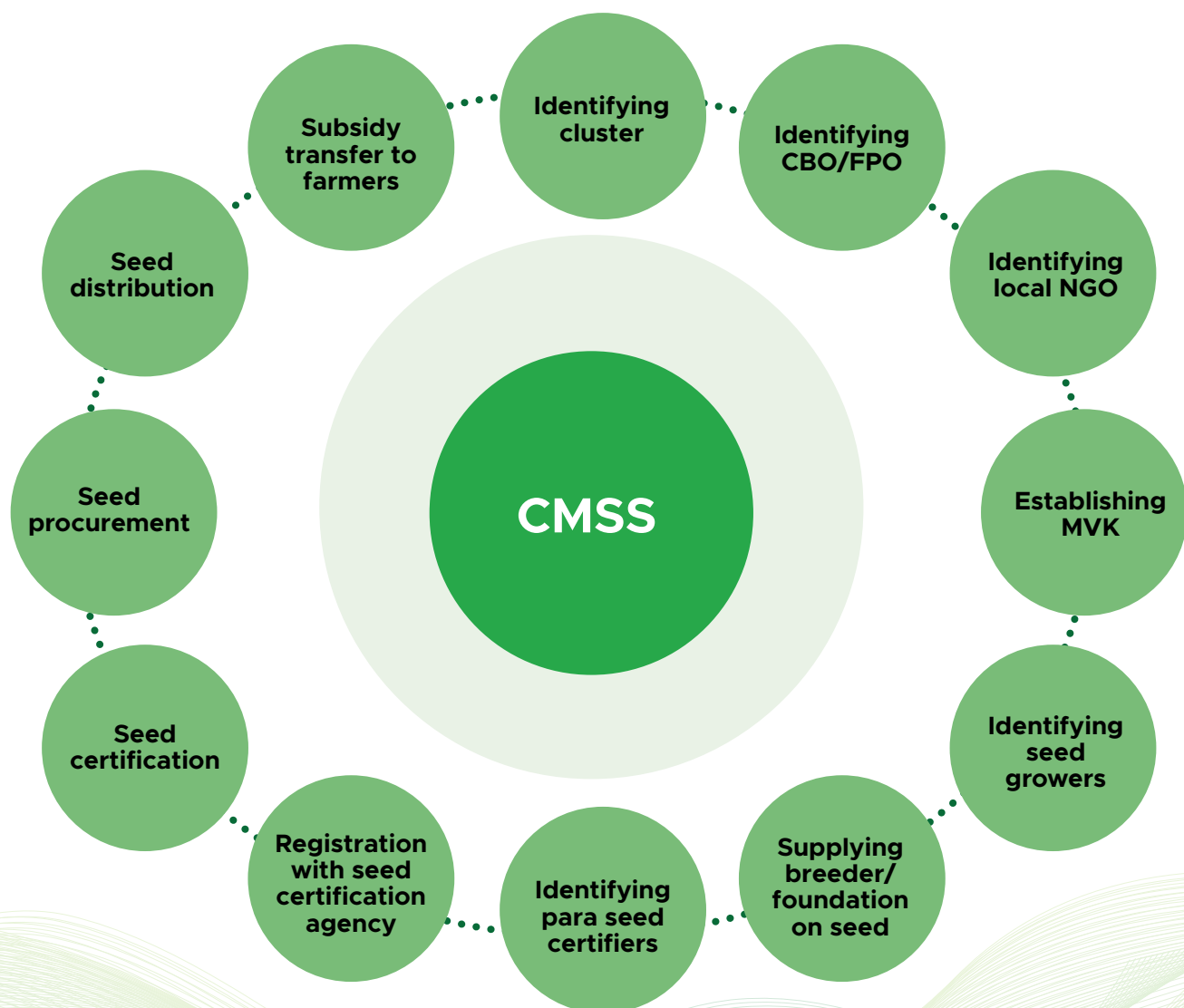
The first step in establishing CMSS is to identify a local FPO for linking the seed producers and seed consumers. Once the FPO is identified, a sub-committee is formed for managing the CMSS. The FPO should have a valid seed license for establishing Mana Vitthana Kendram (MVK), a seed procurement centre. The sub-committee identifies the seed growers who have



irrigation facility and are willing to follow the recommended package of practices for seed certification and to sell the seeds to the FPO. Seed growers sign a memorandum of understanding (MoU) with the FPO with the above mentioned conditions. The FPO shares the list of seed growers with the local agriculture officer and procures breeder/ foundation seeds from local research station to hand over to the seed growers. The FPO registers the seed growers with AP Seed Certification Agency (APSCA) for seed certification. APSCA inspectors visit the fields twice in the season and certify the seeds. The FPO sub-committee takes up quality assessment and germination tests. Seed procurement price is decided by the committee constituted by the Joint Director

of Agriculture at the district level. The committee fixes the price and informs the price to the FPOs.

After harvesting, the crop farmers grade their produce and sell it to the FPO. Local agriculture officers visit the seed procurement centre regularly, monitor the procurement process and inspect the seed godowns. Seeds brought to the local procurement place are bagged and tagged with a seal of the FPO. Payment is made directly to the seed-producing farmers through the FPO. The local seed using farmers buy the seeds and store them in their homestead. Farmers procure the seeds at full price and subsidy is deposited in their bank accounts.



3.2 Institutional mechanism for operating CMSS

CMSS has evolved as a multi-institutional platform with the Department of Agriculture, agriculture research stations, state seed certification agency, FPOs, NGOs and banks as the key stakeholders. The Department of Agriculture is the nodal agency for the implementation of CMSS.

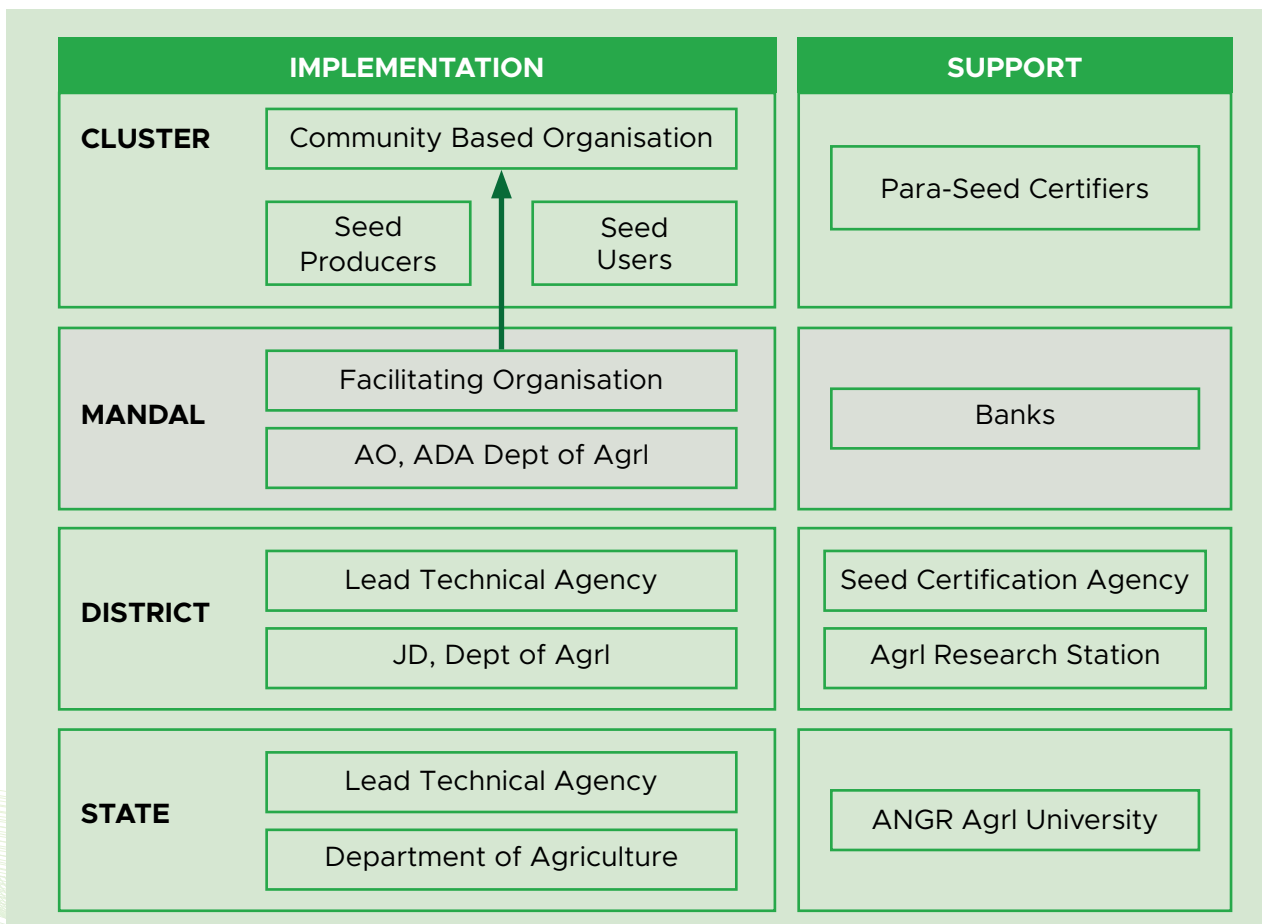
3.3 WASSAN, the Lead Technical Agency

CMSS concept was piloted by WASSAN in Anantapur district. WASSAN is the lead technical agency for the implementation of CMSS at the state level. WASSAN formed a state level network with NGOs (facilitating agencies) and provided the necessary technical support. It played a critical role in bringing various partners together and supported with necessary documentation and conceptual development of CMSS. As the lead technical agency, it coordinated with the Department of Agriculture and

Andhra Pradesh State Seeds Development Corporation (APSSDC) at the state level, and with Joint Director, Agriculture and NGOs at the field level. Also, it identified the capacity building requirements, monitored the programme, identified gaps and facilitated appropriate ameliorative measures.

3.4 Annadata MACS and APMAS

Annadata Mutually Aided Cooperative Society (MACS), as a facilitating agency, forms and supports the MVK. It organises the seed farmers, capacitates them and extends need based technical support. Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) liaisons with the Department of Agriculture, APSCA, ANGRAU, etc. The identification of Vitthana Mithras (para-seed certifiers) is done by them, and their services are utilised. MVK is helped in establishing financial systems and records, as well as in the maintenance of all databases and records related to CMSS.



The FPO sub-committee manages the MVK. Breeder/Foundation seeds are sourced from the research stations and provided to the farmers registered with the seed centre for multiplication, during which time seed certification protocols are followed. The produced seed is procured by MVK and distributed to farmers at subsidised rate. MVKs work with formal and informal seed systems and markets.

Through CMSS, the farmer-to-farmer seed exchange within the village or across the neighbouring villages takes place. The Department of Agriculture supplies quality seeds in time through MVKs. The APSSDC and the Department of Agriculture determine the quality of the seeds via para-certifiers and agriculture officers respectively. The APSSDC provides advance amount for seed procurement to the MVKs at the time of crop harvest.

3.5 Building capacities

Establishing seed systems through community-based organisations (CBOs) calls for immense capacity building. The capacity building needs of different stakeholders, i.e., seed growers, FPO staff, paraseed certifiers (Vitthana Mithras), etc. are different and thus, require a comprehensive capacity building programme that includes a package of practices, rouging, isolation distance, etc.

The sub-committee members of Bhulakshmi FPO were trained on establishing MVK, sorting and grading of seeds, seed storage, bagging, book-keeping, seed certification process, and identifying quality seeds. The FPO staff was trained on seed production, seed certification, seed quality parameters, seed procurement, packing and seed storage.

Information, Education and Communication (IEC) material was extensively used to build the capacity of the FPO sub-committee and FPO staff. Five training programmes were organised on the different modules of CMSS. Hand-holding support was also provided to the FPO staff and sub-committee. The FPO sub-committee members visited a few MVKs to get firsthand information on their management.

Social capital

One of the key features of CMSS is the development of social capital. Continuous capacity building programmes and intensive involvement of sub-committee members, Bhulakshmi FPO staff and Vitthana Mithras led to the building of social capital with the FPO. As of now, there are 37 well-trained members (Board of Directors (BoD), members of business sub-committees, Vitthana Mithras and FPO staff) to manage the certified seed production system at the FPO. The members acquired skills in seed production, seed certification, and procurement, quality testing, packing and sales. The CMSS was managed by Bhulakshmi FPO in the second year with its available social capital, and is expected to do so in the future as well.

4. Bhulakshmi FPO - Addressing the Groundnut Seed System

Bhulakshmi FPO, promoted by Annadata MACS, is located in Gandlapenta mandal, one of the driest mandals of Anantapur district. Annadata is one of the facilitating agencies³ under APMAS (LFA)⁴ consortium for Andhra Pradesh Drought Mitigation Project (APDMP). The members of Bhulakshmi FPO approached Annadata MACS for facilitating the supply of quality groundnut seeds for Kharif 2018.

³ Annadata is one of the four facilitating agencies under APMAS consortium for implementing APDMP and

⁴ APMAS is one of the three lead facilitating agencies for the implementation of APDMP in Anantapur district.

Annadata MACS, with support from APMAS, initiated CMSS to address the challenges faced by the groundnut seed system. A sub-committee was formed in the FPO for implementing CMSS activities. The FPO obtained the seed license for establishing MVK. The sub-committee members were trained by APMAS on the management of MVK.

The FPO procured breeder and foundation seeds (K6) for seed production, and supplied them at subsidised rates to the seed producers under the Seed Village programme. Village level meetings were also organised for the identification of seed producers, followed by a MoU between the FPO and the seed producers.

Bhulakshmi FPO supplied breeder and foundation seeds. The seed producers were registered with Andhra Pradesh State Seed Certification Authority (APSSCA). The seed producers were trained by APMAS and APSCA for seed production. All the required documentation work was done by the staff of Annadata MACS with support from APMAS.

The cultivable area in the FPO area is 11,060 acres. The major crops cultivated are groundnut (3,750 acres), red gram (2,375 acres), and castor (1,000 acres).

4.1 Business opportunity

CMSS created a wonderful business opportunity for Bhulakshmi FPO. It has the potential to take up seed production in 1000 acres with a total output of 8000 quintals. The total value of the output is Rs. 9.6 crore per year.

Over the last two financial years, viz 2017-18 and 2018-19, the FPO made a turnover of Rs. 89.68 lakhs with a margin of Rs. 17 lakh. They were able to repay the loans and also recorded profits. Moreover, employment opportunities were created

for the FPO members, sub-committee members and BoD.

Introducing CMSS enabled the Bhulakshmi FPO to improve its accounting systems, understand business principles and also adopt certain non-negotiables in their business. Accountability of Bhulakshmi FPO staff and transparency in decision making saw a marked improvement as well. Bhulakshmi FPO accessed credit from Friends of Women, World Bank and another FPO federation (Jana Jeevan MACS), which improved its credit worthiness. The various aspects of lending and importance of repaying credit in time were learnings that came along with these changes in the FPO.

4.2 Infrastructure development

Bhulakshmi FPO leveraged funds from APDMP to develop infrastructure for seed processing and seed procurement. The infrastructure included Valsmani multi-crop thresher, weighing scale, moisture meters and stitching machines worth Rs. 6 lakhs. In doing so, the FPO followed all the legal compliances required to register the seed processing unit.

4.3 Partnerships

Bhulakshmi FPO built strong partnerships with the Department of Agriculture, AP SEEDS, APSSCA and Regional Agriculture Research Station (RARS), Kadiri. These partnerships continued successfully in the second year as well. In 2019-20, AP SEEDS provided the working capital required for seed procurement; and RARS, Kadiri provided the breeder and foundation seeds for seed production at the farmer level. AP SEEDS also procured seeds from the FPO.

5. Experiences of other FPOs with CMSS

In addition to Bhulakshmi FPO, 11 FPOs promoted under Andhra Pradesh Drought Mitigation Project are also using CMSS.

Journey of Nallamada FPO in using CMSS

Nallamada FPO, promoted by APMAS, has been actively involved in CMSS since 2016-17. So far, Nallamada FPO has supplied 1447 quintals of groundnut seeds worth Rs. 91,18,087/- to its members. The FPO is working with about 300 seed producers. It successfully completed seven seasons in seed production. Following are the season-wise details:



Financial Year	Rabi			Kharif		
	No. of farmers	Quantity in quintals	Total Value (Rs.)	No. of farmers	Quantity in quintals and kits	Total Value (Rs.)
2016-17	54	46	2,90,440	175	198	8,01,925
2017-18	193	172	10,96,794	302	331	19,58,928
2019-20				58	700	49,70,000
2020-2021	11	80	1,60,000			
TOTAL	258	298	15,47,234	535	1,229	77,30,853

6. Policy Actions and Lessons

The CMSS experience demonstrates the potential for the integration of any CMSS into the mainstream seed programme of the Department of Agriculture. The main policy lessons are:

- a. Replace the Seed Village programme with the Seed Security programme by shifting the objective towards local self-sufficiency in seeds for crops such as groundnut, rice and other self-pollinating crops and indigenous varieties, where the government operations play a major role.
- b. Integrate the Seed Village programme into an institutional system managed by farmers' organisations rather than individual farmers; any existing community organisation can provide a base.
- c. Create mechanisms for the Department of Agriculture to recognise farmers' organisations as its node in seed operations.
- d. Plan and invest in an area approach, taking a cluster of villages, a GP or FPO as a unit of area, and target seed self-sufficiency in the cluster.
- e. Register seed producers with the farmers' organisation to ensure their eligibility for foundation seeds and subsidies.
- f. Allocate seeds according to target supply to meet the cluster's needs, rather than on an ad hoc allocation per acre or per farmer.
- h. Invest in village level infrastructure for seed processing.
- j. Enable farmer level Participatory Seed Certification (with appropriate quality control measures) in lieu of formal seed certification.

7. Moving towards Self-reliance and Self-sufficiency in Seeds

In 2018-19, Bhulakshmi FPO was able to procure seeds from 50 members, enabling them to supply seeds to approximately 250 members. In 2019-20, the FPO was able to reach about 500 members, as well as some non-FPO members. Social capital at the FPO level and the partnerships formed ensured the sustainability of CMSS.

Climate Resilient Agricultural Practices by Gudibanda FPO

Mr. Madhu¹ & Mr. Siddharth²

1. Introduction

Climate change can have a dramatic impact on our natural resources, economic activities, food security, health and physical infrastructure. India is one of the countries most affected by climate change. The threat is especially severe in places where people's livelihoods depend on natural resources. In such areas, climate adaptation measures take on a special significance for safeguarding vulnerable communities and their livelihoods as well as ensuring sustainable development.

Anantapur district in the state of Andhra Pradesh is the second most arid district of India after Jaisalmer in Rajasthan. It receives a mean annual rainfall of 560 mm. Drought is a very serious problem faced by the people in the region, which results in loss of livelihoods and human suffering at individual and community levels. The impacts of drought vary significantly across small geographical areas, due to variations in weather patterns, differences in soil types, poor water availability, low access to markets and unfavourable social circumstances. At present, about 68% of the net sown area in the district is rainfed and is thus drought prone.³ Every year, farmers with rainfed land are experiencing losses due to extreme drought conditions. The small landholders and landless people migrate to nearby cities like Bengaluru and

Chennai due to lack of enough livelihood opportunities.

Hence, there is a need to develop drought adaptation approaches, keeping in view sustainable livelihoods, local contexts and changing climate. A range of climate mitigation and adaptation options combined with thematic solutions at the micro level would form an appropriate sustainable livelihood approach, especially when dealing with uncertain meteorological conditions in this region.

The Government of Andhra Pradesh took up the Andhra Pradesh Drought Mitigation Project (APDMP) in 2017 to find a long-term solution to manage droughts and mitigate distress arising due to them. Small and marginal farmers who rely on rainfed agriculture were grouped to form a Farmer Producer Organisation (FPO) to address the problem collectively. Apart from this, the Climate Smart Village (CSV) project was initiated by Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) in 2019 in Gudibanda mandal, with financial aid from AEIN, Luxembourg, to compliment APDMP.

Because of the prevailing drought situations and unequal distribution of rainfall during the Kharif & Rabi seasons, the farmers are losing the crops most of the time. Under these circumstances, the climate resilient agriculture approach through FPO helped address most of the farmers' issues.

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² Mr. Siddharth - Project Manager, APMAS

³ [http://www.nicra-icar.in/nicrarevised/images/statewiseplans/Andhra%20pradesh%20\(Pdf\)/ANGRAU,%20Hyderabad/AP14-Anantapur%2031.1.2011.pdf](http://www.nicra-icar.in/nicrarevised/images/statewiseplans/Andhra%20pradesh%20(Pdf)/ANGRAU,%20Hyderabad/AP14-Anantapur%2031.1.2011.pdf)



Anantapur map

FPO Profile

Name of the FPO/FPC	Sri Siddheswara Agriculture Producers Mutually Aided Co-operative Society Limited, Mandhalapalli
Date of Registration	24-04-2018
Registration type	MACS
Total number of shareholders	727
Authorised capital	Rs. 10 Lakhs
Paid-up capital	Rs. 7.12 Lakhs
BoD members	12
Name of the Promoting Institution (PI)	APMAS
Licenses Obtained	Seed license, Fertilizers License, GST
Total number of farmers covered	1600
Channels of Marketing	APSEEDS, Bhagyalakshmi pvt, agencies
Source of Finance	APDMP
Turnover	Rs. 55.2 Lakhs
Profit	Rs. 0.34 Lakhs

2. Location

Gudibanda is a mandal in Anantapur district consisting of 58 villages and 12 panchayats. It comes under *Royalaseema*⁴ region. It is located 110 km towards south from district headquarters Anantapur. The major land use categories are agriculture land, common land, forests and hamlets. Around 83% of the agriculture land in the mandal is rainfed area. The major crops are groundnut and red gram under rainfed cultivation, and tomato and other vegetable cultivation are dominant under borewell irrigation. The mandal receives an annual rainfall of 699 mm.

3. Sri Siddheswara Farmer Producers Mutually Aided Cooperative Society

The FPO, registered as Sri Siddheswara Rytu Utpathidarula Paraspara Sahayaka Sahakara Sangham, was formed on 24 April 2018 with farmer families in Gudibanda mandal, covering Konkallu, Mandalapalli and Muthukuru gram panchayats (GP), which include 17 habitations. The total area of this cluster is 15,509 hectares and there are 3422 families in this cluster. Of these families, 22% belong to Scheduled Castes (SCs) and Scheduled Tribes (STs).

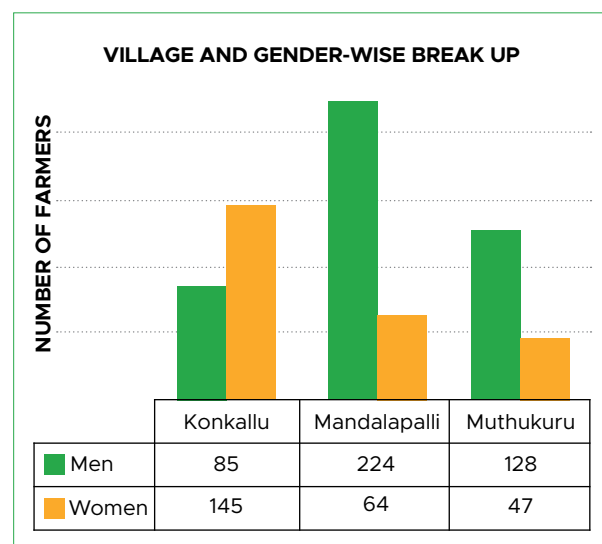
The community mobilisation work was started in all the villages in December 2017. Awareness meetings were conducted in all the villages to form farmer groups. The FPO Board of Directors (BoDs) were selected at meetings organised at the panchayat level, and the FPO registration was done at the District Societies office under the Mutually Aided Cooperative Societies (MACS) Act, 1995 of Andhra Pradesh state. The FPO BoD monthly meetings are facilitated, and the minutes of meeting are recorded regularly. The

FPO has a fixed agenda to address the farmer problems and cover all the essential aspects of project implementation.

The facilitating agency, APMAS, used each of these meetings as an opportunity to make the FPO a self-reliant community institution and also to increase the efficiency of the farmer-members individually. APMAS conducts regular capacity building activities such as training on roles and responsibilities, importance of FPO, quality parameters in project activities, package of agriculture practices, livestock management, natural resource management and restoration of groundwater, etc. to the staff, para-workers and sub-committees of the FPO.

Currently, there are around 693 farmers in the FPO who have taken membership and collected a shared capital of Rs. 6,93,000/-. Around 37% of the total members in the FPO are women and the rest are men. Village and gender-wise break up are given below:

Graph 1: Village and Gender-wise break up of farmer members



⁴ *Royalaseema* is a geographic region in the state of Andhra Pradesh. It comprises of four southern districts, namely Anantapur, Chittoor, YSR Kadapa and Kurnool.

3. Climate Resilient Agricultural Practices

The farmers in the region faced two main problems. One was less rainfall and greenery, and the other was less productivity of the crops they sow. In order to address these issues, the farmers collectively decided to go the traditional way, i.e., to increase the productivity of crops, they increased the tree cover and soil fertility, and changed the cropping pattern.

But, for this to happen, they needed external guidance and support, and that is where APMAS stepped in and suggested a collective solution, Climate Resilient Agricultural Practices, to address the farmers' issues related to:

1. Adaptation: adapt to climate change effects
2. Mitigation: intervene to address the causes of climate change

Adaptation aims at reducing the vulnerability of agricultural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience. On the other hand, mitigation addresses the causes of climate change. The mitigation potential of agriculture is substantial as agriculture and deforestation contribute to about one-third of global greenhouse gas (GHG)

emissions. Therefore, both adaptation and mitigation measures were integrated into policy and programme design in order to holistically solve the issues faced by the farmers in drought prone region of Anantapur district.

4. Capacity Building and Training

Although the name, Climate Resilient Farming, seems to be complex, the practices followed are very known and local. Hence, the farmers need continuous training on different practices and that too on-ground. Farmer Field School (FFS) is one such important and useful platform for the farmers to practice and learn.

During the season, FFS were conducted once in fortnight and this continued for 4 months. All the FFS were taken up on field so that the farmers could learn while at work.

During their internal meeting, the FPO BoD chose 20 progressive farmers who were willing to experiment all the practices in their field. And accordingly, FFS were conducted with those progressive farmers in the cluster with minimal support from the external facilitators. APMAS encouraged farmer-to-farmer learning approach by integrating natural resources through institutions like Climate Information Center (CLIC), Custom Hiring Center (CHC) and FPO.



The FPO BoD visited many agriculture and horticulture institutes, and successful FPOs to understand and implement climate resilient agriculture practices, suitable to their lands. These included KVK Anantapur where they learnt about Dryland Horticulture Management; BAIF, Tiptur to learn about ZBNF, livestock maintenance and integrated farming systems; Indian Institute of Horticulture Research Station (IIHRS), Bengaluru to know about different seeds, irrigation techniques, vegetables, floriculture and fruit crops; Aadharna Farms in Anantapur to learn about organic farming; and finally Mulkanoor Cooperative Society to learn about the FPO activities and the work they do as a farmers' collective.



The farmers finally decided to take up the following activities which they believed would suit their lands:

1. Navadhanya system
2. Organic farming
3. Natural resource management
4. Living soils block
5. Pre-monsoon dry sowing
6. Bund plantation

5. Navadhanya system

The Navadhanya system is a system of cultivation wherein farmers sow different varieties of seeds in their farmland. This system has main crop, inter-crop, border crop and inter-rows. The seeds that are cultivated under the main crop are millets, cereals and groundnut; castor, sesame, creepers or vegetables as inter-crops; bajra and jowar as border crops; and red gram as inter-rows. The BoD procured local variety of these seeds and stored them in Gudibanda FPO office for easy access to farmers.

In this system, each farmer has at least 5 to 10 types of food crops in his farm, which can suffice for their family's food and nutritional needs, throughout the year. Apart from

this, from the time of sowing, each crop yields in different times, giving income to the farmer for the next nine months. As the land is covered with crops for 9 months, the soil fertility increases, and the crop residue serves as feed to the cattle.

A total of 395 farmers in six villages of three GPs, covering 523 acres, have cultivated Navadhanya in 2019 and 2020 under Andhra Pradesh Drought Mitigation Project and Climate Smart Village projects. It was found that there was 20% increase in production from the same area, thereby increasing the income of the farmers. It was also found that the soil fertility improved. Most of the farmers received good fodder for the livestock during summer season also.

6. Organic Farming

Organic farming reduces contamination of food grains, fruits and vegetables, and also reduces air and water pollution. This helps in mitigating climate change as the less usage of chemical fertilizers and pesticides leads to reduction in GHG emissions.

To promote organic farming, awareness meetings and camps were conducted to



make the farmers understand the ill effects of using chemical fertilizers and pesticides. The farmers were encouraged to use Farm Yield Manure (FYM), the traditional fertilizer, and compost pits to fertilise their fields, instead of chemicals. On-field demonstration on the preparation of waste decomposer decoction was shown to the farmers and around 65 farmers were given the decomposer culture to prepare the decoction in their farmlands and use it.

Around 258 farmers adopted organic farming in 365 acres of land in 2019-2020.

The farmers realised a decrease in the cost of cultivation to 23%, particularly in commercial crops under irrigation.

7. Natural Resource Management

Being an arid district receiving scant rainfall, earthworks were taken up and 36 farm ponds were dug in the mandal so that the rainwater gets collected in these pits, causing water to seep in the fields, thereby increasing the water table. The water in the farm ponds is actually life-saving irrigation when there is less rainfall.





8. Living Soil Block

As part of the APDMP project, the farmers have identified 30-50 acres of collective land as Living Soil Block. In order to improve soil fertility and water holding capacity, activities such as summer ploughing, tank silt application, raising green manure crops such as *Pachhi Rottu* and digging a compost pit per 2 acres, and preparation and application of compost were taken up by the farmers. In 2019-20, a total of 144 farmers were involved in this activity, covering 309 acres.

9. Pre-monsoon Dry Sowing

Pre-monsoon sowing is 10-day prior sowing before anticipated monsoon, which is done for better production, as opposed to late sowing, with about 15% yield advantage. Conditions such as poor plant stand, decreased growth of the crop, and more weed infestation are well avoided by this. As the dry system is followed in rain-fed uplands and semi-dry system in rain-fed medium and lowlands, their optimum sowing time depends upon the onset of monsoon.

In this technique, the seeds are treated before sowing to increase the shelf life and



immunity, and covered till at least 4 feet with groundnut or paddy husk after sowing so that the moisture is retained. Also, any small amount of rainfall provides good moisture for proper germination. In 2019-2020, total 19 farmers adopted this technique.

10. Tank Silt Application

Tank silt is fine soil brought from the surface runoff during rainfall from catchment area along with crop debris, and is deposited as sediment in tank water spread area. Then it



decomposes over a period of time. This silt is rich in organic matter. The poor physical, chemical and biological property of the soil heightens the ill-effects of climate change, which significantly affects rainfed cropping. It thereby increases fertility and water holding capacity of the soil. This was taken up by 144 farmers covering 308.91 acres of land in 2019-20.

11. Bund Plantation

Plants have been planted in the common property resources (CPR) of the villages, under the APDMP project. The CPRs were identified by the BoDs of the FPO and the selection of plants was also done by them, personally, so that they take ownership, ensure participation from all the members and use quality seedlings. Under the Climate Smart Village project, seed balls were prepared by the farmers and also school children and placed near the foothills in PC Giri village.

12. Support System

The farmers needed a support system for them to take up all the activities in order to achieve the final goal of the FPO, that is, improved soil fertility & water holding

capacity, and more productivity & income. After visiting Mulkanoor Cooperative Society, the FPO decided to establish a Custom Hiring Centre (CHC) and a Bio Resource Centre (BRC) which they felt would become a support system for its farmer members.

The agriculture tools and implements were made available in CHC on rent at nominal rates to the farmers. Equipment like tractors, rotavators, cycle weeders, power weeders, graders, tarpaulin sheets, power



sprayers, etc. are available for farmers on rent, particularly the small and marginal farmers who cannot afford to buy all the necessary tools and equipment. Because of this intervention, approximately Rs. 1300/- got reduced in the production cost per acre.

An entrepreneur was identified by the FPO BOD and given a three-day training on the preparation of bio-fertilizers and bio-pesticides. The entrepreneur received all the necessary equipment worth Rs. 70,000/- as loan for the preparation of decoctions like *neemastram*, *agni astram*, *bramhastram*, *dasa parni*, *beejamrutam*, *dravajeevamrutam*, *ghanajeevamrutam*, *amruta jalam*, etc. Each decoction has a different property and is suggested by the entrepreneur, and then it is used by the farmers accordingly. Through BRC, 116 farmers have been supplied bio-fertilizers and bio-pesticides, and a 16% reduction in the production cost was observed for the same.

13. Issues and Challenges

It is difficult to speculate rainfall in the region as it is very scattered, and the number of rainy days has been decreasing each year. Also, the soil type in the mandal is mostly red soil and therefore, there is high chance of failure of dry sowing if the rainfall gets any delayed. Because of very less and untimely rainfall in the region, there is no scope for contingency crop as well. Even if we try and cultivate, the production levels may not reach as normally expected and could lead to loss, economically.

Protective irrigation for crops is a necessity in the region, but the required equipment is less. The capacity of the farmers is also limited to maintain such equipment throughout the year.

The diversification of crops should be done in a phased manner. During the *Kharif* season in 2019, more than 70% of the farmers cultivated multiple crops (millets like finger millet, foxtail millet, jowar and brown top millet) instead of mono crop (groundnut). The production of millets was more but the market was very less. There is no primary processing centre nearby to process the millet and sell it in a different market. Because of this, farmers faced huge losses.

14. Way Forward

The prevailing drought situation in the region made the farmers realize the importance and benefits of climate resilient agriculture practices and the necessity of an FPO. All the activities were implemented in a participatory manner with the entire community showing their willingness and participation.

The agrarian distress is very alarming in the region due to various climatic factors, human induced problems, lack of institutional base at the local level, etc., But a ray of hope, in the form of climate resilient agriculture approach, has reversed the situation in the last two years and given confidence to the farmers for better living in the years to come provided there is a presence of collective action.

Sri Venkateswara Model Vegetable Nursery: Supplying High Quality Seedlings to Farmers Profitably

Mr. Jeganmohan Reddy¹ & Ms. Padmasri Nivedita²

A low cost vegetable nursery in Ramasamudram mandal of Chittoor district supplied healthy and quality seedlings to 1,000 farmers within three years of establishment by adopting best nursery management practices. To meet the increasing demand, another nursery was setup by the owner.

1. Introduction

Ramasamudram mandal is a high tomato growing area in Chittoor district where the climatic and soil conditions favour tomato farming throughout the year. The farmers, though, also grow other vegetables like cauliflower, brinjal, cabbage, chilly, etc. Availability of quality inputs, especially seeds and seedlings, is one of the major factors which has a direct impact on the health of the crop and the yield. As the health of the seedlings is one of the most important factors affecting the productivity of the crop, necessary care has to be taken in nursery establishment and management. Many plant diseases which do not have a

cure yet can be prevented by adopting a few best practices at the nursery level. By protecting the seedlings from these diseases, there is less scope for the plants to get affected at later stages of the crop.

To understand the gaps in technology adoption to produce quality and healthy seedlings, the World Vegetable Centre³ conducted a survey of vegetable nurseries in Karnataka and Maharashtra in May 2016. Based on the findings of the survey, Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) developed a nursery grading tool to grade all the existing nurseries in Ramasamudram, Madanapalle, Nimmanapalle and Palamaner mandals of Chittoor district of Andhra Pradesh.⁴

A total of 22 nurseries were graded in these four mandals based on 11 parameters, such as existence of double door system, weed mats, quality of water, usage of cocopeat, pest and disease management, fertilizer management and so on. Out of the 22 nurseries, 18 were in 'B' grade and four were in 'C' grade. Through grading, the problems and gaps in technology adoption by vegetable nursery owners were identified.

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² Ms. Padmasri Nivedita - Project Manager, APMAS

³ World Vegetable Centre is an international, non-profit vegetable research and development organisation. (<https://avrdc.org/>)

⁴ APMAS is the project implementation partner for Green Innovation Centre project for tomato value chain development in Chittoor district.

Realising the importance of promoting model vegetable nurseries, APMAS in partnership with the World Vegetable Centre developed 15 best practices to be adopted in low cost, ventilated, stone type nurseries, considering the huge investment on hi-tech poly house nursery (Rs. 12 to 15 lakhs). The best practices are aimed at addressing the quality of water, cocopeat growth medium, protrays and quality structure to avoid the infestation of sucking pests into the nursery, to introduce weed control and watering techniques, and bring transparency by maintaining sales register, sale receipts, and information on the stock of seedlings.

Following this, an orientation meeting was organised for the nursery owners to share the observations of the grading and to introduce the best practices in vegetable nursery management. After the orientation, a farmer couple, Mr. Vasudeva Reddy and Ms. Kalavathi, came forward to adopt and demonstrate the best practices in their nursery, “Sri Venkateswara Vegetable Nursery”, situated in Miniki village of Ramasamudram mandal.

Consequently, a tri-partite agreement was signed among the nursery owners, Miniki Grama Rythu Sangham (GRS), a member organization of Ramasamudram FPO and APMAS to implement best practices in the nursery and supply quality and healthy seedlings to the members of the GRS.

2. Background of the Entrepreneur Family

Vasudeva Reddy hails from a farming background in Ramasamudram Mandal, Chittoor district, which is on the border between Andhra Pradesh and Karnataka. The family of Vasudeva Reddy and Kalavathi had no previous experience in vegetable nursery management, though their major occupation was agriculture. Kalavathi, with

the support of her father, was rearing sheep to earn supplementary income to meet the family’s needs. Due to financial constraints, the family could not afford to pay the education fees and send their eldest daughter to college who was topper in her high school. Hence, she was married off at an early age to their relative’s son. The family now is keen to support the younger daughter to continue her studies.

Vasudeva Reddy and Kalavathi sold their agricultural land of seven acres in a remote village Yarrapally, Moogavadi panchayat for Rs. 25 lakhs and purchased two acres of land in Miniki village for Rs. 19 lakhs to start the nursery business with the hope of deriving higher returns. Following this, they started their nursery business in the year 2016.

3. Exposure visit to model nursery in Karnataka

Both Mr. Vasudeva Reddy and Ms. Kalavathi did not possess relevant technical knowledge on best practices to be adopted in producing quality seedlings. To gain practical understanding about best practices in vegetable nursery management, they were taken on a one-day exposure visit to the Indian Institute of Horticulture (IIHR), Bangalore and Ekalavya Model Nursery promoted by IIHR in 2018. They interacted with Dr. Ganesh Murthy (Principal Scientist, Soil Science) on quality cocopeat production and with Mr. Prakash of Ekalavya



Nursery about the best practices and essential business management skills.

APMAS provided technical guidance and inputs to them on a regular basis with the support of World Vegetable Centre. Financial assistance of Rs. 100,000/- (Rs. 50,000/- as grant and Rs. 50,000/- as loan) was made available from the Green

Innovation Centre project to the family towards adopting best practices.

4. Innovations Adopted in the Nursery

The table below gives the comparison of the practices adopted before and after Vasudeva and Kalavathi's engagement with APMAS:

Before their engagement with APMAS	After their engagement with APMAS
Used green shade net as side walls which is not insect proof	Used 40 mesh insect net proof to prevent white flies/sucking pests
No double door system adopted	Adopted double door system to prevent the movement of insects into the nursery
Doors were left open	Closed doors to prevent entry of sucking/tuta pests
Holes in side walls & top	Holes were patched to prevent entry of insects
Quality of water was not checked	Quality of water was checked for EC (Electrical Conductivity) and PH (Potential of Hydrogen) during preliminary stages
Protrays with less cavity space and less root growth	Protrays with more cavity space to ensure better root growth
Water wands with less holes (100)	Water wands with 500 holes to protect seedlings
Seed covers not tagged	Seed purchased covers are properly tagged
No name board and stock of seedlings at nursery	Name board and stock of all vegetables seedlings in nursery are displayed
IPM (Integrated Pest Management) was not practiced	IPM – Installation of yellow sticky traps and tuta pheromone traps
Disease management was not good	Ensured weekly monitoring of seedlings for diseases and adoption of control measures
Poor quality cocopeat	Purchased & used quality cocopeat

5. Increase in Turnover and Expansion of Business

Tomato seedlings are grown throughout the year. The seedlings are grown in Sri Venkateswara nursery during lean season (July to December) and peak season (January to June). During lean season, seedlings of cauliflower (dhaval), cabbage and marigold are also grown. During peak season, only tomato seedlings are grown due to huge demand for tomatoes in summer.



Most of the farmers target summer season for tomato production, hence there is a huge demand for tomato seedlings from January to April, which are ready for harvest from mid-March to June end. The varieties 448 (PHS) and 440 (Bayer) were predominantly grown from 2016-2018 which is about 90%, and the remaining 10% consisted of hybrids like Prabhav, Kaveri and Ravi Teja. Since 2019, all the above hybrids have been replaced by only one tomato hybrid, i.e., Saho (Syngenta) due to its high quality, higher productivity (25 to 40 tonnes per acre) and acceptability in tomato market. No processed variety is grown in this region. About 400-500 farmers from farmer cooperatives in Ramasamudram mandal buy seedlings from Sri Venkateswara nursery. About 200 farmers place pre-orders during peak season. The tomato hybrids 440 and 448 are sold at 50 paisa and 40 paisa per seedling respectively, whereas Saho hybrid seedlings are sold at Re 1 to Rs. 2/- based on demand as the seed cost is very high.

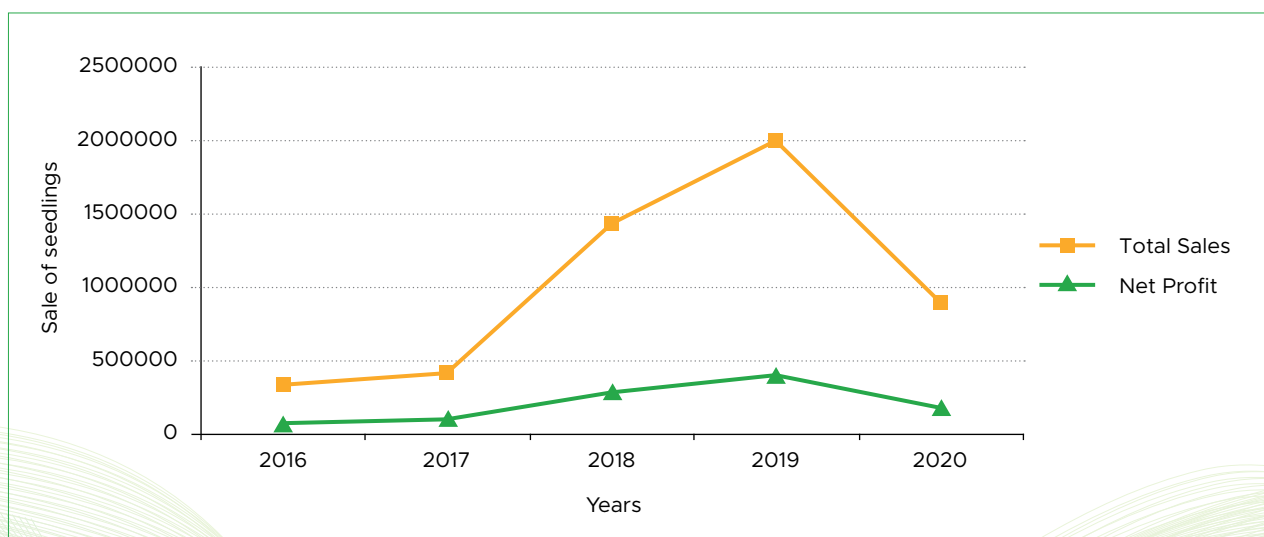
The turnover of Sri Venkateswara nursery has increased considerably and the following graph clearly depicts the increasing trend in sales and net profit from

2016 to 2019. The data for the year 2020 is upto August only. In 2016, 6,90,000 seedlings were sold. The annual turnover was Rs. 3,28,400/- with net profit of Rs. 67,640/-. This was the first business experience for the family and no best practices adopted in 2016. It was like any other nursery which was self-managed.

The family religiously adopted scientific methods and as a result, the annual turnover in 2017 increased from Rs. 3,28,400 to Rs. 4,27,050/-, and the net profit from Rs. 67,640 to Rs. 1,02,270/-. About 9,49,000 seedlings were sold during the year 2017 as compared to 6,90,000 seedlings in 2016.

To meet the huge demand from farmers during the peak season (January to May) for quality and healthy seedlings, Vasudeva and Kalavathi started a second nursery in January 2018 in half an acre plot taken on lease @Rs. 45,000/- per acre. The sales turnover and profit for the year 2018 increased nearly three times, i.e., Rs. 14,29,600/- and Rs. 2,85,920/- respectively compared to the year 2017. The increase in the turnover was attributed to an increase in customer base and establishment of second nursery to supply quality and healthy

Figure: Sales and net profit from 2016-19



seedlings. In 2019, the sales turnover further increased to Rs. 19,96,500/- and net profit of Rs. 3,99,300/-.

During the year 2020, the sales were good upto 21st March, but the family incurred losses of around Rs. 1.5 lakh

due to non-sale of seedlings owing to COVID-19 crisis. The family, however, was confident of overcoming the losses in the next season if things got better, as tomato prices increased due to shortage of supply and heavy rains across the country.

Cost structure of stone pillar nursery with shade net (in 0.25 acre)

#	Particulars	Quantity	Unit Cost (Rs.)	Amount (Rs.)
1	Fixed Cost			
1.1	Shade net	1	36,000	36,000
1.2	Side 40 mesh Insect net	1	15,000	15,000
1.3	Granite stones	70	600	42,000
1.4	Weed mats (sq.m)	1474	25	36,850
1.5	Double door and cement work	2	5,000	10,000
1.6	Sterilised foot pits	1	1,000	1,000
1.7	Equipment (shovel, etc.)	4	300	1,200
1.8	Name board	1	1,000	1,000
1.9	Facility for tray washing	2	1,000	2,000
1.10	Registration/License cost	1	2,000	2,000
1.11	Syntax Tank	1	24,000	24,000
1.12	PVC Pipes to support beds	25	400	10,000
	Sub-total of Fixed Cost			1,81,050
2	Recurring Cost			
2.1	Protrays	3000	13	39,000
2.2	Cocopeat (tonnes)	16	3,530	56,480
2.3	Seeds (packets)	365	304	1,10,950
2.4	Crop protection (Sprayings)	24		13,800
2.5	Labour (family included)	10		1,52,000
	Sub-total of Recurring Cost			3,72,230
	Total Cost			5,66,380
3	Net returns of seedlings			
3.1	No. of seedlings produced			9,49,000
3.2	Cost per seedlings			0.30
3.3	Average selling price per seedling			0.45
3.4	Total Returns			4,27,050
3.5	Net Returns			1,42,350
3.6	Profit per seedling			0.15



6. Sri Venkateswara Nursery– A Success Story

The nursery business has become a successful enterprise for the family due to the supply of high quality and healthy seedlings. The total sales have increased considerably from 2016 to 2020. Apart from an increase in sales and profit, the nursery business has gained much visibility and the overall impact is given below:

- ⊙ The nursery business increased by 28.4% from 2016 to 2017, and increased more than two times between 2017 and 2018, and by 40% from 2018 to 2019.
- ⊙ The standard practices have resulted in improved health of seedlings.
- ⊙ The farmer members of GRS in Miniki and nearby areas are able to purchase healthy seedlings.

Farmer B. Reddappa from Purandlapalli village, who has purchased seedlings thrice, stated that the seedlings are healthy and of best quality, and reported low damage rate among the seedlings and less incidence of pests & diseases. Farmers Mr. Narayana Reddy from Chokkandlapalli, D. Narayana Reddy and P. Ramanjula Reddy from Yarrappalli, and Mr. Nagaraju from Voolapadu villages have also expressed the same views and they are ready to pre-order.

- ⊙ Around 400 farmers from Ramasamudram mandal have reported that the seedlings from Sri Venkateswara model nursery resulted in a good crop.
- ⊙ The price went down by 5 paisa when compared to other nurseries, which resulted in attracting more farmers as well as gaining popularity in the region.
- ⊙ Since credit sales are allowed, more farmers are able to avail the services.
- ⊙ The Horticulture Officer who visited the model nursery applauded the interventions and disseminated the best practices to other nursery owners.
- ⊙ Farmers from Prakasam and Ongole districts visited the model nursery on exposure visit arranged by the Horticulture department.
- ⊙ The nursery owners from various parts of the mandal and district are visiting Sri Venkateswara nursery to learn the best practices adopted. The visitors also get motivated to adopt similar practices.
- ⊙ The family employs one permanent labour and six women as daily labour to take care of the various tasks of nursery management.
- ⊙ Vasudeva Reddy, Kalavathi and her father are engaged full-time in nursery management.

A new nursery was established on 26 January 2018 which is a stone type, naturally ventilated, insect proof house. The family is now able to educate the younger daughter who is currently doing Masters in Business Administration. The family has even constructed a new house adjacent to the nursery site.

7. Challenges Faced

Despite the progress in terms of increase in sales, the following were the challenges faced:

- ⊙ Sudden fall in tomato prices influenced the sale of the seedlings.

- ⊙ Irregular supply of quality cocopeat from cocopeat industry.
- ⊙ Spurious seeds supplied by the seed industry.
- ⊙ Competition from other nurseries who adopt best practices due to demonstration effect.
- ⊙ Fifty percent of the business is on credit where farmers pay the seedling cost after the produce is sold (75 to 90 days). If prices go down, the farmers delay the payment and it becomes difficult to make the recovery.
- ⊙ Changing the conventional practices and adopting unfamiliar methods proved to be a bit challenging.
- ⊙ Not able to increase the price due to high competition in the region, even though the quality of the seedlings is good.

8. Way Forward

The family of Vasudeva Reddy and Kalavathi has benefitted from the nursery business by adopting best management practices. Currently, their aim is to



become the best-known nursery in the vicinity and to gain the reputation for the quality of seedlings they raise. The family's future plan is to go for hi-tech poly-house vegetable nursery which is semi-automatic. During its journey with Sri Venkateswara nursery, APMAS has gained knowledge and considerable experience in the promotion of model nurseries in Madanapalle area and the learnings are being taken forward by encouraging more nursery owners to adopt scientific methods so as to increase the quality of the seedlings and the business turnover.

Participation of Men in Improving Nutritional Outcomes Among Urban Pregnant and Lactating Women

Ms. Padmavathy¹ & Ms. Bhavani²

1. Introduction

Nutrition plays an important role in the health and wellbeing of mother and child, and is particularly critical during the first 1000 days - from conception till the child completes two years of age. Good nutritional practices during this period ensure proper growth and development of children, and reduce mortality among mothers and children.

Telugu states (Telangana and Andhra Pradesh) are plagued by high level of malnutrition among young children and mothers. The prevalence of anemia among women appears to be considerably high. More than half of the women of reproductive age (15-49 years), in general, are anemic (NFHS-4)³. Anemia among pregnant women increases the risk of premature delivery, pre-natal mortality and maternal mortality. Health and nutrition conditions of urban poor are similar to or worse than among rural population.

Nutrition has been at the forefront of government policies for several decades now. Various initiatives such as provision of supplementary food, iron and folic acid (IFA) prophylactic programme, de-worming

pregnant and lactating women (PLW), counseling of community on maternal and child nutrition have been taken up by the government over the years. However, literature shows that government initiatives have not been able to bring about the desired behavioral change with regard to maternal and child nutrition.⁴

Though the government has suggested the use of Urban Health and Nutrition Day (UHND) platform for creating awareness among the masses, however, nutritional counseling is a neglected topic during UHND (Das 2018).⁵ Further, the participation and engagement of influencers in community based events have been low.⁶ The government has made provisions for conduct of home visits by frontline workers for counseling family members on maternal and child health, and nutritional practices. However, the provision of comprehensive coverage of households by all three frontline workers – Accredited Social Health Activist (ASHA), Auxiliary Nurse Midwife (ANM) and Anganwadi Worker (AWW) - is low (average 4 times in a year).⁷

Further, discussions with influencers highlighted that AAAs (AWW, ASHA and

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³ National Family Health Survey -4, 2015-16.

⁴ 'India State level Disease Burden Initiative, Malnutrition Collaborators: The Burden of Child and Maternal Malnutrition and Trends in its Indicators in the States of India.' *The Lancet Child and Adolescent Health*.

⁵ Das, S., Das, M. 'Quality Assessment of Maternal and Child Health Services in Health and Nutrition Day (VHND/UHND) in India - A Literature Review,' *International Journal of Health Sciences and Research* 2018: 8 (7), 321-26.

⁶ Polling Booth Survey conducted by World Bank, 2019 (unpublished)

⁷ POSHAN Abhiyan CBE Guidelines 2018, ANM Guidebook 2017, ASHA Module 6 & VHSND Guidelines 2019.

ANM) do not visit the families as often. Even during visits, they discuss mostly about receiving supplementary nutrition or health related issues. Very few actually counsel the families on the significance of nutrition for mother and child, and correct nutritional practices to be followed.

2. Need for Support of Men during Pregnancy and Lactation

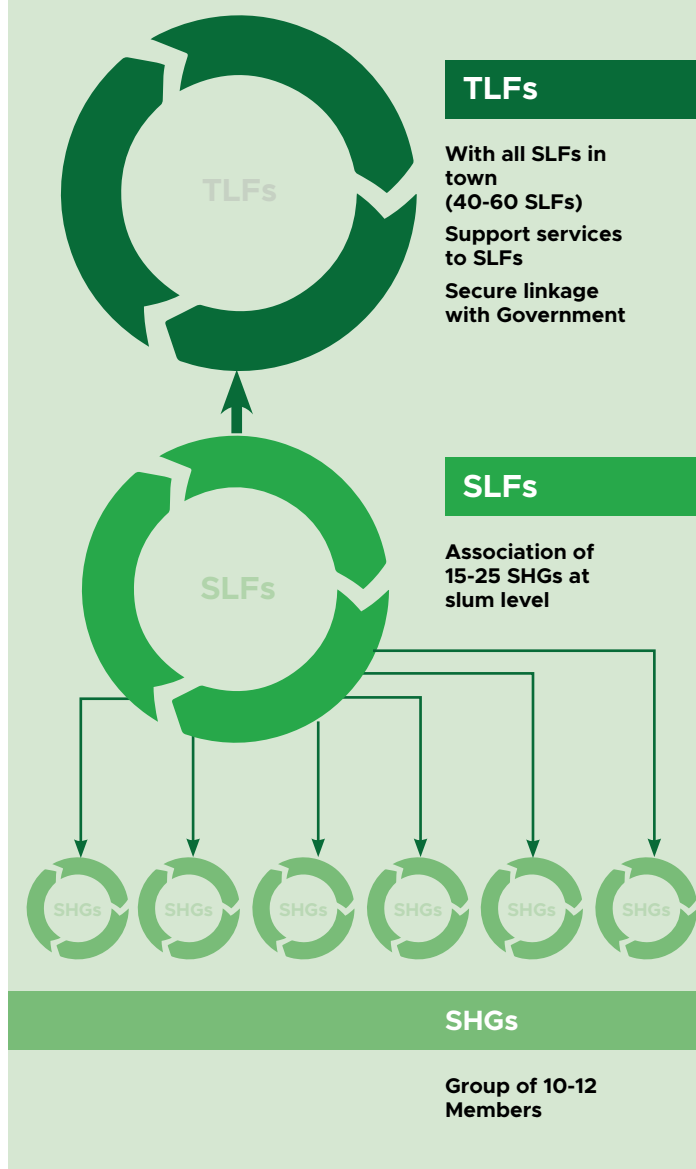
Pregnancy/Lactation is a period when women need additional help from family members in terms of sharing the responsibilities of household chores, care and emotional support. This period is critical for women as they undergo various physical, mental and emotional transformations. Thus, the sensitivity of family members towards women becomes a critical factor in determining their nutritional practices and overall health. And this is especially challenging in nuclear families.

Many interventions and initiatives in this context target only women and girls, and fail to incorporate the importance of involvement of men. Women may gain a lot of knowledge on good nutrition, but excluding men means that women may not be able to act on their improved knowledge. Support of men serves as the foundation of security for pregnant, lactating mothers and infants. It is necessary that men also have the knowledge of right nutrition and provide support in household chores, taking care of the elder children, accompany women for their regular health check-ups, and provide necessary nutrition supplements.

3. Enabling Community Support Systems for Pregnant and Lactating Mothers

Women and children from urban slums face severe nutrition, health and hygiene challenges. Many get little or no support

3-Tier SHG Structure in Urban Areas



from community support groups. Several studies have revealed that rural self-help groups (SHGs) can play a major role in bringing significant improvements in maternal and child health, by implementing effective behavior change communication (BCC) strategies. However, there is little credible evidence of SHGs achieving similar outcomes in urban settings. Therefore, Bill and Melinda Gates Foundation (BMGF) partnered with Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) to understand the impact of sensitizing influencers about social and

gender barriers that exist with regard to dietary diversity, and correct maternal and child nutritional practices by engaging urban SHGs and federations. This project named MARPU (which means 'change' in Telugu) aims to leverage the social capital of SHGs for connecting with PLW and their influencers. It is worth noting that among PLW and traditional households, there is greater acceptance of SHG members, which is highly encouraging for the organizations/groups working for the community.

SHGs in rural areas helped drive demand and significantly improved behaviours, which was replicated in three urban areas, namely, Ongole and Tirupati towns (AP), and Malakpet and Saroornagar divisions of Greater Hyderabad Municipal Corporation (GHMC) in Hyderabad (Telangana) through a cluster-random trial in 2018-19. In each project location, 15 slums were covered wherein adjacent slums were identified as controls. Health Facilitators (HFs) who were deputed by the Slum Level Federation (SLF) implemented various BCC interventions targeted at husbands to promote health and nutrition seeking behaviours among PLW. In this process, a number of active SLF leaders became change agents voluntarily, and supported the HFs in mobilising the husbands for various activities. It was important to develop an enabling, community level support system for the interventions to work. To aid this, the SHGs-SLF were strengthened and supported, and the facilitators were trained and equipped to work effectively with the target groups.

4. Perceptions of Men from Urban Slums about their Role in PLW Care

The investigators interacted with the husbands of PLW to assess their perceptions in taking care of the PLW and the kind of gender stereotypes that exist

in the families. From the discussions it was clear that:

- ④ Eating and breastfeeding behavior of PLW is largely dependent on the husband and mother-in-law. PLW follow practices and beliefs that are prevalent in their in-laws' house. Discussions with the community also showed that the husband and mother-in-law are the key decision makers in the family with regard to the food items purchased and the diet of PLW. In fact, PLW follow their advice during this period.
- ④ Men consider themselves responsible for earning money to run their family. They believe good health and nutrition are essential to being strong and productive, but they are rarely interested in food preparation or the intricacies of food distribution, as they view these activities as women's domain. But interestingly, the responsibility of buying food items largely falls on men.
- ④ Men and children are given good quality foods in sufficient quantities. Most of the men had no understanding on the quality and quantity of foods that their wives received. They strongly believed that performing domestic chores and taking care of children are the responsibilities of women.
- ④ Men have poor knowledge on the nutritional needs of pregnant and lactating mothers, and the care that has to be taken during pregnancy and lactation. They feel shy to talk about such topics as they opine that they are meant for women. Majority of times, elderly women in the family accompany the PLW to the hospital for check-ups.

5. Social and Behaviour Change Communication (SBCC) - A Tool to Integrate Men in Maternal Nutrition Initiatives

Between August 2018 and December 2019, with support from APMAS, the

SHG members implemented the SBCC interventions in the project locations. The objective was to involve and sensitise husbands and other decision makers in the family about social and cultural myths surrounding pregnancy and lactation. Based on the barriers identified, a variety of SBCC materials were developed to trigger desirable change among men to take care of their wives.

Different approaches or mediums of SBCC interventions were identified and used to sensitise the husbands, such as home visits, counselling, group meetings or group discussions, videos, interactive games, songs, posters or leaflets, phone calls, campaigns, celebration of local and national events.

SBCC interventions aimed at collecting information pertaining to a wide range of issues, such as the importance of early registration, various schemes, social entitlements, health and nutrition services available for PLW, importance of diet diversity during pregnancy and lactation, birth and neonatal care preparedness, spreading awareness on danger signs, antenatal visits and immunisation, importance of supplementary nutrition provided in the Anganwadi centre, importance of supplements like IFA tablets, calcium tablets, early initiation, exclusive breastfeeding, age appropriate complementary feeding, diet during illness and, importantly, various myths and misconceptions surrounding the nutrition intake of PLW and the role of husbands in taking care of their pregnant/lactating wives.

6. Group sessions

Active husbands were identified and motivated to mobilize other men for the group sessions. As most of the husbands were working, these meetings were organized



on Sundays or in the late evenings. Group sessions brought together husbands in the community and gave them opportunities to engage in peer-to-peer discussion on issues related to gender and diet diversity,

And the various ways by which they could support their wives. Discussions were held on how husbands could purchase low cost and seasonal nutritious foods to support maternal diet diversification. Similarly, to overcome inequitable gender norms, several specific actions were discussed on the ways in which husbands could support their pregnant/lactating wives, including by doing house work, ensuring adequate supplies of foods and antenatal micronutrient supplements in the home, and reminding and encouraging their wives to eat nutritious food and take adequate rest. Special SBCC tools like posters, flyers and games were designed, emphasizing the role of husband in taking care of his wife during the period of pregnancy and lactation.



7. Home visits

Initially, the attendance of men in group sessions was very low, as they felt shy to discuss about pregnancy and lactation care. They considered these topics as purely meant for women. So focus was shifted to home visits. The HF's, when they visited the houses to meet PLW, also interacted with their husbands. The individual discussions at home helped them open up with the HF's during home visits. Gradually, after realizing the importance of health and nutrition care for their wives, they also started participating in the group sessions.

Home visits were central to the strategy to build relationships. Since PLW and their spouses were not able to take time out frequently to attend the awareness sessions, the HF's made home visits. Generally, families do not welcome advice from 'outsiders', but slowly the teams developed sincere, trusting relationships with women and their husbands, which permitted them to open up on closely-held and personal issues.

During home visits, the HF's sensitize PLW and their caregivers on dietary diversity, food groups and make them aware and recognize gender barriers that affect their health and nutrition. For example, our society norms condition women to have their meals, especially dinner, after everyone in the family. Most PLW now

have an early breakfast and they have their other meals on time. Similarly, all household chores are no longer the duty of only PLW; the husband and family share these chores and ensure she gets to rest.

8. Videos

During home visits, husbands were shown videos on the role of husbands in taking care of their wives during pregnancy and lactation. The videos generated great interest among the husbands.

9. Posters

Posters and flyers were developed depicting the role of husbands in taking care of their wives during pregnancy and lactation. These posters and flyers were used during counselling and group sessions. Posters were also displayed at the common meeting points of men like pan shops and tea stalls. Some of the motivated husbands supported the SHG members in displaying the posters on the walls of some of the houses in the slums.





10. Games

Learning through entertainment and play tends to be more effective than any other method. One of the interesting games is “Vaikuntapali” (snakes and ladders game). This game was designed for the husbands to instil in them an understanding of the concepts of gender, diet diversity, pregnancy and lactation care. In this specially designed game, ladders represented positive gender roles, health and nutrition concepts, while snakes depicted negative concepts. Husbands internalized both gender and nutrition concepts through this game. This game generated a lot of fun and, at the same time, the husbands started reflecting on their own behaviours.

11. Involvement in Anganwadi activities

Husbands were involved in “Suposhan Event” at Anganwadi centres where they learnt about various health and nutrition



services and schemes available for mothers and children.

Then they came forward to support the SHG members in writing key messages on pregnancy care and lactation care on the walls of the houses in the slums.

12. Campaigns and events

Husbands were encouraged to share certain responsibilities during campaigns and events. They supported the SHG members in arranging the tables for food melas, displaying of information, education and communication (IEC) materials in the stalls, managing the crowd, etc.

13. Achievements

Though the participation of men was quite low during the initial stages of the project, but over a period of eight months, significant number of men began participating in various activities. Whoever participated could influence the nutrition seeking behaviour of their wives to a greater extent. There are instances where they managed to influence their mothers (in case of restrictions on the diets of their daughters-in-law) and ensured that they support their daughters-in-law for improved nutrition outcomes.

Countering food myths by counselling PLW, mothers-in-law and husbands was a challenge. With numerous BCC sessions, events and home visits, many myths were broken down. Now the communities do not believe that by eating eggs, a bald baby will be delivered, or consuming papayas can cause abortions and so on.

Decisions on food to be served to PLW are solely based on the husbands and mother-in-law's views and beliefs. Mothers-in-law go by their own experience and believe their daughters-in-law do not require any special consideration in terms of food, apart from

what is traditionally given. Husbands tend to trust their mother's judgement, and are not open to any other point of view. This changed after the families were influenced by BCC sessions and home visits. The PLW are now assertive about their needs, and the families understand them better.

SHGs have conducted seven home visits during eight months, which has resulted in tremendous improvement in knowledge and behavior of the community. There has been an increased focus on dietary diversity for mother and child. Husbands have started promoting healthy dietary practices. There has been an increase in the purchase of fruits and vegetables. The husbands have become empathetic towards the workload of their pregnant wives and, in turn, have started taking responsibility in household chores which provides women with time to rest during the day.

Engaging influencers in the study also resulted in significant improvements in the nutrition seeking behaviour of the community over a period of eight months (see Figure 1).

It was found that 9.5% more women could make health related decisions and 7.4% more women availed supplementary

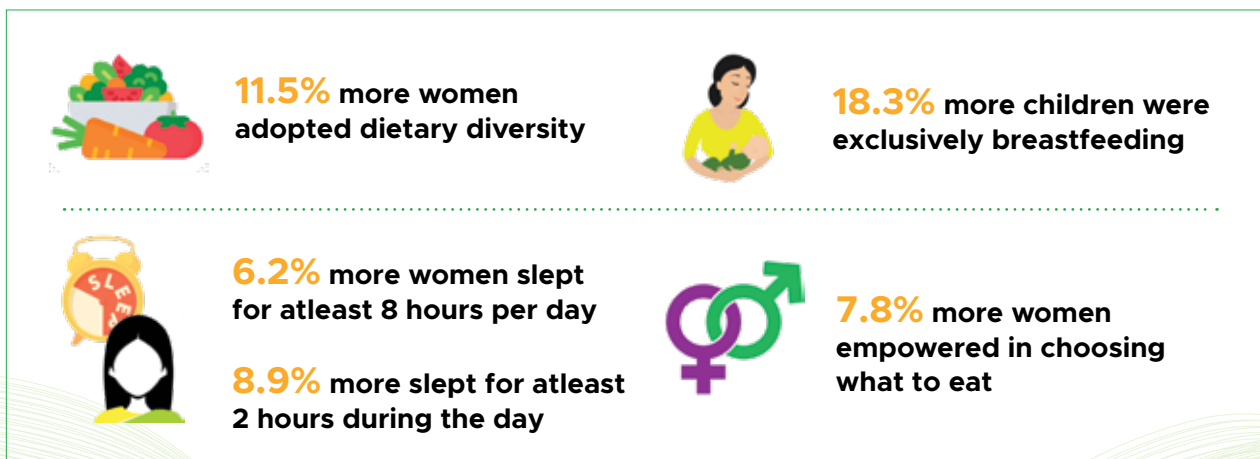
nutrition from Anganwadi centres. It thus strengthens the belief that influencers are central in bringing about a change in community behaviour.

The study has established that home visits are an effective way to engage and counsel influencers to improve nutrition seeking behaviour. They are among the best platforms for interpersonal communication and to promote behavioural changes.

13. Challenges

Many women from urban slums are culturally conditioned to accept gender roles that prevent them from recognising their right to good health. Poor education levels and fewer livelihood opportunities mean women have little control over their lives. They think caring for the family is paramount, often at the cost of their own health and wellbeing. They have little knowledge about maternal and child nutrition and care. Religious and socio-cultural beliefs condition families to follow local 'norms' and practices, and taboos about food and other practices affect women's health. Financial constraints also limit choices. In such a scenario, changing attitudes and behaviours of husbands proves challenging, but it is essential.

Figure 1: Improved nutrition practices among pregnant and lactating mothers



Many husbands of PLW do not like it when we go to their houses to talk to their wives about diet and care. Talking to them in such situations can be very difficult, especially when some men are indecent.

**Rachana, Health Facilitator,
Bhagat Singh Nagar, Hyderabad**

Involving men is not that easy, especially in reproductive and child health issues, as they usually think that these topics are purely meant for women.

All the existing practices around pregnancy and lactation are deep rooted. Therefore, mobilization of community members was found to be very difficult. Many men and influencers were found to be hesitant in listening and sharing their current practices, and also to switch to new practices. Availability of men and spending enough time during SBCC sessions are the other challenges.

Women have low self-assertion and they strive to project themselves as “good housewives”. In the process, they give more importance to the health and nutritional needs of their husbands and children, and often neglect their own.

14. Way Forward

Nutrition programmes need to recognize gender power relations in a household, and ensure both the partners and all family members are informed and involved in decision making for improved nutrition. It will promote long term behaviour change and gender equality. Targeting wives and husbands, and designing activities to engage men in maternal nutrition programmes are important to maximize

the impact. SBCC demands reinforcement of messages frequently. Thus, the desired change in nutrition seeking behaviour can be brought about by frequent home visits. This can be achieved either through developing clear guidelines for increasing the number of home visits to be conducted by AAAs or using other ways, such as using SHGs which have proved to be effective in conducting a greater number of home visits to counsel the influencers and thus resulting in improved nutrition seeking behaviour of the community.

The other important area of focus to attain success in increasing knowledge of the community is by ensuring comprehensive and unified messaging. Any inconsistency in the messages can negatively impact the outcomes. Further, there is a need to track the influencers covered by various players (AAAs, etc.) in order to monitor the progress in behavior change.



Frequent prioritized home visits along with comprehensive and consistent messaging on correct nutritional practices and gender barriers that exist can prove to be effective in influencing family members to bring about the desired behavior change among pregnant and lactating mothers. It can hasten the progress towards achieving national and sustainable development goals.

15. Conclusion

Influencers (husbands, mothers-in-law, fathers-in-law) play a crucial role in nutrition seeking behavior of pregnant women and lactating mothers in India. Anecdotal evidence depicts that despite various government interventions, the influencers' knowledge on the significance of nutrition in the first 1000 days of a child (from conception to completion of 2 years) is very low. Less number of home visits by AAAs has led to low information among the influencers, thereby negatively affecting the nutrition seeking behavior of the PLW. Further, there has been inconsistency in the information provided to frontline

workers which can create hindrance in their knowledge gain. APMAS-MARPU project studied the impact of SBCC on knowledge, attitudes and behavior of influencers and their role in promoting nutrition seeking behavior among the community. The study has clearly demonstrated that home visit is an effective way to counsel the influencers. Further, an increase in the knowledge of influencers on maternal nutrition and existing gender barriers results in greater autonomy among the PLW with regard to decision making for dietary practices, and adapting positive behaviors in community regarding maternal and child health, and nutrition practices.

Enable: A National Network of Support Organisations for Self-Reliant People's Collectives

Mr. CS Reddy¹, Ms. Ramalakshmi² & Mr. Naveen Kumar³

1. Introduction

A national network of organisations that the self-help group (SHG) movement, called ENABLE, was initiated in the year 2007 by Mahila Abhivruddhi Society, Andhra Pradesh (APMAS) with funding support from the Ford Foundation to build capacities of the important stakeholders on promoting sustainable SHGs and SHG federations, and to advocate for a conducive policy environment for growth and sustainability of the SHG movement in India. The network was initially promoted by seven resource organisations (NGOs)–APMAS, Hyderabad; Centre for microFinance (CmF), Jaipur; Chaitanya, Rajgurunagar/Pune; Indian School of Microfinance for Women (ISMW), Ahmedabad; Reach India, Kolkata; Sampark, Karnataka; and SHG Promotional Forum (SHGPF), Kolkata. ENABLE network was active in conducting large-scale research studies on SHGs and SHG federations, and organising various policy workshops and conferences. The network also conducted a number of training and capacity building programmes to develop a national pool of high quality trainers to train on SHGs and SHG federations. A Handbook for Trainers on SHG federations was developed in English & Hindi for use during the training of trainers (ToT) programmes. However, during 2013 to 2017 (for a period of nearly 5 years), ENABLE network did not have significant activity due to limited funding.



RBI Deputy Governor & Minister RD in National conference



Assembly Speaker in National Conference

With keen interest from DGRV Germany, APMAS's long term partner in supporting a system of self-regulation among the SHGs and SHG federations, to support ENABLE network, the mainstreaming of self-regulatory systems for the SHGs, SHG federations and Farmer Producer Organisations (FPOs) was started in 2018, enabling the revival and strengthening of the network. Post wider consultations during ENABLE national workshops with the stakeholders of the SHG movement and FPOs, the membership, scope and scale of ENBALE network expanded.

¹ Mr. CS Reddy – Founder and CEO, APMAS

² Ms. Ramalakshmi - Consultant, APMAS

³ Mr. Naveen Kumar – Program Coordinator, APMAS

ENABLE FOUNDING MEMBERS



2. Key Achievements of ENABLE Network during 2007 to 2012

While improving quality and sustainability of the SHG movement across India has been the focus of the ENABLE network, during the first 5-6 years of existence of the network, there was considerable focus on mainstreaming self-regulation system for the SHGs and SHG federations.

- ① Organised a National Conference on SHG federations and SHG women's sessions in Microfinance India Summit, 2008
- ① Organised Women Leaders' workshops at State and National levels
- ① Developed a comprehensive "Handbook of Trainers on SHG Federations" in English & Hindi, which has been widely used by various agencies for conducting ToT programmes.
- ① Published state specific SHG sector reports led by the promoting members of ENABLE network.
- ① Organised state level policy workshops on SHGs and SHG federations, and developed a state specific "Charter on SHGs and SHG federations" as recommendations to the state governments.
- ① Supported national and state level missions and expert committees such as National Rural Livelihood Mission (NRLM) and the corresponding state missions, Reserve Bank of India(RBI) constituted Malegam Committee on Microfinance and Y.C. Nanda Committee on SHGs in West Bengal by organising workshops, meetings and submission of recommendations for consideration.
- ① Conducted a national level study on SHG federations.
- ① Conducted a national study on quality and sustainability of SHGs in eight states (Rajasthan, Assam, Bihar, West Bengal, Gujarat, Maharashtra, Andhra Pradesh and Karnataka).
- ① Organised exposure visits and discussion forums on various themes by ENABLE network's member organisations for Self-Help Group Promoting Institutions (SHPIs), bankers and policy makers.
- ① Conducted a study on the structure of SHG federations in India - *Core Elements for Achieving Sustainability* with support of DGRV, Germany and GIZ -NABARD

Rural Financial Institutions Programme in 2012.

- ③ Organised a national level conference on Community-Based Approaches for Inclusive Growth (Microfinance, Livelihood Promotion and Social Agenda) in December 2012 at Hyderabad in Telangana state.

Currently, the network is technically and financially supported by DGRV, Germany and the number of network members has grown to 24 from across India. APMAS is the Convener of the network secretariat. Owing to Covid-19 pandemic situation, most of the ENABLE network meetings and workshops are being conducted in virtual mode. The network and member organisations are taking up a number of activities under two broad themes, viz. policy advocacy and capacity building at national and state levels (for more details about ENABLE network, please visit: <http://apmas.org/enable/index.html>).

3. APMAS Pilot on Self-regulation of SHGs and SHG Federations

What is Self-Regulation

SHGs and their federations have their own regulations to ensure good governance and management at all levels, which is called self-regulation. They also need to enforce compliance with prudential regulation by their own supervisory body.

To facilitate the growth of the institutions working for the poor and to reduce their dependency on external agencies,

APMAS, in collaboration with the Society for Elimination of Rural Poverty (SERP), the Governments of Andhra Pradesh and Telangana, with the support of DGRV, Germany, developed and tested systems and processes of self-regulation, that is, **Swayam Niyantrana Udyamam (SNU)**, among SHGs and SHG federations in Kamareddy cluster of Kamareddy district in Telangana state during 2007-10. The focus of self-regulation was on building capacities of the leaders of SHGs and SHG federations and members on key aspects, such as mobilising internal resources, establishing strong systems (accounting & bookkeeping) and business rules, conducting elections in a transparent manner, advocating fee for services, and developing internal human resources for achieving greater self-reliance.

For capacity building, APMAS developed, pilot-tested and published a series of self-learning modules, posters and training materials in local language (Telugu) following a participatory approach. Late Ms. Shashi Rekha Rajagopalan, expert in cooperative organisations, provided mentoring and guidance in conceptualising and designing the system of self-regulation based on cooperative values and principles. DGRV Germany, particularly Dr. Wolfgang Salomo, their senior advisor, provided significant inputs in developing the self-regulation system and modules based on 150 years of German experience in self-reliant cooperatives. For wide dissemination and use of self-learning modules in various trainings, and for the management of SHGs and SHG federations, APMAS developed and published the self-learning modules in English as well. APMAS ensured that the language used in both languages is easily readable and understandable by the SHG members.

Table 1: List of Publications under Self-regulation of SHGs and SHG Federations

1. The Significance of Savings	2. The Significance of Loans	3. SHG Bookkeeping
4. Reconstruction of Accounts in SHGs	5. SHG External Audit	6. Annual Planning for SHGs
7. SHG Federation Bookkeeping	8. SHG Federation Internal Audit	9. SHG Federation External Audit
10. Election Process in SHGs & Federations	11. Annual Planning for SHG Federations	12. Best Performance Award
13. Understanding Financial Statements	14. Surplus Management in SHGs & Federations	15. Fixation & Calculation of Interest in SHGs
16. Management Information Systems in SHGs & SHG Federations	17. Model Annual Report of Our SHGs & SHG Federations	18. Financial Management in our Federation

Material Developed under Self-regulation of SHGs and SHG Federations



POSTERS



VIDEO FILMS

SELF-LEARNING BOOKLETS & TRAINING MANUALS



4. Adoption and Upscaling Self-regulation of SHGs and SHG Federations by ENABLE Network Members

Based on the findings from various research studies and recommendations from advocacy events organised by ENABLE network, it was realised that there is a need for addressing the critical issues concerning Self-Help movement, and work towards the self-management and self-reliance of SHGs and SHG federations. In this connection, ENABLE network started advocating self-regulation of SHGs and SHG federations by adopting the following strategies:

4.1 Translation and adoption of self-regulation material into different languages

As the self-learning modules on self-regulation of SHGs and SHG federations gained significant reorganisation at the national level as a part of financial inclusion and member education, ENABLE partners decided to adopt publications into their local languages with necessary customisation. ENABLE partners took the responsibility of translation and adoption of self-learning modules into five local languages, in addition to Telugu and English, which were developed by APMAS.

Table 2: Organisation and Material Available in Different Languages

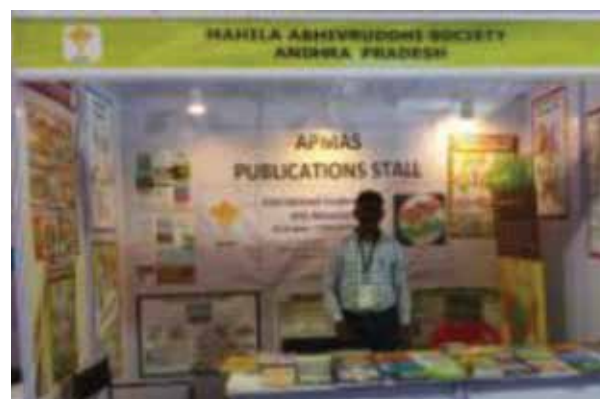
Organisation	Language
APMAS & Women Development Corporation, Bihar and CmF, Rajasthan	Hindi
Chaitanya, Maharashtra	Marathi
Grameena Mahila Okkuta, Karnataka	Kannada
ISMW, Ahmadabad	Gujarati
SHGPF, West Bengal	Bengali
APMAS	English & Telugu

4.2 Advocacy through national, regional and state level workshops with key stakeholders

While working together as a network, members also recognised significant operational and financial changes in the SHG movement, which had a negative impact on their work. As a response to those changes, ENABLE network members felt the need for advocacy at state and national levels with key stakeholders. The network organised the following workshops:

- Three-day National Conference for SHG Federations at Hyderabad with over 500 participants
- Two-day National Workshop for SHG Leaders at Ahmedabad, Gujarat
- Two-day SHG Federation Leaders' Sessions at the Microfinance India Summit, New Delhi.

Apart from these three, the network also helped the Government of India in organising a National Workshop for SHG Federations. The two federation workshops deliberated on all the crucial issues of SHG sector, such as bank linkage, financial inclusion, federations, livelihood promotion, women leadership in SHGs and need for self-regulation. The self-regulation, self-learning materials in several languages were shared by the members during the workshops. Many SHPIs purchased the customised books and posters produced by ENABLE network members.



Self-learning bookstall during International SHG Conference, Bangalore



SOC Workshop at Kolkata



Launching of books in Kolkata workshop

4.3 Regional level workshops

For advocating self-regulation system and sharing self-learning modules with SHPIs and SHG federations, ENABLE partners also conducted two regional level workshops, one in Kolkata and another in Gauhati. A total of 110 participants from the government, SHPIs, banks, NABARD, research and training organisations, federation leaders and other stakeholders from nine East and North-Eastern states participated in the workshops. During these workshops, ENABLE members shared their experiences in the form of publications which were targeted at educating SHGs, SHG federation leaders and community professionals like bookkeepers, trainers, auditors and financial literacy facilitators by using the community resource pool.



Workshop in Guwahati

4.4 Developing resource pool through ToT programme

During the pilot phase, APMAS realised the importance of a strict separation of business duties of SHG federations from that of service related duties for effective implementation of self-regulation in Kamareddy cluster. In this connection, APMAS facilitated a supervisory federation of SHG federations called “Kamareddy Cluster Paryavekshana Samakhya-KCPS” in Kamareddy cluster. Due to its significant work in developing a community resource pool (such as bookkeepers, internal auditors, financial literacy facilitators, ToTs, etc.) for the implementation of self-regulation, SERP identified KCPS as a resource cluster and deputed trained Community Resource Persons (CRPs), Senior CRPs and Professional Resource Persons (PRPs) to support the State Rural Livelihoods Missions (SRLMs) in implementing the CRP strategy for quality SHGs.

KCPS with support of APMAS has trained more than 1,000 SHG federation staff and executive committee members on self-regulation system and key elements of self-regulation. In these trainings, focus was given on content covered in training

modules and their use in training the SHGs, SHG federation board members and staff. ENABLE members also conducted state specific ToTs on self-regulation by using self-learning modules.



Development of resource pool



Participants explaining about the SL books



CRPs conducting trainings to SHG Federations on Governance



SHG training on annual planning by CRPs



Office Bearers Election Process followed by SHG Federation after taking training



Women bookkeeper maintaining SHG books after training

KCPS, with the support of APMAS, developed 228 CRPs and Senior CRPs, and 53 PRPs for strengthening the SHGs and SHG federations on self-regulation concept. These CRPs were deputed to six states for conducting trainings and facilitating the training of SHGs and SHG federations in self-regulation aspects.

APMAS signed the memorandum of understanding (MoU) with SERP for a period of three years from April 2013-16 to support the West Bengal SRLM in the implementation of intensive block strategy in Pathorpratima block. For operationalising the MoU, APMAS deputed its senior staff to WBSRLM. For strengthening the SHGs, formation and facilitation of Village Organisations (VOs) was done. Also, KCPS deputed 60 CRPs and 15 PRPs to West Bengal SRLM to support in developing the resource block. APMAS also placed a State Anchor Person (SAP) for overall capacity building. The outcomes of KCPS support through CRPs and PRPs are as follows:

#	Outcomes	Total	#	Outcomes	Total
1	SHGs' trainings (old)	1,688	9	SHG books updation	2,078
2	New SHG formation	493	10	SHG audit	1,997
3	Default groups	242	11	Audit presentation	1,878
4	Default groups revised	144	12	New groups' BK training	648
5	Weekly meetings	2,734	13	Facilitated loan recovery (Rs.)	35,86,363
6	New SHGs' training	635	14	Facilitated IDEL funds utilisation (Rs.)	88,73,994
7	MIP trainings	327			
8	BK trainings (old)	2,489	15	New groups' account opening	200

Similarly, ENABLE member Chaitanya in Maharashtra also developed nearly 100 Jaankars (literally meaning knowledgeable persons) on government programmes, legal aspects related to women and SHG promotion.

4.5 Supporting SHPIs in developing a strategy to implement self-regulation

Through advocacy events, structured capacity building inputs, providing support to SHPIs in designing and operationalising self-regulation system for SHGs and SHG federations, ENABLE was able to build and develop the social capital of the institutions. The CRPs whose capacities were built during ToT snow themselves conduct field level trainings for SHG bookkeepers, auditors, SHG trainers, financial literacy facilitators, SHG federations' accountants, auditors, etc. The CRPs also facilitate the SHG federations to read self-learning

modules during federation board meetings and discuss on various aspects of SHG and federation management.

5. Issues and Challenges

In spite of ENABLE network's significant success over the years in policy advocacy and proactively supporting the system of self-regulation of SHGs and SHG federations through ToTs and mentoring, the network has been facing a number of challenges:

- ⊙ As the network is informal (not a registered legal entity), the impact of the network depends on the individuals in the member-organisations who take interest in carrying out the activities of the network. When the persons coordinating the network agenda in an organisation leave, the implementation of activities gets delayed.
- ⊙ ENABLE network member-organisations prioritise their own

work and thus, the agenda of the network often gets stuck, resulting in delays or some of the important initiatives not taken to their logical conclusion. Hence, advocating self-regulation agenda has become a major responsibility of APMAS.

- ⊙ Language barrier has proven to be one of the hurdles in conducting the ToTs and providing follow-up mentoring support in the field.
- ⊙ Lack of capacity building funds to develop a resource pool at state and national levels was another major challenge as the funding available from donors was limited to ToTs.
- ⊙ Lack of common long-term perspective

among members about SHGs and SHG federations

- ⊙ Contradictions in the policy environment and predominant role of the state governments in the SHG movement affected the self-reliance of SHGs and SHG federations, etc. Because of this, ENABLE members had to make a lot of effort in advocating self-regulation at various levels.

6. Outreach

As of 30 October 2020, 17 NGOs and eight SRLMs across India had adopted elements of self-regulation system for SHGs and SHG Federations. The outcomes of self-regulation are as follows:

Table 3: Outcomes of Self-regulation

Particulars	Number	Particulars	Number
Resource pool development		Regular SHG bookkeeping, auditing & MIS	30,000
SHG bookkeepers trained	5,000	SHG trained on SNU	50,000
SHG auditors	3,200	Federation Board trained on SNU	2,000
Community resource pool developed	1,000	SHGs paid audit fee to federations	25,000
		Legal compliances in SHG federations	2,000

The best practices and tools suggested in the self-regulation modules have been adopted by the NRLM in the form of Standard Operating Procedures (SOPs) for village and cluster level SHG federations.

7. Key Learnings

- ⊙ Developing a resource pool for implementing self-regulation enhances the capacity of institutions that are helping the SHGs and SHG federations in achieving sustainability and viability. Implementation of self-regulation through ToT process has become a mutual self-learning process within the SHG federations as well as between the project facilitators and SHGs. Self-regulation became an integral part of the NRLM and SRLMs.

- ⊙ Establishing bookkeeping, auditing and election system as a base for self-regulation brings more transparency and accountability in SHGs and SHG federations.
- ⊙ Self-regulation as a strategy and improving the capacities of elected representatives in the management of institution improves ownership and accountability of elected representatives.

8. Current Status of ENABLE Network

During January 2019, BMZ (German Ministry) and DGRV conducted an external evaluation of upscaling activities of APMAS under self-regulation. As a part of mainstreaming self-regulation, APMAS

organised a stakeholders' consultation on 24 January 2019 at APMAS Training Centre, Hyderabad. During the workshop, the agencies that have been engaged in upscaling the self-regulation system for SHGs and SHG federations shared their experiences and learnings when they implemented self-regulation in the states of Andhra Pradesh, Telangana, Maharashtra, Bihar, Madhya Pradesh, Uttar Pradesh, Rajasthan, Chhattisgarh and West Bengal with the evaluation team. At the end of the workshop, all the SHPIs felt the need for coming together as a network for advocating and mainstreaming self-regulation for SHGs, SHG federations and FPOs. Based on the recommendations from stakeholders' consultation and the evaluation team, APMAS revived the ENABLE network. In the past two years, ENABLE network membership has increased from 7 founding members to 24 organisations. NABARD and SRLMs also take part in ENABLE network events as invitees. Now ENABLE network is trying to work on the following:

- ⊙ Expanding the scope of promoting self-regulation for SHG system and also for the FPOs as both are built on values and principles of cooperatives.
- ⊙ Policy, advocacy in mainstreaming and strengthening of self-reliant people's collectives.

ENABLE network is actively performing its role of promoting self-regulation among the SHGs, SHG federations and FPOs by taking up the following activities since its revival.

1. Conducted three virtual meetings focusing on strengthening the institutions after Covid-19, and how to facilitate interface between SHG federations and FPOs.

2. Conducted one virtual training for the staff of network members on values and principles of cooperatives, and how to operationalise them into FPOs.
3. Based on its experience in developing self-learning modules as a part of self-regulation of SHG system, APMAS has developed six self-learning modules on governance and management of FPOs. ENABLE network members are in the process of translating six modules into Kannada, Marathi, Gujarati, Odia and Hindi languages.

ENABLE network would like to take up the following activities over the next 3-5 years:

1. Revise the vision and strategy of ENABLE network based on contextual understanding.
2. Increase membership by ensuring regional representation.
3. Activate its website and create profiles of partners and CBOs promoted by them.
4. Further develop the self-regulation system and modules for the FPOs to become self-reliant business organisations for the farmers, both women and men.
5. Collate material to become a knowledge hub for people's collectives.
6. Organise ToT programmes and provide follow up support for country-wide support to self-regulation of SHGs, SHG federations and FPOs.
7. Empanel and develop a resource pool from among the members on self-regulation.
8. Elect Office Bearers of ENABLE network and position one full-time person.
9. Conduct virtual trainings/interactive sessions for various stakeholders and members.



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