

DOCUMENTATION OF WOMEN LEADERS AS FARMERS, ENTREPRENEURS, WOMEN -LED AGRI START-UPS AND FPO'S

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Director General's Message



Dr. P. Chandra Shekara

Director General, MANAGE

“Women's empowerment contributes to the establishment of a good family, a good society, and eventually, a good Nation,” according to the former president, late Dr. A.P.J. Abdul Kalam. More than half of women work in agriculture, yet they are still not properly recognised because of the widespread gender inequality in the community.

This evidence-based study has focused on various Women farmers and Entrepreneurs concerns in farm activities, decision making, credit access, extension services, wage gap in agriculture, food production & productivity, and marketing and looking at the results, there is still a long way to go. The authors have constructed a conceptual framework on the outcome of success stories of women Farmers, Entrepreneurs, Agri start-ups and FPOs in agriculture and allied based on the study's findings. The report has also made an effort to compile and integrate the information on women Farmers and Entrepreneurs and it offers a plan of action for prioritising research across many themes to facilitate focused evidence synthesis and creation.

In order to create a long-lasting and robust recovery, I believe that this report will serve as a call to action for all the stakeholders to make gender parity a key objective of their policies and practises. Considering that gender equality is currently more necessary than merely a choice.

I appreciate Ms. P. Sai Charitha, MANAGE intern and Msc Scholar of Sam Higginbottom University of Agricultural science and technology for selecting the relevant topic Documentation of Women Leaders as Farmers/ Entrepreneurs/ Women-Led Agri start-ups and FPOs of that needs to be addressed. Let me express my gratitude to Dr. Veenita Kumari, Deputy Director (Gender Studies), MANAGE, for helping her to choose the suitable stories, use proper research methods to gather pertinent data, analyze it, and advise on the best course of action.

13th April 2023

(P. Chandra Shekara)

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At the outset of the completion of my research internship, I have a chance to thank the Almighty for his blessings, through which I was able to complete my research on the documentation of women leaders as Farmers/ Entrepreneurs/ Women-Led Agri start-ups and FPOs and for giving me this opportunity to express my heartfelt gratitude to all those who have given me helping hands to make this study a success.

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(P. Sai Charitha)

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List of symbol & abbreviation

AIC-AAU- Atal Incubation Centre - Assam Agricultural University
AIR- All India Radio
ATMA – Agriculture Technology Management Agency
Bed - Bachelor of Education
CENDECT- Centre for Development and Education Trust
CIPHET – Central Institute of Post – Harvest Engineering and Technology
DRDA – District Rural Development Agency
FPC – Farmer Producing Company
FPG – Farmer Producer Groups
FPO – Farmer Producer Organisation
GDP – Gross Domestic Product
GOI – Government of India
HDP – High Density Planting
ICAR – Indian Council of Agricultural Research
ICDS – Integrated Child Development Scheme
ICRISAT- International Crops Research Institute for the Semi-Arid Tropics
IFS – Integrated Farming System
IRP – Intermediary Relending Program
JARDS - Jubilant Agriculture Rural Development Society
KVK – Krishi Vigyan Kendras
LMC – Local Management Committee
MIDH – Mission for Integrated Development of Horticulture
MKSP - Mahila Kisan Sashaktikaran Pariyojana
MoA&FW – Ministry of Agriculture & Farmers Welfare
MSME – Micro, Small, and Medium Enterprises
NABARD – National Bank for Agriculture and Rural Development
NEATEHub – North East Agri Technology entrepreneurs Hub
NGOs -non-governmental organizations
NRLM - National Rural Livelihoods Mission
NSSO - National Sample Survey Office
NYK – Nehru Yuva Kendra
OECD – Organisation for Economic Co-operation and Development
pH – Potential of Hydrogen
Rs – Rupees
SAC – Scientific Advisory Committee
SERP – Society for Elimination of Rural Poverty
SHG – Self Help Groups
SVBC – Sri Venkateswara Bhakthi Channel
TNAU – Tamil Nadu Agricultural University
TNRTP - Tamil Nadu Rural Transformation Project
UAE - United Arab Emirates
US – United States
VLPC –Village level Procurement centre
% - Percentage
\$- Dollar

EXECUTIVE SUMMARY

Women Entrepreneurship and empowerment are considered important tools in eradicating poverty and unemployment. Now, women empowerment has become a buzzword. Empowerment of women may not be feasible just by creating employment opportunities for them. The need of the hour is to inspire them to set up their own enterprises. Traditionally, women have been on stage, playing a crucial role in the management of the family as well as in agriculture and allied sectors. But their job has not been duly recognised. This study made an effort to examine the various literatures available in order to comprehend women leaders as Farmers, Entrepreneurs, Women-led Agri start-ups and/or FPOs and to provide tactical solutions to close the inequality between women and men that already exists. The study was conducted as a desktop' based study. Hence the study was done through online mode for primary source of data Total 290 from that, after duplication with regard to the title and key word 7, were selected through the telephonic method, and the available literature for secondary sources of data total 250, and after duplication, 10 were selected as above mentioned. At last, 3 were selected by both primary and secondary sources. Therefore, the scope of the study was pan India data from 11 states, viz., Andhra Pradesh, Telangana, Tamil Nadu, etc. On analysis of the profiles of the women farmers and entrepreneurs, it was found that the majority of them were high school educated (53.0%), only 47.0% had been trained, and the remaining had directly started their enterprises out of their own interest (53.0%). Although the majority (68.0%) of them were not leaders, they stood up and inspired many people in and around their villages. The challenges noticed regarding the study Limited access to productive resources and limited decision making capability. From that suggestion, it is given that Program targeting women entrepreneurs must address their time and finance issues. However, entrepreneurship development and skill training are not only the responsibility of the government; other stakeholders too should shoulder the responsibility. We come across many single, independent women entrepreneurs, but their major role is carried out by men.

Key words: Women Empowerment, Entrepreneur, leadership.

INTRODUCTION

Women entrepreneurs have been designated as the new engines for growth and the rising stars of the economies in developing countries to bring prosperity and welfare. Women Entrepreneurs may be defined as a women or a group of women who initiate, organize and operate a business enterprise. As per recent figures, women comprise **14 per cent** of the total entrepreneurs in India, which works out to 8 million (**ABP Network 2023**). The (GOI) **Government of India** has defined women entrepreneurs as an enterprise owned and controlled by women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women. The growth of the proportion of women entrepreneurs in developing countries has drawn the attention of both the academic and the development sector. Women entrepreneurs engaged in business due to push and pull factors encourage women to have an independent occupation and stands on their own legs.

We are seeing this exemplified in our Indian entrepreneurship ecosystem. The past few years have seen a growth of women venturing into and succeeding as entrepreneurs and nothing begets success like success. According to media reports, over 20.0% of MSMEs are owned by women entrepreneurs in India which amounts to 23.3% of the labour force. Also it is interesting to note that 50.0% of India's start-up ecosystem is empowered by women in some way. Women can play an important role in MSME businesses and hence if, given attractive tax stimulus, women ownership of MSMEs can increase from 14.0% to 30.0% in 1 year. (**Economic Times 2022**).

In this situation, it only calls for a better tax benefits and lower tax slabs to working women linked to flexi working options, to promote higher inclusion of women in workforce for faster economic growth. Only 6.0% start-ups today are solely women led, hence tax incentives and holidays to promote women led start-ups and businesses will go a long way in encouraging women to come forward to start their own businesses.

Traditionally financial products and budgets are designed keeping men in mind. While 48.5% of India's population is women, and Lakshmi is considered the Goddess of Wealth in India, it is paradoxical to note that Women and Wealth do not enjoy a close relationship. As per the latest TATA AIA report, Oct 2022, 56.0% women are not allowed to take financial decisions. As per Global Gender Gap Report, World Economic Forum, July 2022, it will take another 132 years to fully bridge the Gender gap globally. India Ranks 135th out of 146 countries to close only 62.9% of its Gender gap.

Speaking of the difference between today and 50 years ago, women-owned businesses have definitely grown. In 1972, there were 402,000 female-owned businesses in America. Today, there are 12.3 million women-owned or women-led firms. That does seem to represent quite a lot of progress.

Data from 2021 shows that women now make up 43.0% of all business owners in the world. While women entrepreneurs are closing the gender gap in business ownership, they still aren't quite halfway there. However, 43.0% show that there is a potential for a halfway mark in the coming years.

The largest percentage of women entrepreneurs are 40 to 59 years old, making up 62.0% of all women business owners. About 80.0% of these female business owners have college degrees, according to women entrepreneur's stats. Only 30.0% of all women-owned firms are younger than 40 years old. This is due to the fact that it takes years of hard work, experience, determination, and commitment to build a successful business. This includes building relationships, network connection and maintaining capital.

A Small Business Trends survey reported that women-owned small businesses are up from 2020's 27.0%. An impressive 30.0% of these female-run businesses have enjoyed success for over 10 years. In 2020, 17.0% of women started a business (United States).

When it comes to business funding, men dominate that venture. Female entrepreneurs seeking venture capital receive, on an average, \$39,000 in loans. Their male counterparts receive an average loan amount of \$44,000. Even though women-owned firms are known to earn twice as much per dollar invested, men still have the upper hand in funding. Overall, women entrepreneurs generate more than 10.0% more revenue over 5 years than men.

Starting a business, getting funding, maintaining a business, challenges and struggles resulting from operating a business, balancing work and family, and other stressors impact women entrepreneurs more than men entrepreneurs by 26.0%. However, as more women start businesses, that figure may change.

According to a report by Global Entrepreneurship Monitor, the percentage of women entrepreneurs in the world varies by country and region. In 2019, the average rate of women's entrepreneurship activity was 10.2% globally. However, the rates vary widely by region, with the highest rates in Latin America and the Caribbean (17.1%) and the lowest rates in East Asia (6.9%).

According to a report by National Sample Survey Office (NSSO), in India, about 46.0% of the agricultural workforce is female, but only 13.0% of rural women are engaged in entrepreneurship. While there is no specific data available on the percentage of women entrepreneurs related to agriculture in India, it is estimated that a significant number of women entrepreneurs in rural areas are involved in agriculture-related businesses such as farming, food processing, and handicrafts. The Indian government has also launched various schemes and programs to encourage and support women's entrepreneurship in agriculture, such as Mahila Kisan Sashaktikaran Pariyojana (MKSP) and National Rural Livelihoods Mission (NRLM). These programs provide training, financial support, and market linkages to women entrepreneurs in rural areas. Additionally, various non-governmental organizations

(NGOs) and private sector initiatives are also working towards empowering women in agriculture and promoting their entrepreneurship.

Women leaders in farming are becoming increasingly common as more women take on leadership roles in agriculture. Women have always played a crucial role in farming, but have often been overlooked or underestimated. However, with the growing recognition of the importance of women's contributions to agriculture, more and more women are taking on leadership roles in the industry. These women are leading the way in sustainable farming practices, advocating for gender equity and empowering other women farmers. With their leadership, women in farming are making significant contributions to the global economy. Agriculture sector employs 80.0 per cent of all economically active women; they comprise 33.0 per cent of the agricultural labour force and 48.0 per cent of self-employed farmers. In India, 85.0 per cent of rural women are engaged in agriculture, yet only about 13.0 per cent own land.

Women are generally denied higher education, especially in rural areas and under developed countries. Women are not allowed to enrich their knowledge in technical and research areas to introduce new products. Women entrepreneurs are not generally aware of the subsidies and incentives available for them. Lack of knowledge may prevent them from availing the benefits of special schemes.

Government and NGOs must provide assistance to entrepreneurs, both in financial and non-financial areas. Finance is one of the major problem faced by women entrepreneurs. Both family and government organizations should be liberal in providing financial assistance to them.

Family members do not encourage women entrepreneurs. They hesitate to invest money in the business venture initiated by women entrepreneurs. Bank and other Financial Institutions do not consider Middle Class Women Entrepreneurs as proper applicants for setting up their projects and they are hesitant to provide financial assistance to unmarried women or girls as they are unsure as to who will repay the loan, either their parents or in-laws after their marriage. This humiliates unmarried women and they generally leave the idea of setting up their ventures.

Objectives of the Study:

With these backgrounds, following Research on “Documentation of Women Leaders as Farmers /Entrepreneurs/Women-led Agri start-ups/FPO” was taken with following specific objectives:

1. Identification of successful Women Farmers/ Entrepreneurs/Agristart-ups and FPO.
2. Documentation of the selected Women Farmers/ Entrepreneurs/Agristart-ups and FPO.

REVIEW OF LITERATURE

Review is prepared by online available studies and journals.

Pharm and Sritharan, (2013) studied on the problems faced by women entrepreneurs in rural areas and concluded that majority of the women entrepreneurs lacked strong leadership. Their leadership quality was not good as required for being a successful entrepreneur. There are many women entrepreneurs who face problem related to finance. Second rank was financial insufficiency. The third rank was absence of systematic development, No awareness about Government schemes, non-repayment of loan by the participants, lack of education and other problems.

P. Jaya Kumar and J. Kannan (2014) highlighted the challenges and opportunities before women for self-employment. Main challenges faced by the women were dual role of women, overlapping of responsibilities of business and family, illiteracy among rural women, less risk bearing capacity, lack of information and assistance, need of training and development etc. With the increasing interest of government in women entrepreneurship, it created an opportunity for women.

Singh (2014) in his study reported that India is a developing country and having mixed economy, male dominated society and women are assumed to be economically as well as socially dependent on male members. Women entrepreneurs are having basic indigenous knowledge, skill, potential and resources to establish and manage enterprise, but simultaneously women entrepreneurs faced lots of problems like lack of education, social barriers, formalities, high cost of production, male dominated society, limited managerial ability, lack of self-confidence, harassment and not fulfilment of rules and regulation etc. Various factors like positive reinforcement and negative reinforcement influencing women entrepreneurs. Successful leading business women in India are ideal role model for our country. Government takes various steps for the upliftment of women entrepreneurs in 7th five year plan, 8th five year plan and in 9th five year plan. Women have the potential and determination to setup, uphold and supervise their own enterprise in a very systematic manner, appropriate support and encouragement from the society, family, government can make these women entrepreneur a part of mainstream of national economy and they can contribute to the economy progress of India.

Andrew, K. (2015) in his study reported that Worldwide last three decades have seen major shifts in rural economies. Rural enterprises are important generators of employment and economic growth internationally. It is important to stress that rural entrepreneurship in its substance does not differ from entrepreneurship in urban areas. Entrepreneurship in rural areas is finding a unique blend of resources, either inside or outside of agriculture. This Research has attempted to understand the role played by rural enterprises in economic development and how governing bodies can help to foster its growth. The promotion of entrepreneurship and the understanding where entrepreneurship comes from is as equally important as understanding the concept of entrepreneurship. The environment which is

considered most favourable for their growth forms the basis for the development of policies for entrepreneurship development.

Kumar (2015) the results revealed that 40 per cent of the respondents belonged to age group of below 30 years

Chauhan and Patel (2016) concluded that slightly less than half of the poultry entrepreneurs (48.47%) had medium level of economic motivation while 31.25 per cent and 20 per cent had high and low level of economic motivation, respectively.

Mohan (2016) in his study mentioned that today we are in a better position wherein women participation in the field of entrepreneurship is increasing at a considerable rate. Efforts are being taken at the economy as brought promise of equality of opportunity in all spheres to the Indian women and laws guaranteed equal rights of participation in political process and equal opportunities and rights in education and employment were enacted. But unfortunately, the government sponsored development activities have benefited only a small section of women i.e. the urban middle class women. Women sector occupies nearly 45% of the Indian population. At this juncture, effective steps are needed to provide entrepreneurial awareness, orientation and skill development programs to women. The role of Women entrepreneur in economic also being recognized and steps are being taken to promote women entrepreneurship. Resurgence of entrepreneurship is the need of the hour emphasizing on educating women strata of population, spreading awareness and consciousness amongst women to outshine in the enterprise field, making them realize their strengths, and important position in the society and the great contribution they can make for their industry as well as the entire economy. Women entrepreneurship must be molded properly with entrepreneurial traits and skills to meet the changes in trends, challenges global markets and also be competent enough to sustain and strive for excellence in the entrepreneurial arena.

Purohit and Sinhadea (2016) stated that mulberry sericulture hasn't made much headway in Kalahandi district which is a non-traditional area. The present low production of cocoons and consequent low return per unit area may be attributed to the fact that the sericulture respondents of this zone were not well acquainted with modern technologies involved in mulberry cultivation and silk worm rearing. Besides, there was a lack of adequate infrastructure and technical support.

John (2017) Reported that majority members have improved their participation in social programmes, banking, money transaction etc. After joining Kudumbashree. It also enhanced entrepreneurship and leadership and the capacity of women to work and earn together.

Khin maroo (2017) mentioned that majority of rural women belonged to middle age group (59.17%) were illiterate.

Bandarla and Jayachandra (2018) found that 64 per cent respondents of rural area have failed: in marketing their products About 2.31 per cent had faced problem in the area of finance, raw materials, labour and technological factors.

Korreck (2019) in his study mentioned that an increasing number of startups and new businesses have been founded in India over the last decade, the majority of them by men. While many Indian women have entrepreneurial ambitions, it is often more difficult for them to succeed. This brief examines the impediments to greater participation of female founders in India's economy by first gathering available data to describe the situation of women entrepreneurs in the country. It then explores the causes of low female entrepreneurship rates, primary of which are unconscious biases, low confidence in business skills, difficult access to finance and networks, a lack of family support and child-care options, as well as insufficient safety in work and public spaces. The paper offers a set of recommendations that can help push women's entrepreneurial empowerment.

Sujata and Vardana (2019) revealed that the problem faced by rural entrepreneurs were financial crisis, raw material selection, collection and storage marketing.

Dhaliwal (2020) in his study mentioned that with changing times women have been successful in breaking their confinement within the limits of their homes. The globalization and the spread of education have brought in new era of progress of women world over. Women nowadays are recognized as important contributors to the economy and development of nation. Especially, in developing countries such as India, this not only has world's largest young population but also has a high unemployment rate of 4.8%. More than 30% Indian youth (aged 15–29) are neither in employment nor in education or training as per an OECD Report 2017. Women entrepreneurs can therefore, not only generate wealth and contribute to national economy and but also act as potential source of much required employment opportunities. Therefore Government, Policymakers, Quasi government and private institutions, NGO's working for women empowerment should work on these factors and variables to provide conducive environment to ensure success of women entrepreneurs. The study presents and recommends development of sustainable policies and programs to encourage women entrepreneurship through recognizing the personally ambitious potential of women, encouraging their education and knowledge of the latest tools and techniques and building supportive systems for ensuring success of their entrepreneurial ventures.

Sowmya (2020) revealed that the constraints faced by rural women in their farming and allied enterprises from different areas such as labour financial production labour.

Dayya et al., (2021) indicated that majority of the respondents were married (89%), illiterate (46%), had joint family (95%) with medium family size (48%). Family occupation of all the respondents (100%) was farming. More than one third of the respondents in the age group of 31-45 years (77%) and only eleven per cent respondents were the members of the formal organization i.e. self-help group.

Kamalakanna (2021) listed of the constraints faced by women entrepreneur are family finance and Risk discouragement, lack of self-confidence and risk bearing capacity, social barriers and lack of education, low need for achievement, low mobility, problems of finances problem of marketing problem, problem of middle men.

RESEARCH METHODOLOGY

The main purpose of this study was to highlight the contribution of rural women as Farmers/ Entrepreneurs/ Women-Led Agri start-ups/ FPOs and to document their success stories. This would bring out the factors that led these women towards success and would serve as a learning experience and motivate other fellow women.

Location of the study

The study was conducted on 'desktop' type of study. Hence the study was conducted through online mode for primary source of data and the available literatures for secondary source of data. Therefore, the scope of the study was pan India.

Selection of the Respondents

Through Primary Source

Primary data was collected with the support and facilitation of KVKs and DRDA officers from Andhra Pradesh, Telangana, and Tamil Nadu.

The respondents were located through google search, using the keywords:

Thereafter the prospective respondents were contacted through telephone, wherever the details were available. A total of 290 prospective respondents were contacted from the States of Andhra Pradesh, Tamil Nadu and Uttar Pradesh using the keywords as mentioned above. After careful screening and removing the duplicacy, 71 women were considered to be contacted through telephone. The list of the Farmers/ Entrepreneurs/ Agri Start-up/ FPOs who were contacted is given in table. (1)

Table1: The contacted list of the Farmers/ Entrepreneurs/ Agri Start-up/ FPOs

Farmer	Entrepreneur	FPO
Sashikala farmer	Bhanot rajeswari apiculture	Jhansilaxmi Women Farmers Producer Company Limited's
Mythili farmer	Eswaramma apiculture	Mann deshi kisan producer company
Aranya permaculture	Lavanya rice mill	Simhadri farmer producer company limited
Usha turmeric farmer	Nitya millets	Basant women farmers producer company limited
Padmavathi farmer	Kalyani dinesh millets	Konakondla Farmers Producer Company Limited (Kfpcl) Chittoor
Usha raju vizag	Shilpa suryapet sericulture	Rythu Pragathi Farmers Producer Company limited swaroopa taduri Karimnagar
Shilpa farmer	Renuka devi mushroom	Bethamcherla Abhyudaya Farmers Producer Company Limited

Saroja farmer	Rekha devi mushroom	Dhone Farmers Producer Company Limited
Nunna jyothi	Padmavathi mushroom	Visakha Millets Farmers Producer Company Limited
Gayathri patel gunthakal	Sri Lakshmi mushroom	Banaganapally Women Farmer Producer Company
Lavanya reddy dasagavya	Padmaja mushroom tirupati(rural)	Peddathippasamudram Women Farmer Producer Company Limited
Aparna patlola farmer	Prameela mushroom	Ahobilam Women Farmer Producer Company Limited
Kotha krishnaveni	Subba Lakshmi hydroponics Kurnool	Narayanpet Farmers Producer Company Limited
Vijaya Lakshmi farmer Vijayawada	Sp rajitha entrepreneur	Gramabharathi surya kala
Kranthi farmer	Bhanuja entrepreneur	
Arifa rafee mango farmer	Vijaya ongole entrepreneur	
Mamatha quionoa farmer	Sacred Honey Indira reddy entrepreneur	
Anusha safflower farmer	Millenova founder sowmya entrepreneur	
Krishnaveni singaipalle	Janata agro foods Asha latha entrepreneur	
Madhavi farmer	Ancient foods haritha bhavani	
Madhureddy farmer	Shathabdhi organics kasu sri bhanu entrepreneur	
Anne Padmavathi dragon fruit	Jeeni foods	
Chamundeswari	Plantae stevia (sugar)	
Padmaja	Lavanya suryapet entrepreneur	
Mamidi lingamma	Gargi	
Roopa apple ber	Preethi	
Sunanda farmer asifabad		
Desigiri bangarama farmer		

After conversation with these 71 women, only 7 women were finalized for documentation purpose through telephonic interview, as mentioned in table. (2)

Table 2: Finalised list of Farmers/ Entrepreneurs/ Agri Start-up/ FPOs by telephone interview

S.No	List of selected farmers
1.	Chamundeshwari Andhra
2.	Anne Padmavati Krishna Andhra Pradesh
3.	Nirmala Kadapa Andhra Pradesh
4.	Gargi Chauhan Moradabad UP
5.	Rajammal Trichy

6.	Indira -Tamil Nadu
7.	Tamilnadu fpo

Through Secondary Source

Secondary data was collected from the websites of KVK, DRDA, USDA, FAO, RARS, NABARD, NRLM, ICRISAT, USDA, FAO, The betterindia.com, YOURSTORY, The Hindu, Sakshi e paper, IFAD, World Bank, ADB, Eenadu, Polam badi, Raithu nestham, Entrepreneurshub, Hans India, Tractor story Google (advance search), Google Scholar, Academia.edu, Think-asia.org, Wiley online library, Elsevier, Taylor & Francis, Krishi kosh, Science Direct. After screening on their websites, the following prospective respondents were identified as listed in table.

In this process, 250 literatures and articles were studied relating to women farmer and entrepreneurs in agriculture and allied sectors. After removing duplication, 180 articles were screened out. Of these, 70 literatures were selected based on their titles and abstracts. In the next stage, after in-depth reading of these 70 articles, 11 articles were finally selected based on the title and objective of the study. The list of the Farmers/ Entrepreneurs/ Agri Start-up/ FPOs selected from secondary source is given in table. (3)

Table 3: The list of the Farmers/ Entrepreneurs/ Agri Start-up/ FPOs selected from secondary source

FARMER	ENTREPRENEUR	FPOs
Rupi reddy Telangana	Sushma Rani Udampur	Kulswaamini Farmers Producer Company limited
Kaden Lepcha. Potato Farming.	Anita Devi Bihar,	Yashodhan farmer producer company
Bibi Kamaljit Kaur. Organic Farming	Gurvinder Kaur. Dairy Farming	Surya chandra farmers producer company
Leena Sharma. Natural Farming.	Navelban Gujarat	Chandra Bhushan Farmers Producer Company limited
Bhavana Nilkanth Nikam. Polyhouse farming. Maharashtra.	Hmangaihkimi. Beekeeping.	Akshya Marutham Collective Farming Farmer Producer Company Limited
Saroja Patil Karnataka	Tractors and Farm Equipment Limited / CEO Mallika Srinivasan	Narayanapet farmer producer campany
Bhuvanewari Kerala	SLURP FARM –Meghana Narayan	Benishan fpo
Shashikala Karnataka	Rigdham foods - Dibyajyoti B and Madhavi Pomar	Dhanalaxmi rebbena farmers producer company
Kanika talukdar nalbari Assam	Early Food - Shalini Santhosh Kumar	Gudihathnoor farmers producer company
Pappamall Tamil Nadu	Harika foods Sabitha para	Yacharam farmers producer company
Suman Rajasthan	Naturally yours co-founder	Nelatalli farmer producer

	Priya prakash	company
Sushma Rani Udampur	My harvestfarm Archana stalin – tamil nadu	Kowipally frmers producer company limited
	Hoovu fresh Yeshoda Karuturi – Karnataka	Anantagiri farmers producer company limited
	Milk India Company - Shilpi Sinha	Chivemla farmers producer company limited
	Klimom	Sri bheemeshwara tadwai mandal farmers producer company
	Nurture fields (nurture field industries) aayushi khandelwal	
	Farmizen gitanjali rajamani	
	Binita Kumari. Mushroom Farming. Bihar	
	Terra green organics- Likitha bhanu	
	PVR foods- subhadra, Coimbatore	
	Meluhans Greens & Grains Private Limited	
	Purnim ananth	

This is the list of 11 women were finalized for documentation purpose as mentioned in table.(4)

Table 4: List of Success Stories finalised for documentation purposes

S.No	List of the selected stories
1.	Rupi reddy Telangana
2.	Benishan fpo
3.	Saroja Patil Karnataka
4.	Shashikala Karnataka
5.	Pappamall Tamil Nadu
6.	Bhuvaneswari Kerala
7.	Navelban Gujarat
8.	Sushma Rani Udampur
9.	Anita Devi Bihar,
10.	Kanika talukdar nalbari Assam
11.	Suman Rajasthan

Combination of both Primary and Secondary Source

Some of the secondary articles have seen and added additional the data by the primary telephonic interview method, these is the list of those women for documentation purpose Mentioned in table. (5)

Table 5: List of Success stories collected by both Primary and secondary sources

S.No	List of selected women
1.	Rekha Kumari mushroom Bihar
2.	Fancy joshimon Kerala
3.	Geetha -Tamil Nadu

Distribution of the respondents

The distribution of the respondents through primary & secondary source is represented in figure.(1) The respondents were from 11 States viz. Andhra Pradesh, Tamil Nadu, Telangana, Karnataka, Kerala, Bihar, Gujarat, Rajasthan, Jammu, Assam & Uttar Pradesh.

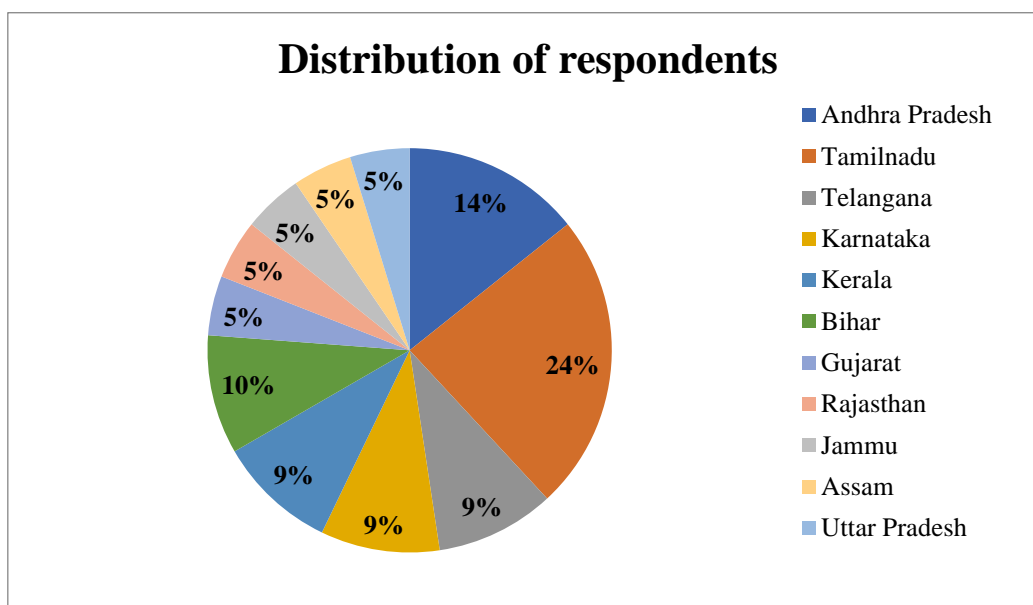


Fig 1: Distribution of Respondents

Tools for data collection

Primary Data Collection

The information for documentation of success stories through primary source was collected through virtual interview. The selected respondents were interviewed through video call. Before the interview, the respondents were contacted and communicated about the purpose and objectives of the study. They were also given some lead questions in advance to get themselves ready with the information before the final interview.

Some of the lead questions given to them prior to the interview are:

1. What is her background? Either farmer or entrepreneur with an educational background
2. Why & how did the journey start?
3. How do they run their businesses, either on their own or through other training?
4. What is the first step after getting an idea to start? Vision?
5. Mission of the farmer/entrepreneur
6. What was the first thing that propelled her to success?
7. Did they receive formal or informal assistance in their business or farming?
8. Employment type and strength
9. What is their credit support? Any government schemes are owned business?
10. Economic details like total investment, gross income, net income, and return on investment.
11. What kinds of products do they prepare? and their marketing strategies and networks?
12. What are the major challenges faced by her as a woman farmer/ entrepreneur/Agri start-up and FPO?
13. Future planning?

Secondary data Collection

The secondary data was collected by searching the articles on different websites, as mentioned above. The information was presented in the form of success stories using the standard scientific format.

RESULTS AND DISCUSSION

The result of the study is presented under the following sub-heads:

1. Identification of Successful Women Farmers, Entrepreneurs, Women-led Agri start-ups, and FPO.

The total no. of women farmers, entrepreneurs, agri start-ups and FPOs through primary and secondary source is presented in figure (2). The data of this figure shows that majority of the respondents were women Farmers (44.0%) and followed by FPOs (24.0%). Entrepreneurs (21.0%), & Agri start-up's (11.0%)

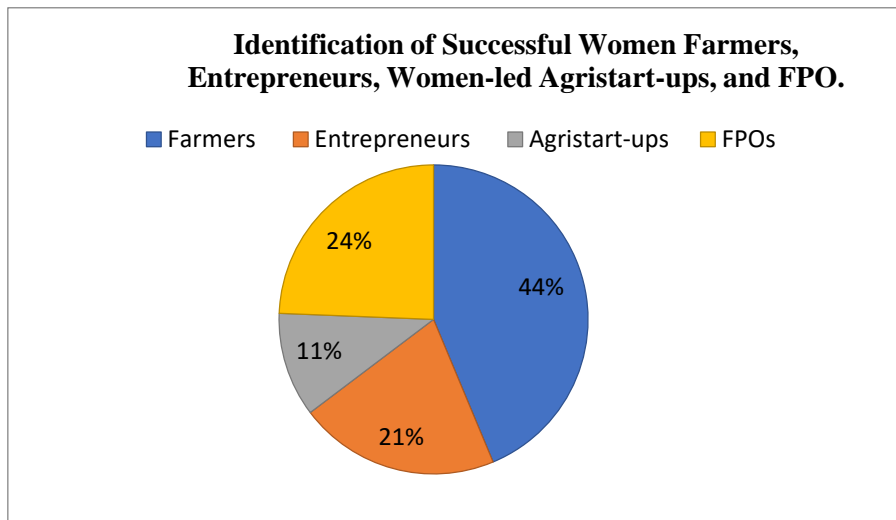


Fig. 2: Identification of Successful Women Farmers, Entrepreneurs, Women-led Agri start-ups, and FPO.

2. Final selection of the respondents for documentation

The total no. of women farmers, entrepreneurs, agri start-up and FPOs through primary and secondary source, who were documented is presented in figure (3). The data of this figure shows that majority of the respondents were Entrepreneurs (48.0%), followed by Farmers (33.0%), FPOs (10.0%) Agri start- ups (9.0%)

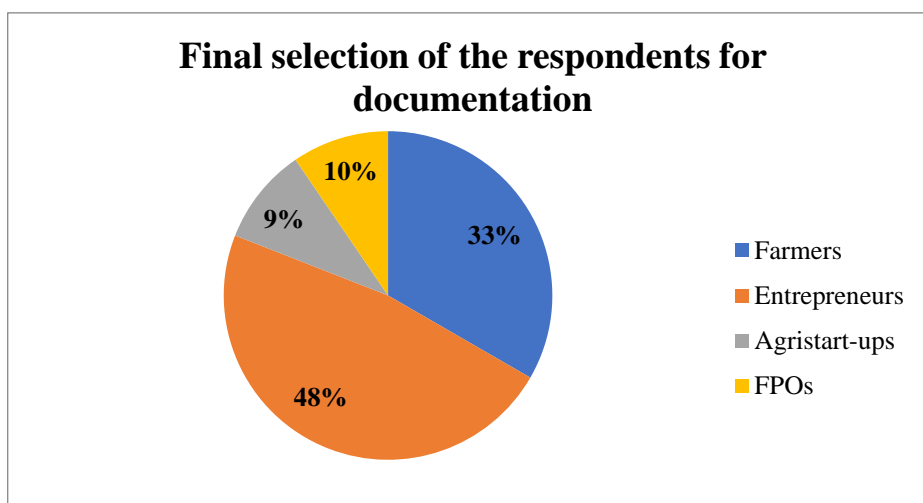


Fig. 3: Final selection of the respondents for documentation

2. Documentation of the selected Women Farmers/ Entrepreneurs/ Agri start-ups and FPO

Success Story 1

Ruling life with an Integrated Farming System

Mrs. Chamundeswari is a women farmer from Vemur village, Tirupati District, Andhra Pradesh. She completed the SSC and then married into an agriculture family. She has two college-going children. They were in agriculture from 2003 to 2012.

Her entrepreneurial journey started when Dr. Gangadharam Sir, General Secretary of Ward, inspired her to go into organic and natural farming. Since 2012, they have been doing chemical-free farming.

She has started farming on her family's land of 6 acres by cultivating Mango (Benishan, Neelum), Rice (Navara, Bahrudi), Sericulture (Mulberry), Sericulture unit and Multi cropping pattern (Banana, Papaya, Vegetables, Pulses). Last year, she took 9 acres of land on lease with their family's support, carrying out Sericulture on 2 acres, Rice cultivation on 1 acre, and Sugarcane cultivation on 6 acres. She uses Kashayam like Neemastra and Brahmastram for pest management of crops. The factors that motivated her to expand her activities were year-round increased income, enjoying a better lifestyle, nutritious food, and fresh fruits and vegetables.

She also has four cows and a calf that they use for household milk consumption, curd for spraying buttermilk on plants, and cow urine for the field and making Panchagavya. Neemastra is prepared by mixing Neem leaves, cow dung, and cow urine and keeping it aside for 10 days. Brahmastram is prepared by mixing Neem leaves, custard apple leaves, and cow urine, which is then boiled and kept overnight.

In the sericulture rearing unit, the second moult of silkworms is reared into cocoons, and the cocoons are sold to Chittoor. She also started a vermicompost unit in which earthworms are reared on waste leaf matter and soil. She also sells earthworms and vermicompost through these entrepreneurial activities.

Besides, her farm is also used as a laboratory in organic farming by students and faculty of the University of Tirupati and Chittoor district for officials of agriculture and allied departments. Students from Tirupati, other districts and states visit her field to study the methods of cultivation as part of an exposure visit.

She is not only engaged in natural farming but also organises training for farmers in her village and nearby villages on natural farming.

The ministers and district collectors who took cognizance of this matter also visited her farm and patronised her. In recognition of her contribution to agriculture, she has received awards from the farmer's association and universities. Many dailies also published prominently in recognition of her cultivation methods in Paadi Pantalu Magazine.

Many radio talks on natural farming were delivered by her, and a television serial on nature and agriculture has appeared on a popular TV channel (SVBC).

The Chamundeswari family is very supportive. Annadatha Masa magazine also featured her in their magazine and highlighted her entrepreneurial activities and natural farming practices.



Fig. (4.1): Application of seed in the field



Fig. (4.2): Explaining farmer experience in IFS

Fig. 4: Chamundeswari's participation in the field and with media

Name: D.Chamundeswari
W/o D.Ayyapa Naidu
Address: Vemur village, Tirupati
District, Andhra Pradesh.
Ph No: 9441764030

Dragon Fruit: figuring out the profit for the farmer.

Meet Anne Padmavathi from Nuzividu, who used her knowledge of farming to create new opportunities and possibilities for a better living. Cultivating dragon fruit attracted everyone's attention. Along with this, other indigenous fruits are grown naturally.

The story of this Telugu woman is one of grit and resilience that have earned her success in a profession that was once alien to her: farming.

Here is a women farmer who can inspire many in the field of agriculture. She displays how knowledge can lead to the creation of opportunities and possibilities.

Padmavati is a 55-year-old single mother. She lost her husband in 2006; she has two sons, both with settled jobs. She came from a farming background; her father is a farmer and a trader.

The journey started when she gave some of her land to Israeli traders to cultivate fruit trees. They came to India with the idea of growing pomegranates in that field. The weather conditions were not favourable for growing crops. The crops grown in other areas also didn't yield good results. So, she decided not to grow pomegranates in her field.

Padmavati thought about why she should leave the land barren. Therefore, she decided to grow dragon fruit, as none of the farmers were growing it in their fields. If you want to grow a new crop, grow dragon fruit. She said, "I ate dragon fruit once, seven or eight years ago. I liked its flavour, but we don't find it in the market anymore."

During this journey, she faced many unpleasant remarks: "Why do all these things at this age, when people at this age stay at home and take rest? Why do you grow a crop that everyone has given up on due to losses? No matter what people said, her determination grew day by day, and she did it last year also.

She collected all the details related to dragon fruit growing. She got information on how it is grown abroad, what equipment is used, the method of storing ripe fruit, marketing, etc. She had brought dragon fruit plants from Vietnam with the help of her friends.

Padmavati started on her own 8 acres of dry land, where dragon fruit can be easily grown. She tried two methods of growing: one was the poll method on 4 acres of land. It cost her up to six lakh rupees per acre. Another one is the Trellis' method on another 4 acres of land that costs 4 lakh rupees per acre with High Density Planting (HDP). Most farmers can't afford to invest this much. She tried the trellis method also to raise awareness about dragon fruit cultivation among other farmers. She said that once you invest in your field, you can reap for the next 25 years. If planted once, it will bear fruit for twenty-five years. This is the reason to grow this fruit plant, which is delicious as well as profitable.

Being a desert plant, it does not require much water. It survives in floods. It can also withstand weather and natural fertilisers. It is grown naturally, without pesticides. Dragon fruit has a lot of health benefits as well.

Greens are being cultivated as intercrops. Among these are papaya, guava, and cantaloupe fruit plants. Within eight months of planting, the yield of dragon fruit reached quintals. Padmavati started selling it to the people in nearby villages and local markets. She also gave a dragon plant to the needy. Farmers can be reassured of the benefits of this plant, which have been explained to them in farmer's meetings in Andhra Pradesh and Telangana. Only a few farmers cultivate dragon fruit in Tamil Nadu.

"Today, she is the role model for others. For growing a rare plant in the fields and earning profits. Moreover, there are not so many women farmers. I'm glad she's growing it in our Andhra Pradesh."



Fig. (5.1) Dragon fruit Field



Fig. (5.2) Farmer sharing her thoughts about Dragon fruit farming.

Fig. 5: Anne Padmavathi in the Dragon Fruit Farm

Name: Anne Padmavathi
Address: Nuzividu, Krishna
district, Andhra Pradesh
Ph No: 9160877477.

The journey of a social worker to becoming a successful entrepreneur

Consistency and persistent market-driven strategies are key to any entrepreneurs attaining success in any business, as proved by Mrs. Nirmala (40 years old), a housewife with a minimum qualification in matriculation who, coming from a medium-income family, later emerged as a role model for many women in her surroundings and neighbourhood.

According to her, she was once a leader of one mandal of "Podupu Sangalu (Self-Help Groups)" at the district level and was also elected as Vice President of the "Stree Nidhi" Self-Help Group in Kadapa town consequently for two years. But she left all these positions. Driven by Dr. Khader Vali, who advocates for "Millets Diets," she is establishing her own business to be productive and support her family in any way she can.

At this juncture, Mrs. Nirmala was encouraged by DRDA about millets through "skill training on millets" in 2015 at KVK, Uttukuru, with DRDA. She underwent training to gain technical knowledge and skills on the production of good-quality grains and the preparation of value-added products such as Ragi flour, Ragi malt, biscuits, organic turmeric powder, etc., and also learned about marketing, packaging, and labelling of products. Learning the importance of millets for numerous people with various health issues through training was also beneficial. During the training programme, out of the 100 people who enrolled, only 15 started their businesses. Among them, Nirmala was the only successful entrepreneur who has run her business till now.

Mrs. Nirmala was committed to addressing the problems of diabetic people and motivating them to consume organic millet products. One way she acted as a social worker, and on the other side, as an entrepreneur, she could capitalise on market demand and drive production based on the needs of the diabetic patients. It was the motivation to establish her own unit in 2016, "Nirmal Food Products," which became the main source of income for running her family. All family members fully supported her and were involved in her business.

Mrs. Nirmala faced challenges like a lack of interest from the shopkeepers and local people in purchasing millet products. During that time, she signed a contract with ICDS (Integrated Child Development Scheme) for supplying ragi malt powder and was assigned to provide Kadapa red gram to some mandals under DRDA. Due to some constraints, like a lack of transportation, a low number of workers, and the slow processing of payments from government offices, she faced financial problems.

For the expansion of her business unit, she invested Rs. 5 lakhs. Then her production started increasing from 25 kg to 1500 kg through selling the products in nearby places in Kadapa district. The market also expanded from Kadapa to Bangalore and Chittoor. Wide publicity and advertising were done through distributing pamphlets, advertising on social media platforms and through Yellow Pages, Justdial, WhatsApp, etc. to create awareness and promote her products for increased sales. Today, she offers full-time employment to two women who help her in the business. Now, her net income has reached the level of Rs 1 lakh per month.

Message- “To become a successful and sustained entrepreneur, we should stand strong in every situation, no matter what comes. At the beginning of business, one should not worry about the profit.”



Figure 6: Nirmal products after value addition

Name: Nirmala

Address: Near MS. Bhawan, Adjacent to SV Degree College, Balaji Nagar, Kadapa, Andhra Pradesh 516003.

Ph No: 9989815837

Giving life by recycling waste

It is a well-organised source of income for the conversion of agricultural wastes like hay, paddy straw, etc. into precious proteins and makes added profits as well as reducing unemployment. Mushrooms can be successfully grown without the use of land and can provide a regular income throughout the year. Cultivation is also independent of weather and can recycle agricultural by-products as composted substrate, which, in turn, can be used as organic mulch in growing. Mushroom cultivation in India has yet to reach its full potential. Recently, unemployment has been increasing. In this situation, self-employment can be an important way to increase the employment rate for farm households by creating employment and earning extra income.

Mushroom cultivation is playing a vital role in helping rural communities strengthen their livelihoods. Mrs Gargi Chauhan (35 years old) of Thakur Dwara Village, Moradabad, Uttar Pradesh, completed her studies up to M.a (Master of Arts) and worked as a housewife. Her main desire is to cultivate mushrooms on her own to provide nutritional food that contains protein and also to overcome income obstacles.

Mrs. Gargi is from a rural area and has two children. Her husband had been working for a private company in Gurgaon, but due to some severe health issues, he resigned his job. This was a very tough situation, as the whole country was suffering from the COVID-19 outbreak.

Mrs. Gargi stood as president in SHGs (Self Help Groups) at cluster level and took training on preparing candles, pottery, colour, value added products (mushroom pickles, mushroom powder), and beekeeping in JARDS (Jubilant Agriculture Rural Development Society).

Inspired by seeing mushroom cultivation videos on YouTube, she believed to start growing initially with oyster mushroom cultivation, but as it proved unsuccessful again, she came up with a different method with lots of struggle in a different growing pattern and started button mushrooming and composting in inspiration of Dr. Vikram Singh's YouTube videos, who is from Punjab.

Mushrooms are purely climate-friendly, so they were grown in some climatic conditions. They were grown on a seasonal basis. She was harvesting mushrooms in season, selling them to nearby mandis, and delivering them for weddings or functions. In the off-season, prepare value-added products (like mushroom pickles and powder), diya, pottery, candles, and colour.

Initially, for three years, she stood independently and started expanding her business as it was running well to expand her mushroom production. She gave part time employment to three women as part of their training.



Fig. (7.1) Preparation of Pottery



Fig. (7.2) Participation in Kisan Mela



Fig. (7.3) Mushroom unit



Fig. (7.4) Bed preparation



Fig. (7.5) Drying of Mushrooms

Fig. 7: Processing of Mushroom and Mushroom products by Gargi

Name: Mrs Gargi Chauhan
 Address: Thakur Dwara Village, Moradabad,
 Uttar Pradesh.
 Ph No: 89419 96614

Victory of an ambitious female farmer

Miss Rajammal, w/o Mr. Chinnaya, hails from an agricultural community. We do not make enough money to meet our financial demands due to monocropping. Later, she learned about the "integrated farming system" training program through Podhigan TV", which was broadcast by the Agriculture Department of Tamil Nadu. She was inspired by seeing the program on TV and attended numerous IFS Model workshops by ATMA Tour, and she was motivated to put these into action. In their field. She started a model of integrated farming in Pirampatty village on 2.5 acres of rain-fed land.

Based on the advice of the Agriculture Department, she implemented all the modern methods, which increased crop yield. By following this method, she grew green gram on 2.5 acres of land with cowpea as a border crop. She used certified seeds, bio-fertilizers, organics, and PP chemicals, which yielded 800kg of greengram per hectare and 150 kg of cowpea per hectare. She has planted trees, such as acid lime, papaya, and guava, in the available vacant space to get an additional income.

She fed cattle and goats by feeding foliage. This reduced not only the feed cost but also increased the milk output from cattle to 12 lts per day, half of which is consumed at home and the rest for sale.

Further, she purchased ten poultry birds from the neighbourhood. On a seasonal basis, she used to get 8 to 10 eggs per day and sell each egg for Rs. 10 in the local area, as well as to supplement her family's nutritional requirements. Vermicompost is used as manure for her crops, with the remainder sold to customers for Rs. 10/- per kg.

As per the advice of the Agriculture Department, she purchased a honeybee hive to help build her farm through honeybee pollination. It not only added income through honey production but also served as a pollinator. She grew many trees, which produce edible fruits, and the blossomed flowers from these trees ensured an increase in honey production throughout the year.

Later, she purchased ten goats (nine females and one male) as a unit for meat purposes. This goatery unit improved her financial situation. She thanked the Tamil Nadu Agricultural Department for providing this kind of integrated farming system model project to the farmers.

This influenced other farmers to adopt IFS to increase their income and get healthier and more nutritious food products.



Fig. (8.1) Cultivation of Cowpea



Fig. (8.2) Using cattle for IFS.



Fig. (8.3) Using goats for IFS.

Fig. 8: Integrated farming system by Rajammal

Name: Rajammal Pirampatty
Address: south Marungapuri
Trichy
Ph no: 7639673811

Rice mill with Solar power... Amazing Female Entrepreneur!!!

Indira is from Kallipatti in Virudhunagar district. She has studied up to the 12th standard and has full support from her husband, Rajaguruvaiya. She is successfully running a small grain rice mill with financial assistance through a government scheme, and that rice mill was running on solar power. She gave an interesting account of her business experience.

Once she married, my husband and I worked in the field. At that time, she was a member of the TNRTP (Vaazhnthu Kaatuvom Thittam). Through that program, every time the meeting is held, they will send us for a field survey by saying, 'Select entrepreneurs in your panchayat'. We also went to all the towns around our panchayat, and she is very interested in selecting entrepreneurs who know about new technologies. She said...

At that time, the government subsidised barnyard millet seeds. In order to benefit from it, she has met all the agricultural groups and surrounding farmers and also planted barnyard millet on our farm. But no one is willing to make it a business as much as she expected. After that, she told him about her desire to start her own business and that we would give it a try.

I don't know what else to do except to express my wish. As per the guidance of the agriculture department officials, the idea came to start the business of selling small grains at a premium price. Accordingly, she started a "First Level Small Grain Production and Value Addition Centre."

It was too late to get a government order to take a loan from the bank and start a business through the TNRTP. So, as the agriculture department officials said, she decided to take a loan from the bank through the Prime Minister's One District, One Crop Project'.

She has applied for a bank loan, estimating that she needs a total of Rs. 8.50 lakhs to start her rice mill. My share in this is Rs. 83,000, and I got a bank loan for the remaining Rs.7,48,000,. They said that they will give 35% of this, i.e., Rs. 2.90 lakh, as subsidy. After getting the money, she was very worried about the location, purchase, machine, and electricity needed to start the rice mill.

As the first step, she decided to start the rice mill at the place next to our stable and started the work. At a cost of Rs. 2.51 lakh, to place cooling tin sheets around the shed and make the shed ready. She has purchased a machine for flour milling for Rs. 4.72 lakh and installed it at one place. It seems that solar electricity can be used for the next electricity requirement. Because our entire area is agricultural land. Here, from 9 a.m. to 3 p.m., farmers continue to use electricity to irrigate their fields. At that time, electricity will be available to the houses only at low voltage.

Therefore, it is not possible to rely mainly on three-phase electricity. So, she opted for solar power. For that, she spent Rs. 1.50 lakhs and printed a solar plate to get six kilovolts of electricity. For this, eight batteries, one inverter, and 10 solar panels are required.

A three-phase electrical connection is normally required to run a rice mill. But all the machines can run on unipolar electricity. So she doesn't need to go to the electricity board for a three-phase connection. 1 HP at a time in a rice mill with 6 KW of electricity available to the unit. Two capable machines can drive the plants without interruption.

The rice mill can be run for four hours at night using the electricity saved by solar power during the day. She has also bought a three-phase connection for emergency work during the rainy season. After preparing all this, the next problem she faced was the procurement of small grains and advertising for value addition. In order to correct this, she harvested the barnyard millet that she had sown on their land, prepared flour from it, and sold it.

Business can only happen if outsiders also benefit, not for our own sake. So, I went to each farmer and farming group nearby and told them about our rice mill. Around our village, all 15 villagers had to go to Mallanginaru to grind rice, thresh small grains, and remove husk. she speaks.

Farmers had to spend a lot of money to transport grain in autos and grind it. So, she told the farmers about her rice mill nearby to avoid this cost. Similarly, the husks that came out of the ground grains after grinding or threshing were collected by the millers themselves.

The husk and pulp are used as goat, cow, and chicken fodder. That's why everyone soon came to know about her rice mill. Farmers are also interested because they can get good benefits at a low cost. Virudhunagar, Aruppukkottai, Rajapalayam, Chatur, Maharajapuram, Vijaya Karisalkulam, Vathirairipu, Krishnankovil, and Srivilliputhur come to her unit from all the towns and come to grind grains.

Entrepreneurs come from many places, like Coimbatore, Erode, Krishnagiri, Madurai, and Salem. She is the only one in the country to run a rice mill entirely powered by solar power successfully under the **Prime Minister's scheme**. She felt very proud when the agriculture officials told us about this.

To maintain this pride, she started working even harder. Now, a lot of people are taking her as a role model and starting businesses. Finally, a person from Gujarat came here to see how the rice mill was run. She answered him through a person who knew Hindi. After seeing this, she thought that my responsibilities were increasing. Similar jobs have also increased. Now she has made all the arrangements necessary to grow barnyard millet on 10 acres more than what was cultivated in the beginning.

In the current situation, she is earning Rs. 1,500 to Rs. 2,000 per day. Meanwhile, she calculates the grinding wages and expenses based on the weight of grains brought by farmers and outsiders for grinding. If the business increases, the monthly income from this will also be increased," said Indira with hope.



Fig. 9: Rice mill with Solar Power by Indira

Organisation of Producers of Primary Producers

Name of the FPO: **Veerapandy Kalanjai Jeevidam Producer Company Limited**

Location: Veerapandy, Salem, Tamil Nadu.

Year of establishment: 9th Feb 2017

Name of the CEO: B Sivarani

This FPO is promoted by NABARD. Their main vision of starting this FPO is Enhancing Farmers income through increased production and productivity by promoting Sustainable and Good Agriculture Practices. To capitalize the collective strength of farming community towards increase the agriculture production, better infrastructure facility and fair price to sustain their livelihoods women farmers.

This FPO is linked with 48 Panchayath, 141 villages, 227 FIG's and 2555 women farmers.

Mission:

1. To promote economically viable, democratic, and self – Governing Veerapandy Kalanjia Jeevidam Producer Company Limited.
2. To create adequate infrastructure facilities to support all operations in the agriculture value chain and thereby enhanced their livelihoods
3. To support the farmers to access up to date technical knowledge related to production, value addition and marketing
4. To provide support for the promotion and strengthening of Producer groups and Producer Company limited
5. To facilitate forward and backward linkage with market

Objectives

1. To organize small holder Producers into FPOs.
2. To facilitate small holder Producers to connect with local, State Level, National Level and Export markets to get fair Prices for their Products.
3. To empower the small holder producers for more control over the production resources and managing the support systems.
4. To build their capacity and skills to undertake scientific practices Agriculture Production
5. To collaborate with government line department, financial institutions, and other agencies to access the various schemes and subsidies for the small holder farmers.
6. To motivate the small holder producers to mitigate and overcome the disaster risks.

In 2018-2021 Procuring products like Ground nut, Pulses, Coconut and increased to Millets, Vegetables & Mushroom by 2021-2023.

Authorized Share capital: Rs. 60 lakhs

Paid up Share capital: Rs 40.55 lakhs.

Giving training to the women farmers related to the crop production and taking their produce for better prices and also training on value added products, packing, labelling and marketing techniques.

Closely working with shareholders and increasing production and productivity, opening outlet in Salem as marketing is more, exporting of oils and pulses to nearby state, online platform trading is also available.

Best women FPO Award at State level 3rd prize at 2019 and best women FPO Award at national level with cash prize of 50,000 in 2021-22.

Jan 2022 Interaction was held with Prime Minister of India Shri Narendra Modi garu on basis of FPO.



Fig.10: Success of Veerapandy FPO

Address: 11/2, Near Mariamman Temple, Inam Bairoji, Vatharasampatti, Veerapandy, Salem-636308.Tamil Nadu, India.

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Smart way of paddy cultivation

Rupireddy Lakshmi, a women farmer, her self-confidence, perseverance, and belief in her work make her stand out. Finally, it attracted the attention of the central government. Lakshmi, an ideal farmer, achieves good results by experimenting in agriculture. Lakshmi was born into a farming family and is uneducated. However, that is not lacking in intelligence; along with her husband's support, she adopted new methods of paddy cultivation.

Because there is a labour shortage and wage rates are rising. She began cultivating 12 acres of rice by herself through the broadcasting method. This woman farmer grows 430 to 450 quintals of grain each year without any labour.

Generally, farmers maintain nurseries for paddy cultivation, plough the main field, and have the main field planted by labourers, avoiding these steps; Lakshmi, on the other hand, sows rice seeds directly on the main field in the broadcasting method and reaps the harvest.

In this method, four to five sacks are getting higher yields. She just adds vermicompost to the field; no fertilisers are used. Lakshmi is getting high yields by using 90 percent organic fertilisers.

On ICAR Foundation Day, awards are given annually to encourage farmers who are doing innovative farming.

While entries were received from 11 zones across the country, the names of 12 farmers from the 10th zones of Telangana, Andhra Pradesh, and Pondicherry were proposed for the best farmer sections, and the name of Rupireddy Lakshmi, who is cultivating using the broadcasting method, was sent to KVK scientists. The scientists were surprised to learn the cultivation method of Lakshmi among all 12 people. She is selected for the **Best Female Farmer Award**.

The Jagjivanam award, along with Rs. 50,000 in cash and a certificate of appreciation, was to be presented in Delhi on ICAR's foundation day, but in the wake of Corona, the award was sent directly to Lakshmi's home. State Agricultural University VC Dr. Praveen Rao, Collector Shashanka, KVK scientists Venkateshwar Rao, etc. received appreciation and congratulations from Uttam Rythu Lakshmi over the phone. Many people from Italy, Germany, and France visited Rupireddy's field to learn her broadcasting technique for growing rice.



Fig. (11) Broad casting of paddy by Rupireddy

A single unit is transforming the lives of many farmers.

BE'NISHAN PRODUCER COMPANY LIMITED under Government of India Ministry of rural development it is situated in Telangana State tied up with currently consists of 56 (46 FPCs/ 10 Cooperatives FPOs) from 28 districts, 404 mandalas, and 3072 villages, covering 6967 FPGs and 1.09 lakh members (small and marginal farmers who are also SHG members). Incorporated in 20th August 2019.

This is initially started for supporting women farmers to stand self-dependent by themselves and giving by conducting trainings to farmers by line departments on best practices, pre and post harvesting techniques. How to select fresh fruits right time of harvesting, quality of fruit, Processing technique, Packing, Labelling and also marketing.

To remove the middle men and to increase cost benefits to farmers by SERP (Society for Elimination of Rural Poverty) farmers are benefited by getting price realization as per quality and without deducting any weight loss and also without paying any commissions to the brokers.

Village level procurement centre (VLPC) established in villages for grading and storing of vegetables. Centre is open for 6 days in a week for 8 hours daily. Centre is with Digital weighing machine, Crates, Grading machine. Accounts and receipts are done in IRP software where Farmers will have individual Rhythu seva card they will enter the weight of produce and type of produce they bought to VLPC; within 24 hours money is credited to their registered account number through Government of India, to save farmers from middle men and get returns fast this method is done.

Farmer Producer Company established the village level procurement centre to address the following challenges in marketing of fruits and vegetables:

- Lack of demand for huge quantity of vegetables
- 5-10% commission deduction by wholesale traders
- Price imperfections
- Improper weighing

Within 10 hours transportation is completed and produce will reach to vendor in their needy pattern either in crates are weight based the speciality of this fpo is lable contain farmer name, place, grade, commodity, time of harvest mainly this part attracts many vendors and customers.

They were dealing with Vendors like Reliance, Walmart, Big Basket, Way cool, Prism, Scoops, Udaan, Ratnadeep & Ninjakart.

They are also concentrating on processed food like purees & squash. Mainly seethaphal puree is done for 3-5 metric tons for every season by 500 women farmers.

Authorised Capital rupees 20,000,000 and paid up capital is rupees 15,000,000

Goals

- Be'nishan incorporation in 2019-20 resulted in an average increase of 12% in farmer's income which increased to 21% in the year 2021-22.
- To increase vegetables produce to 10 metric ton from selected VLPC for more.
- To increase more Processed fruits with Mango, Guava to get 60% more returns for farmers than normal.



Fig.12: Farmers of Benishan FPO

Life before and after “TADHVANAM”

Mrs. Saroja Patil, a Karnataka native, founded the company to sell organic farm products and earn income. She currently assists farmers in making the transition to organic farming while also advocating a healthy lifestyle. She is the village's **first female entrepreneur** and has pioneered organic items. Moreover, the 63-year-old contributed to the empowerment of hundreds of women in Karnataka. She claims to be a native of Arablache, in the Bhadravati taluk. "I am the second of three daughters, and I never went past Class 10 in school."

After marrying Nagendrappa in 1979, she relocated to Nittur village. Her husband's family formerly possessed 25 acres of farmland, but the family finally split up, and her husband was left with a smaller chunk of land. Nagendrappa joined a coir plant in the village to supplement his income and help support his family.

By converting coconut trash into coir, the factory produced mattresses, ropes, and other items. "So I decided to start a business and set up a tiny unit at home," she explains.

Saroja set up the unit to create coir mats, brushes, and other goods with the help of a family loan and her own funds. She also bought cows to start a small dairy farm a few months later.

"The items were in high demand on the market, and the firm was off to a good start." However, poor infrastructure and an inconsistent power supply prevented me from making the anticipated earnings. "Eventually, the activities had to be shut down since the company was losing money," Saroja recalls.

Saroja then considered transitioning to marketing organic foods and products. "She has been intrigued by the idea of cooking with millets and other traditional grains. My husband planted organic veggies as well as grains such as jowar, ragi, paddy, and millets. So, utilising our farm's fresh harvest, she decided to market the chemical-free vegetables and traditional recipes."

Saroja established her business on the side. However, many farmers approached her only once her products were recognised and valued higher in the market. "She began training women and men alike how to properly use existing agricultural resources for organic pest management, therefore improving soil quality and productivity."

The agriculture department authorities saw her efforts and asked her to promote organic farming. She then joined the officials, who were advising farmers in 20 villages around Harihar and other areas of the state. "She has not only improved as a teacher but also acquired new crop-growing techniques from other farmers. "The knowledge and revenue from agriculture helped me improve my family's financial situation."

Saroja then felt compelled to expand her business and spread the word about the benefits of organic food to a wider audience.

She registered her firm under the Tadhvanam name in 2014, selling a variety of products, including her famed banana flour, ragi, rice, jowar, and pearl millet papad. Other unusual goods were rice-wheat vermicelli, ragi, and other stuff. She also sells Rava idli mix, Navane

Bisi bele bath mix, and Ragi malt, a Ragi powder mix with spices, jaggery, and indigenous herbs. She also offers chutneys in a variety of flavours.

Saroja claims that an organic food producer named Eshwar Theerta showed her how to package and promote the items. The determined entrepreneur has shown her organic items in places such as Mumbai, Ahmedabad, New Delhi, Chennai, and Karnataka. "I gained greater faith in my products when ISKCON approached me to make an order for rice papad that met their specifications. I was proud of myself for delivering and customising things for consumers," she adds.

Her banana flour was a success right away. "The product is manufactured by drying bananas and then turning them into a powder. It's a good alternative to maida or other types of flour. During those days, the daily use product was unusual, and it was in high demand. Customers appreciated the 15 healthful meals she offered, which included cake and spicy dishes like thakali (tomato rice)".

Saroja is pleased with her achievements and earns Rs 50,000 per month from her business. She has hired 20 ladies who work part-time to suit their schedules. Organic food is something that she wants to promote. She wants to urge people to pick healthier meals because many items on the market are contaminated.

While empowering women, Saroja helped them overcome and avoid the hardships she faced as an entrepreneur. "I faced many challenges in convincing customers and farmers to opt for organic farming. To encourage buyers, I gave away samples in small mud pots. I requested that they try consuming chemical-free food. They loved it and returned for more. Even today, the majority of my customers repeat business. However, Saroja says the villagers welcomed her decision to become an entrepreneur, which helped her gain confidence and establish her business. "Today, I help women procure finances through reliable entities and share experiences in marketing and promoting their products."

She says arranging finances also made her entrepreneurial journey difficult. "Unlike urban entrepreneurs, the government and private banks do not offer loans to rural women for fear of losses and lack of confidence. I had to make arrangements with my family. Moreover, I did not know effective marketing techniques existed, and social media did not exist during my early years. I had to build trust by interacting personally with customers."

She adds, "I want the concept of organic farming to reach every corner of the globe. City dwellers should practise organic farming and grow their vegetables to avoid consuming chemical-laden food. Every human should eat and live healthily."



Fig.13: Products of “Tadhvanam”

Name: Saroja Patil,
Address: Karnataka

New technology driven successful women farmer

Smt. Shashikala, a technology-driven vegetable farmer from Pemmanahalli village in Tumakuru District, Karnataka, is a **champion farmer** who has developed good linkages with Krishi Vigyan Kendra (KVK), Hirehalli, Tumakuru, the Karnataka State Horticulture Department (KSHD), and the Indian Institute of Horticultural Research (IIHR), Bengaluru. She started growing vegetables like French beans, Tomato, Peas, Brinjal, Chilli, and green leafy vegetables in 2012 by shifting from crops such as Ragi, Field Bean, Red gram and Jowar. **Being a hardworking and fast technology adopter** herself, she was identified as a **techno-agent** by the KVK, Tumakuru, in the dissemination of technologies in horticulture in that area to other farmers for improved vegetable cultivation.

Smt. Shashikala has completed her SSLC and has a keen interest in horticulture-related activities. She owns 4 acres of land, of which 1.5 acres are irrigated. She is actively involved in agriculture, horticulture, and animal husbandry-related development in her field. Now, she has been growing improved varieties of peas from IIHR for the last two years, namely Arka Ajit and Magadi local. The Arka Ajit variety has been grown in Pemmanahalli at her farm. After her shift in crops, she started getting average net returns that went from Rs. 20,000 per acre to three times as much as Rs. 60,000 per acre.

Post-success, she started motivating women farmers who were members of various self-help groups to adopt new technologies promoted by IIHR. She is also a member of the Sri Vinayaka Shree Shakthis Self Help Group (SHG), which has 20 members in her village. The group meets once every 15 days to discuss and learn from the successful farmers regarding agriculture and horticulture planning, organic farming, animal husbandry, and vermicomposting. She is constantly in touch with scientists from IIHR, Bengaluru, and KVK, Hirehalli, for her technological needs.

In the case of peas and tomatoes, she learned about an organic formulation, 'Panchagavya', to be sprayed during the flowering stage, as she found it effective in controlling the flower drop. Panchagavya is made with 5 kg of cow dung, 10 litres of cow urine, 1 litre of curd, 1 litre of milk, and 1 kg of ghee. After being kept for 15 days, the solution is diluted with water in a 1:10 ratio and sprayed. During her visit to the IIHR, she came across another technology, the **vegetable special**, for the tomato, beans, and other vegetables. The recommended dosage of vegetable special for French beans is 2 g/litre. She is now using vegetable special regularly, as she has noticed that the fruit quality and disease resistance of the crops grown have improved. She started adopting bio-fertilisers for enriching the farmyard manure and bio-pesticides for effective bio-control of pests and diseases.

Through her continuous training and interaction with scientists, she could identify the insect pests of French beans, including stem flies, and hence fare better in her farm management practises. After seeing the potential of the new French bean variety, she started seed production on her own in the current year. The seeds thus generated were supplied to the neighbouring farmers. With this intervention, they also started to grow different vegetable crops to realise a better price in the market.

Through a group approach, she convinced the farmers in her village and popularised the new technologies. She collaborated through numerous group meetings with scientists from IIHR and KVK, Hirehalli, on seed production in French beans and integrated pest and disease management. 12–15 groups of farmers participated again and again. The idea was to have a good exchange of ideas, discussing the pros and cons of technologies, etc. She is focused on bringing agricultural and horticultural development to the village through a group approach. By realising the importance of growing vegetable crops, she is diversifying into other horticultural crops like tomato, chilli, leafy vegetables, and banana. In every crop grown in her field, she is following the recommended practises of the IIHR by interacting with the KVK scientists and Division of Extension and Training.

Instead of her visiting Bengaluru's market, now the vendors go to her to purchase the produce. She has also motivated other farmers in her village as well as those in her neighbouring villages. About 15 farmers were motivated and are now growing improved varieties of French beans.

The key to her success lies in her eagerness to learn new technologies faster and adopt them immediately in her field, a prime quality of an early adopter.



Fig.(14.1) Harvesting of French Bean



Fig. (14.2) Appreciation on the Field

Fig. 14: A women farmer Shashikala in her Field

Name: Shashikala
Address: Pemmanahalli village, Udigere Hubli,
Tumakuru Taluk, Tumakuru District,
Karnataka
Ph No: 7259488516

Age is not a matter in farming

Pappammal (or Papammal, born 1914) is an Indian organic farmer from Tamil Nadu. At the age of 109, she is disputed to be the oldest farmer still. She lives life by a simple formula: healthy food, keeping her mind stress-free, hard work, and being honest.

While honouring her, the government noted Pappammal's skills to organise women in agricultural extension programmes and be an ardent organic farmer while also adapting modern technologies. The government honoured her with the **Padma Shri** for being a role model woman farmer and for her remarkable contributions in promoting women in agriculture, organising women in agricultural extension programmes, and for being an ardent organic farmer while also adopting modern technologies and introducing new farm practises.

Pappammal's memory seemed blurred while recollecting her early years. "We had no time to relax or play; we girls had to work in all stages, from tilling, sowing, irrigating, harvesting, and post-harvest work such as chaffing, milling, and so on. With marriage, responsibilities doubled, with women having to do chores at home and work on the farm, but this was the way of life women had to endure. We had no choice".

We mostly eat good food like ragimudha, ambali (ragi malt), rice starch, and buttermilk with onions and chillies. Rice was cooked only during the festivals.

The secret of her health is being close to nature—that's her mantra, brushing her teeth with Neem twigs and eating in banana leaves—or her life is inspirational in more ways than one indeed. At an advanced age, she eats steaming hot food served only on a banana leaf. When she visited Delhi to represent women farmers in Coimbatore, she took banana leaves with her and used them in the plane and also during lunch at the conference".

From starting a tea shop in Thekkampatti, upgrading it to a grocery shop, and buying 2.5 acres of land, Pappammal has had steady growth. Though the perennial Bhavani River that flows down from the Nilgiris mountains runs about 2 km from her farm, she had no means to irrigate it. So she grew rain-fed crops like millets, pulses, and grains during the North Eastern monsoon. In the last fifteen years, she has been cultivating bananas under micro-irrigation besides the traditional rain-fed crops. Subsequently, she was able to buy another 7.5 acres of land for purpose of Organic Farming.

From 1983, Pappammal's public life took another major dimensional change that led her to become a lead farmer and an icon of "**women in farming**" after she joined the Krishi Vigyan Kendra (KVK) of the Indian Council of Agricultural Research (ICAR) in Coimbatore district, run under the aegis of the Avinashilingam Institute of Home Science for Women.

She was involved in training and on-field testing of research and facilitated scaling, becoming an instant leader in the local management committee (LMC) of KVK. With her inherent organising skills, she started to mobilise other women in the farm extension activities, says Kumaravadivel, a senior scientist and the district in-charge of KVK. The LMC eventually became a Scientific Advisory Committee (SAC), and Pappammal became a member. For someone who admits never having stepped foot in a school, becoming a SAC member built her capacity as a practical farm scientist and elevated her ability to interact with experts.

As a key member of the extension centre of the Avinashilingam Institute of Home Science for Women and as a member of various committees at the Tamil Nadu Agricultural University (TNAU) in Coimbatore, she played an important role in several lab-to-farm technologies. She became an early adopter and promoter of new initiatives among fellow women farmers.

"Her farm in Thekkampatti emerged as a model farm for the students of home science and agriculture, and she played host to students during their village stay programmes." She also organised the first self-help group of women farmers in her village under KVK.

"Her leadership stood out when it came to collective initiatives. In 2007, she made the village granary scheme a success by ensuring the participation of other farmers. In 2008, she demonstrated her skill in operating modern farm machinery after undergoing training," she said.

Pappammal is a delightful exception in a world where almost everybody looks for multiple degrees and certificates to establish expertise. She had no formal education in agriculture when she was growing up. Her life has been her teacher as well. Yes, she has attended sessions in the TNAU after learning about organic farming. Her learning has come from being deeply connected to the soil she tills and from a rich tradition of farming.

And yes, you read it right—she is 109 years old!



Fig. (15.1) Pappamal in the Banana field



Fig. (15.2) Pappamal with Shri Narendra Modi



Fig.(15.3)President Kovind presenting Padma Shri to Pappamal

Fig.15: Pappamal success and Achievements

The Farm converted into a Tourism spot

Meet P Bhuvaneshwari whose decades of hard work turned a barren land into an organic farm that helps her earn 18 lakh! Leaves in Maruti Gardens, in Elappully village, Palakkad, Kerala, show a wonderful land with golden paddy fields, fruit orchards, vegetable farms, and more.

Her journey began in the 1990s with 4 acres of barren land, which she was positive would one day bear great prosperity. She worked hard to turn the barren area into a lush paradise, eventually expanding it to the 24 acres that it is now. This organic farm, like the Garden of Eden, was the fruit of decades of hard work by P Bhuvaneshwari, a 62-year-old homemaker turned organic farmer.

"At first, the dry ground was infertile because it was covered in stones. To get it to where it is now, I had to put in a lot of effort. As a result, I cleared some land that was free of stones and began farming there. I never used pesticides or chemical fertilizers. "All that we reap today is the result of natural organic farming," says Bhuvaneshwari, who attended school until the 10th grade.

Bhuvaneshwari, who grew up in a typical agricultural family, regards farming as the cornerstone of her education. She recently received the **Karshakasree Award** from Malayala Manorama for her success in organic farming. The Karshakasree award carries a cash prize of Rs 3 lakh, a citation, and a gold medallion.

"I learned to farm by following in the footsteps of my father, Kunjikannan Mannadiyar, who has always been passionate about agriculture. As a result, I've always had a passion for farming in my blood. "Perhaps that gave me the courage to dive into agriculture," she speculates.

She began farming in 1995, after her husband, Venkatachalapathy, retired from his profession as a school teacher. "We needed to find a means to make a livelihood, so I decided to do what I enjoy the most." who is now an active member of the Jaiva Samrakshana Samithy. She has four children: Sajith, Sabith, Sabitha, and Aneesh. The 31-year-old Aneesh was adopted by the family when he was six. Bhuvaneshwari is a much-loved volunteer of the Sneha Theeram Palliative Unit.

"Farming on our property was difficult since it was very dry, stony, and only had a pH value of 4.8," she explains.

Bhuvaneshwari then began to try to bring the land back to life. *"After removing the weeds and bushes, I planted sheema konna" (Gliricidia). "The tree's leaves, as well as limestone, were added to the soil, which helped in some ways with its revival,"* she explains.

She also went to a workshop led by Subhash Palekar, a pioneer of organic farming. She learned about chemical-free farming here and decided to give it a try. "I learned how to fertilise the land using natural manures." So, I began manufacturing natural fertilisers such as Jeevamrutham and Panchagavya, which are mostly made from cow dung and urine. This really helped in enhancing soil quality and promoting crop growth," she says.

With sustainable intensive farming, she cultivated two crops of paddy and a single crop of sesame, horse gram, and urad dal on 10 acres. Her unique farming methods are incredibly profitable, as she sells these organic products at a good rate. It is indeed an amazing feat that she is able to produce up to 25 quintals of produce just by nurturing it with green leaves and organic manure. Bhuvaneshwari, who invested about Rs 2 lakh in paddy farming last year, earned a whopping profit of Rs 18 lakh by selling rice and rice products.

Besides two rows of paddy, Bhuvaneshwari grows one row of sesame on her fields. Moreover, urad dal, horse gram, moringa, and many other foreign varieties of fruits and flowering plants are grown here on a rotational basis.

The dairy on the farm is another source of instant income and fertiliser. Bhuvaneshwari sought the help of veterinary surgeon Dr Shudhodanan, who advised her to prepare the field by using organic manure made from cow dung and sheema konna (*Gliricidia sepium*). The soil regained its fertility and was ready to receive the crops. She relied on the lessons taught by Subash Palekar in traditional farming methods to yield amazing produce.

Fruit trees provide shade too. Mango trees, jackfruit trees, plantains, and tapioca are grown as cover crops for coconut palms. Mango and the rare Vietnam, early jackfruit fetch handsome returns. Sapota, rambutan, mangosteen, avocado, orange, soursop, jujube, Ramaphalam, papaya, and grapes are other fruits that are grown here. Turmeric is grown between dwarf jackfruit trees.

Bhuvaneshwari's megafarm has local breeds of dairy cows, goats, hens, ducks, and dogs. The dung of 10 cows is used as organic manure that nourishes the fields and agricultural lands. After taking the milk that is required for domestic use, fresh ghee is made from the remaining milk. This high-quality homemade ghee is sold for Rs 2,000 per kilo.

She makes three varieties of manure called 'jeevamrutham', 'beejamrutham, and 'khara jeevamrutham' using just cow dung and urine. Bhuvaneshwari sells the additional manure to earn additional income. She grows 20 goats, 3 dogs, hens, goose, ducks, pigeons, love birds, and turkeys too.

Moreover, Bhuvaneshwari's fish farm sprawls across two massive ponds on two acres. Cutla and tilapia that she got from the fisheries department are currently grown in the ponds.

Bhuvaneshwari tries her hands at modern techniques like high-density farming to increase the yield. She studied new methods of farming from Maharashtra-based agricultural conglomerate Jain Irrigation System years ago and implemented them in her fields.

Bhuvaneshwari has kept chemical fertilisers and pesticides away from her farm for the last 20 years. She has been able to earn the trust of her customers without any high-profile testimonials or advertising campaigns. However, many celebrities and noted personalities are regular visitors at her organic farm, looking for chemical-free food items. Most of the produce is bought by stores that sell organic fruits and veggies.

She sells rice, sesame, and coconuts as value-added products. She takes online orders and ships these products worldwide. Not just rice, mangoes, and coconuts, but also her organically produced ginger, turmeric, coconut oil, and sesame oil are in high demand.

Her farm has around 300 mango trees in eight different varieties. Bhuvaneshwari earned Rs 9 lakh last year just by selling mangoes and mango pickles. Half of the plantains are turned into delicious 'sharkaravaratti' (fried plantains coated in jaggery syrup) and plantain powder.

She also delivers high-quality mangoes to customers in North India and Abroad.

Bhuvaneshwari's old tile-roofed houses and the upper floor of her new house have been earmarked for farm tourism. Lots of tourists, including foreigners, visit her farms to experience the incredible goodness of organic farming. The extremely affordable rental of Rs 900 also attracts hundreds of visitors to Bhuvaneshwari's farms. More than income from rent, Bhuvaneshwari sees this as an opportunity to increase the scope and marketability of the value-added products.

You may dial to book organic farm produce or to learn more about the agrarian model that is worth emulating.



Fig.(16.1) Bhuvaneshwari in Field



Fig.(16.2) Bhuvaneshwari in Field



Fig.(16.3) Bhuvaneshwari receiving award



Fig.(16.4) Bhuvaneshwari with family

Fig.16: Visit to Bhuvaneshwari field

Name: P Bhuvaneshwari
Address: Maruti Gardens, in Elappully
village, Palakkad, Kerala,
Contact: 9946718866

A proven tool for poverty eradication: dairy farming

Some stories make you think that you are doing something wrong with your life and would like you to get more determined. Navalben Dalsangbhai Chaudhary, a 62-year-old woman from Gujarat, has been selling milk and earning a living.

Also, if you own your dairy, you can make your earnings reach millions. Navalben is from Nagana Village in Banaskantha district, and she defied the odds by starting a mini-revolution in her district at the age of 62. She has recently made a record of selling milk worth Rs 1.10 crore in 2020 and has been earning a profit of Rs 3.50 lakh every month. Her record-breaking sales were nothing new, as she had previously sold milk worth Rs 87.95 lakh in 2019.

This tale of success started when Navalben started a company at her home with one motive: to sell milk. To fulfil the needs of her business and cater to the demands of her customers in several villages in the region, she keeps as many as 80 buffaloes and 45 cows for milking.

Media reports suggest that Navalben has been recognised for her achievements and honoured with the Best '**Pashupalak**' award in her district three times. She has also been awarded the '**Lakshmi**' award twice. She received an award from Prime Minister Shri Narendra Modi, Minister of Home Affairs of India Shri Amit Shah, and Chief Minister Bhupendrabhai *Patel*.

She told the media that her four sons, who were studying and working in cities unlike her, earned less than her. She proclaimed that she was the first in her Banaskantha district, Gujarat to sell milk worth Rs 87.95 lakh in 2019 and that she would be number one with her sales of milk worth more than Rs 1 crore in 2020.

Every morning at 4:00 a.m., she goes to feed the cattle and milch, returning by 8:00 a.m. She also currently employs fifteen people at her dairy. A manual chaffer is there for cutting fodder. She will go to feed and milch again in the evening from 4:00 to 8:00 p.m.

A 62-year-old woman from Gujarat has reached new heights via her business acumen and entrepreneurial ability, in an inspiring story of hard work and persistence. Many would be surprised to know that she accomplished so much by selling milk.

A list of '10 Millionaire Rural Women Entrepreneurs' was published on Twitter in August by Amul Dairy Chief Executive Officer RS Sodhi. In the financial year 2019–20, these women, involved in dairy farming and animal husbandry, received lakhs of rupees by selling milk to Amul. The president recognised the role of empowered women in the success of the world-renowned cooperative society.



Fig. 17: Navalben in her dairy and her record in Twitter

A journey of prosperity through value addition

Sushma Rani, the group leader of the Self-Help Group, is the person who scripted the success of this group as an agripreneur farm woman. Previously, besides sharing various farm responsibilities, she used to prepare processed products only for domestic consumption. Her family owns marginal land where they cultivate seasonal vegetables, fruits, and staple crops. Inspired by the vast market potential of value-added products, Self-Help Group has emerged as a brand in the village of Bashat, in the district of Udhampur, for the sale of value-added products prepared from fruits and vegetables.

Her real journey as an agripreneur started after attending a training programme for women self-help groups in the art of fruit and vegetable preservation conducted by the Department of Horticulture to inform them about technologies available to enhance the shelf life of locally available fruits and vegetables for better nutrition and health benefits.

With the launch of the Central Sponsored Scheme for Mission-Integrated Development of Horticulture (MIDH), the department identified a group of six interested women drawn from different SHGs in village Bashat and provided financial and technical support to establish a Low Cost Preservation Unit.

The unit was established with a total investment of Rs 3.0 lakh, with Rs 1.0 lakh provided to the group as subsidy on the machinery and equipment like a pulverizer, a fruit mill, a dehydrator, a hydraulic juice press, etc. The unit successfully started working in 2019. The department also provided an assistance of Rs 2.0 lakh to the group for establishing a packing house for handling fruits and vegetables in 2021–22. The group members were also imparted advanced training by CIPHET Ludhiana, wherein they learned the new aspects and acquired hands-on training skills, especially in product development and packaging.

The unit successfully started working in 2019 with certification from FSSAI and is presently engaged in the processing and marketing of various fruit and vegetable products like apple and apricot jams, pickles of knoll-kholl, lime, dhew, Jimikand, aonla, etc., and candies of aonla and ginger, etc. The group also learned the art of dehydration and took up the preparation of dried fruit and vegetable products through solar dehydration under an ambitious project of the District Administration Udhampur. These value-added products are available under the brand name Green Himalaya Products.

During 2019–20, the production was limited to only 05 quintals, with total sales of Rs 1.50 lacs and a profit of Rs 70000. The production capacity reached 12–15 quintals in 2021–22 and touched Rs 2 lakh in sales and Rs 1 lakh in profit. The group is progressing leaps and bounds under the supervision of Chief Horticulture Officer Udhampur Salil Gupta and the technical guidance of Manager Cum Chemist Udhampur K S Sodhi.

The Green Himalaya also survived the brunt of the COVID-19 pandemic. The District Administration Udhampur provided a sale outlet to the group through SRLM for the sale of these products. The strategic location of the unit on Chenani-Sudhmahadev Road is helping them earn a decent livelihood.

Motivated by the achievements of the Green Himalaya Group, additional SHGs from other sections of the district of Udhampur are stepping forward to undertake these activities. Besides running their own enterprise, Sushma Rani's Green Himalaya is providing direct employment to five other women and many unemployed youth as helpers, service providers, and middlemen. Sushma Rani and others from the Green Himalaya Group are now master trainers for various institutions, like NYK, for training programmes in the district. The group has been recognised for its achievements at various Kissan Samelans and fruit shows.

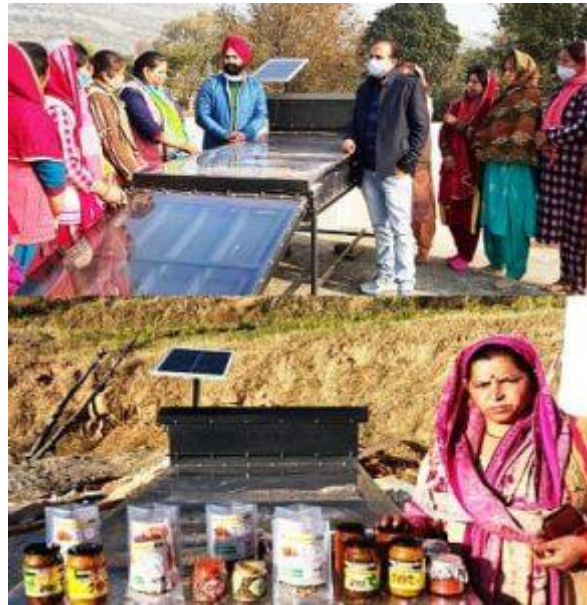


Fig. 18: Sushma Rani with her SHG and value-added products

Name: Sushma Rani Address: Green Himalaya Group Bashat, Udhampur
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Mushroom lady of Anantpur

Anita Devi (47 years old) started mushroom farming in 2010 after training at Dr. Rajendra Prasad Central Agriculture University in Samastipur, Bihar, and GB Pant University of Agriculture and Technology in Uttarakhand. "I was desperate to earn, so I approached the Krishi Vigyan Kendra, Harnaut, in Nalanda," she said. "The officials advised me to grow mushrooms." After that, I began my journey to success."

Her success encouraged dozens of women from her village to start mushroom farming, followed by women from neighboring villages. In 2012, her Anantpur village was declared a **mushroom village** by the state agriculture department. Her success in popularising mushroom cultivation has been such that people in Nalanda call her **Mushroom Mahila** (the mushroom lady).

Before Anita Devi took up mushroom farming, her husband, Sanjay Kumar, was struggling financially. He has since opened a garment shop in Madhopur. Their two sons are studying horticulture, and their only daughter is pursuing a B.Ed.

Anita and other women are mainly growing oyster and milky white mushrooms because of their ease of growth. Oyster mushrooms grow on almost all types of agricultural wastes, which are locally available and free of charge.

"Both mushroom varieties are suitable to grow in the climate of Nalanda, and profit is at least two to three fold." Women are also keen to grow button mushrooms, but growing button mushrooms is very high-tech and requires investment and space," Anita said. "Due to a lack of facility, we are unable to grow button mushrooms."

"September to March is the best season here for mushroom cultivation. We are growing mushrooms during the period without any air-conditioning facilities because it is possible during comfortable weather." We also grow some mushrooms during the summer. She says..

To ensure the government schemes reach the members properly, Devi launched **Madhopur Farmers Producers Company Limited**. This company is working with all the mushroom producers and sellers. As all these women are growing only organic mushrooms, the demand is skyrocketing.

After initial hurdles, Devi has now become a successful entrepreneur in the true sense. Presently, over 250 women in the Jeevika Self-Help Groups are part of this '**white revolution**' happening in the Nalanda district.

One of the challenges faced by Anita Devi at the time of launching her mushroom initiative was the shortage of mushroom seeds. As the number of growers increased, this shortage further worsened. Devi developed her own seed manufacturing lab with the help of the National Horticulture Mission. Under this mission, she was given a subsidy of Rs 15 lakh.

According to Devi, two major varieties of mushrooms grown by her and other women in the village are oyster and milky white mushrooms. Both these varieties have a huge demand. As

they grow in agricultural waste, they are now very popular. A kilogramme of the mushroom is sold for anywhere between Rs. 80 and Rs. 120, making the women self-sufficient.

"Villagers were not even ready to believe me when I decided to start something on my own. They didn't know the importance of this initiative," says Devi, adding that today the perception has changed. **The state government roped in Devi to train the Jeevika Women Self-Help Group members in mushroom cultivation and marketing, making Devi a household name in Bihar. As a token of respect, today Anantpur village is named as the mushroom village of Bihar state. This is how Anita Devi has become a changemaker in the true sense.**



Fig.(19.1)Devi in front of Madhopur Farmers Producers Company Limited



Fig.(19.2) Devi with Oyster mushroom bed



Fig.(19.2) Devi's unit with milky white Mushroom

Fig.19: Mushroom unit of Anita devi

Converting waste into manure: A source of livelihood

Ms. Kanika Talukdar's standard of living has changed a lot since she started using vermicompost. Earlier, it was difficult for her to even think of sending her child to school; however, by creating an excellent vermicompost business plan and improving economic conditions, she is now able to provide a good education to her daughter. Nothing is greater than providing good education to children. She says.

Ms. Kanika Talukdar, an agriculture-based woman entrepreneur, received a **National Level Padma** Award from the Indian Council of Agricultural Research (ICAR) in New Delhi on International Women's Day. She is the only woman from the North East to earn the honour, which was given to six other women. Talukdar received the prize at a celebration hosted at Nalbari Krishi Vigyan Kendra (KVK) following the formal pronouncement of the award via an ICAR virtual meeting. Because of the COVID situation, the award recipients were not invited to the major celebration in New Delhi. Dr Manasi Chakravarty, the officiating programme coordinator of the KVK Nalbari, formally handed over the certificate provided by the ICAR along with the award and also earned the **Best Farmer** award by the Nalbari district administration on August 15, 2022, Independence Day. She has also been recognised by the Rotary Club of Guwahati, and she recently earned the Asom Sangram Mancha **Women Entrepreneur Award** for her contributions to society. The start-up has been incubated at NEATEHUB, an AIC-AAU incubator based in Jorhat, Assam.

Mrs. Kanika lost her husband at a young age, and it was very difficult for her to bear the expenses of the house and the child. It was during such difficult times in 2014 that she met Krishi Vigyan Kendra Nalbar. There, she became part of a training programme. After learning the technology, she thought she would pursue it as a business. She realised that organic farming was the need of the hour and that it was difficult to do without vermicompost. Therefore, she could foresee that the demand for vermicompost will continue to grow in the future. Vermicompost is a better choice than chemical fertilisers. It improves soil nutrition, improves crop production, and damages soil fertility. As organic farming grows, the demand for vermicompost is steadily increasing. Therefore, it is very useful to start with a good vermicompost business plan. Especially for those who don't have money and resources. The production costs of vermicompost are very low, and it does not require much technical knowledge. This is the main reason why Kanika Talukdar of Borjar village in Assam started vermicomposting for a living. This allowed her to become an entrepreneur and earn lakhs of rupees in a few years.

Initially, her financial situation was very bad. She had little money and could gather organic waste and cow dung easily. However, on the advice of experts, to compensate for the lack of funds, she built an affordable tank with the help of bamboo. In addition, Krishi Vigyan Kendra Nalbari provided technical assistance in the form of a Front Line Demonstration (FLD) on 'Vermicompost Production Technology' in the area. The institute encouraged communities to produce vermicompost and provided 1 kg of earthworms (*Eisenia foetida* species) and 4 vermicompost beds. However, in the first year, only 14 quintals of vermicompost were produced, earning them only Rs 16,300.

Later, she started a short-term training at Nalbari Krishi Vigyan Kendra in 2014, which changed her life as it propelled her to set up a vermicompost start-up. She made an investment of Rs. 500 to start a vermicompost unit. She was exposed to vermicompost production technology and gained substantial knowledge to start her business. She says that because of her poor financial stability, she could not invest much in the beginning, but later, as her business grew, she started pumping money into it. She has a team of five people who help her run the business smoothly.

In 2017, Kanika sold 200 quintals of vermicompost and earned a profit of Rs 1,25,000. Gradually, with an increase in production, her profits increased too. In 2018, she sold 500 quintals of vermicomposting and earned a profit of Rs 3,25,000; in 2019, she made a net profit of Rs 6,00,000 on 1000 quintals of manure.

Taking her success to the next level, Kanika comes up with an innovative vermicomposting business plan, starting with the product brand 'Jai Vermicompost'. In Assam and Nalbar district, the demand for organic fertiliser has increased in other areas. And also started producing the organic pesticide Vermiwash. Kanika Talukdar once struggled to manage her expenses, but today she is one of the most successful farmers in Assam. Kanika wants to further expand his business and plans to open 20 more vermicomposting facilities in the next two years. She is Assam's only woman vermicompost entrepreneur licenced by the state agriculture department to supply vermicompost.

She says that he has expanded his business to other areas like Darrang, Kamrup, Baksa, Goalpara, Chirang, Bongaigaon, Barpeta, Majuli, etc. Due to his dedication and determination, Talukdar was able to achieve phenomenal success in vermicomposting in a very short span of time. She has emerged as one of the most prominent women entrepreneurs in Assam. Chalgenius salutes her encouragement and tip-off to women's empowerment.



Fig.20: Kanika at her Vermicompost unit

Name: Kanika talukdar

Address: Nalbari, Assam.

Ph No: 8723997073

Soybean Processing: A Suitable and Rewarding Enterprise

Smt. Suman Sharma resides in village Balita with her husband, Sh. Akhil Sharma, and other family members. Recently, she has been residing in Nayapura, Kota, Rajasthan. She is staying with a joint family of eight members, including her two children and in-laws. Smt. Suman Sharma belongs to a lower-middle-class farm family. She always wanted to find a better way to earn income so she could become independent, and her dreams came true with the establishment of a small soya processing unit in 2014. She got an appreciation award as a woman entrepreneur from former Agriculture Minister Sh. Prabhu Lal Saini, the Mayor of Kota, and FEGC, Jaipur, for her achievements. She has been invited to share her success with the masses on AIR, Kota, and DD's Kisan channel.

She participated in a one-month training programme on food processing and value addition of regional crops in 2014, organised at Krishi Vigyan Kendra, Kota. During training, she learned about processing techniques, value addition, packaging, marketing, labelling, and the cost calculation of products. After completion of training, she engaged herself in experimental work for 2–3 months for the standardisation of her processed products of soybean and aonla, finally establishing her own small unit of soybean processed products, viz., soybean laddu, nuts, flour, etc.

At the time of starting the venture of soybean processing, Smt. Suman Sharma had her own savings of Rs. 2 lakhs, which became her capital investment, a very crucial resource for her daring and adventure. She converted the roof top area of her house into a 20' x 15' hall by covering it with a tin shed to install the processing machinery and work space.

She constituted an NGO of 100 women entrepreneurs named "Siddi Vinayak" and a self-help group called "RISHI-TANVI" for food processing entrepreneurship development. She formulated group-sale processed products on an order basis for home delivery and also exhibited products at different fairs, and now she is earning about Rs. 40, 000 per month.

Smt. Suman Sharma is working as a master trainer and gave her services in more than 75 training programmes organised by Jan Shikshan Sansthan, Prodh Shiksha, CFCL, Gadhean, and KVK, Kota, and trained more than 1000 women. Earned approximately Rs. 1–1.5 lakhs in a year.

She has also demonstrated her products at the Organic Festival in Delhi (organised by the Ministry of Food Processing Industry) and earned more than Rs. 30,000. Customers also ordered 200 quintals of amla candy from her at Rs. 300 per kg.



Fig.:21 Suman Sharma with her awards

Suceceded Entrepreneur, trained many in Mushroom Farming.

Mrs. Rekha Kumari, a homemaker from the state of Bihar, has turned into an entrepreneur with a successful business of selling mushrooms that was started at her home. Mrs. Rekha Kumari, 51 Years, from Hathua village in Bihar state, was a housewife and mother of three who was very busy raising her children until they left home for further studies. She disliked to sit idle at home and decided to use her time in farming and entrepreneurship together by doing mushroom business.

She has stated, "I had a lot of free time and disliked being idle at home; while looking for innovative ideas, I read about the scope of doing mushroom business by cultivation in the newspaper." I was inspired after seeing the article in the newspaper, and I decided to grow mushrooms at home itself".

In the year 2013, she started farming mushrooms with an investment of only Rs 1,000 and gradually turned into a flourishing agricultural entrepreneur within a few years. She discovered the potentials of mushrooms, their nutritional qualities, and the scope of growing them through her study on YouTube. Without taking proper training, she started the venture and experienced many losses in the beginning stage due to a lack of sufficient knowledge in the field. Later, in the year 2018, she was trained at Krishi Vignan Kendra in Sipaya and at Rajendra Prasad Central Agricultural University, Pasa, in Samastipur.

She is an Economics graduate and stated that she was guided by Dr. Sanjay Kumer, a scientist at Krishi Vignan Kendra, and trained in mushroom venture by Dr. Dayaram Rao, who is her guru. After this, she started to receive positive results.

She started her cultivation just with oyster mushrooms in the beginning and later expanded to five more varieties, i.e., button mushrooms, milky button mushrooms, shiitake mushrooms, hericium mushrooms, and paddy straw mushrooms throughout the year under a registered venture." Anand Jyothi

Mushroom Utpadan Kendra After receiving proper training in this field, she never turned back and became more confident to explore and expand the business for further development. With much more confidence, she started making mushroom spawns of her own at home, and today, her farming business earns Rs 3 to Rs 4 lakhs per year.

After receiving proper training and guidance from the officials of Krishi Vigyan Kendra and the Agricultural University, she experimented by selling value-added mushroom products in order to stretch the shelf life of her produce. She adds, "Over the year, I learned to make different value-added products like mushroom powder, pickles, biscuits, samosas, namkeen, ladoos, and so on. These products are sold through her centre and local shops. She explained that mushroom powder can be used as a healthy supplement by mixing it with milk and adding it to different dishes like kheer, seva, etc. " Mushroom-based namkeen is priced at Rs 250 per kg, biscuits and ladoos at Rs 400 per kg, and samosas at Rs 300 per kg. In the initial years, she depended on my husband to invest money into her business, but now she is able to earn a steady income of Rs 3–4 lakhs per year. She said that her husband, Mrs.Ashwin Kumar, has encouraged her to pursue her dream of becoming an entrepreneur.

As a result of her own success, she decided to train people in mushroom cultivation, and in Value addition, she believed that if many people, especially women, were provided with sufficient training in mushroom cultivation, it would help them to stand on their Own feet. She implemented these ideas in practise and said, through my free online classes, I have been able to train people in different parts of our country, like Madhya Pradesh, Kashmir, and also in Andaman and Nicobar. Even at home, I conducted training classes. Since 2018, I have trained around 1000 people through online and offline methods, of whom 500 have been growing actively. This reveals her confidence in motivating people towards mushroom cultivation. she said.

Inspired through YouTube Mrs. Sheela Devi from the Andaman and Nicobar Islands took online training at no cost around three years ago and started to grow oyster mushrooms on the basis of following the cultivation guidelines that were taught to her in the training programme. She benefited well. She earned around Rs. 45000 on average per month before expenses, which gave her much satisfaction.

On touching the peaks of success in her mushroom cultivation, Rekha advised unemployed people, especially women, that though the field requires proper training and hard work, anyone can adopt mushroom cultivation to get fruitful revenue from their own house itself and may desire good satisfaction.



Fig. 22: Rekha Kumari in her mushroom unit and with value-added products

Name: Rekha kumari
Location: Hathua village, Bihar
Contact: 7667594296

Altering raw to bolstered-up products

A Kerala woman transforms jackfruit and tapioca into organic mixes that she distributes throughout India and the United Arab Emirates.

Francy Joshimon, a woman entrepreneur from Kerala, was surprised to learn in 2018 that her father had cancer. They began looking for healthy and organic food items that could help him maintain better health while receiving therapy. But for their needs, there weren't a lot of choices available in the neighbourhood market. Francy lost her father a few months later; it was an incident that completely changed her life.

She made the decision to bring about change on her own in order to stop further occurrences of this nature. She founded a small company named Minnus Fresh Food out of her house in Karalam, Thrissur, Kerala, to produce nutritious and organic food items. The brand, which bears her daughter's name, began in 2018 and offers mixes and value-added goods created with jackfruits, millets, and a few jackfruit-based items. It now sells over 50 different organic product variants and even exports outside of India. These, according to Francy, are completely chemical- and preservative-free.

Making homemade jackfruit puttu powder with a small women's team was how Francy launched her business. "At the time, jackfruit and its health advantages were the subject of extensive discussion. We opted to focus on jackfruit first after conducting extensive research and consulting with specialists from Kerala Agriculture University," says Francy, who has only completed up to class 12.

In addition to puttu powder, she continues to produce a few jackfruit- and millet-based products, such as immunity boosters and health mixes, which are primarily distributed to cancer patients in neighbouring areas through various social groups.

Francy made the decision to establish a processing unit in 2019 when her business eventually began to grow. set up the necessary equipment for processing and packing in the unit with the assistance of her husband, a mechanical engineer, after taking the advice of the university's experts. For the machinery, we obtained a loan for Rs. 15.5 lakh. We invested almost Rs 20 lakh from our own personal funds in just setting up the building, she adds.

Francy introduced more value-added goods as the company grew by utilising a variety of raw materials, including bananas, tapioca, wheat, millets, and others. She says raw materials are completely cleaned and dried after sourcing, then processed and turned into other goods. She always makes sure to employ premium, organic raw materials in the creation of products.

She claims raw materials that are grown organically and obtained from neighbourhood farmers in and around her Thrissur village. "Farmers in this area frequently struggle to locate a reliable market for goods including jackfruit, tapioca, bananas, and turmeric ". Therefore, when I purchase their goods, I ensure that they receive a fair price.

"Every year, we harvest about 2,500 kilos of rice." She uses it for her business rather than directly selling it. It sounds good when the rice needed to manufacture puttu powder is grown on her own property. She says Minnus Fresh sells health mixtures for between 50 and 350 rupees. Additionally, they provide a variety of conventional snacks, including chakka varatti and banana chips.

According to Francy, on average, the company currently sells 400 kg of puttu powder, 250 kg of chips, 100 kg of rice powder, and 50 kg of health mix per year.

Francy reports that there are eight different types of puttu powder, with jackfruit, jackfruit ragi, banana mix, banana mix ragi, tapioca, bran mix germinated rice, sprouted ragi, and sprouted wheat being the fastest-selling.

Initial Challenge However, they encountered a significant obstacle when they first started their company. The length of our products' shelf lives posed the biggest problem. We found it challenging to promote our organic products because of their short shelf lives and complete lack of preservatives, she notes.

"To discover a solution for the shelf life of our products, she met with a few experts from the Kerala Agricultural University." They requested to dry the items in accordance with their moisture content after many tests that lasted for around six months and advised she make a few tweaks to the formulations and processing techniques, which would help the products stay fresh for longer, she says.

In Kerala, local stores, supermarkets, and Kudumbashree outlets serve as the main distribution channels for Minnus Fresh Food Products. Facebook and WhatsApp are also used for sales. Additionally, our items are sold to the UAE, where there is a significant market, says Francy, who is currently anticipating the growth of her business.



Fig.(23.1) Francy in unit



Fig.(23.2) Francy with Value-added products

Fig.23: Francy in her unit and with value added products

Name: Francy Joshimon

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Tamil Nadu Farmer Doubles Her Income by Selling Value Added Products of Banana & Grapes

In the tiny village of Seepalakottal in Tamil Nadu's Theni District, K. Preethi, a well-educated woman, turned to farming and became a progressive farmer. Not only shown interest in farming but also in modern technologies.

Preethi was always fond of farming, but with the will to learn more about modern technologies, she started to add value to the crops she grew, in which she and her husband Krishnakumar are engaged in agriculture. Our family has a total of 5 acres of land. We are cultivating 3 acres of organically grown bananas and 2 acres of chemically cultivated grapes. Bananas and grapes are grown extensively in the Cambam Valley of Theni district. Both of these products play an important role in the economies of the farmers in the region. However, farmers in the region face a lot of difficulty during periods of high yields because remunerative prices are not available.

On those days when the price falls to such an extent that they cannot even afford the cost of production, the distressed farmers throw these on the roadside instead of taking them to the market. In this context, the Agricultural Science Institute in Theni is providing training to the farmers of the region to convert bananas and grapes into value-added products and sell them.

When Preethi decided to take on value addition to create awareness about value-added fruit products, she turned towards CENDECT Krishi Vigyan Kendra, Theni, where she was given the opportunity to get trained on value-added products from fruits, especially grapes and bananas. At KVK Theni, she was a part of a training programme at Seepalakottai that was conducted for Malligai Horticulture Farmer Producer Group (FPG) members. A one-day training course on value addition was held. Ramya Sivaselvi, a qualified technician, trained 50 women.

She taught the techniques for making banana powder using bananas. They also told me to change the raisins to dry raisins. I decided to make a business out of this, and since I was sure that I could see a profit, I started trying to sell it.

Preethi trained and adopted the technical knowledge and skills that she learned through KVK training programmes and developed several value-added products from her produce, like grape squash, dried grapes, and different types of banana flour, i.e., Nendran banana flour, Red banana flour, G9 banana flour, banana nutri mix, banana baby food, banana flour chappati mix, and banana flour soup mix, all of which became under-brand KP products. In the first step, I prepared a powder using bananas grown in our garden, mixed it with milk, and gave it to my children. Love it and drink it. Next, I gave it to my relatives and friends. It was well received.

participated in the Makkal TV programme and shared her success story for wider coverage. She receives regular orders for her products from various districts in Tamil Nadu as a result of her participation in the TV programme. Participated in the district-level exhibitions in different blocks of Theni District for the purpose of marketing her products. The bananas and

grapes produced by them are sent and sold not only to other districts but also to foreign countries.

Preethi's hard work and dedication have been recognised by many organisations, and she has received several awards, like the Best Entrepreneur Award during the International Women's Day programme at CENDECT KVK. Selected as the Best Farmer Award under ATMA in the year 2022-23

When asked about why she decided to adapt the value addition of fruits, she said, "My motive in learning about value addition is to make more people aware of it as it not only raises income but also guarantees that the end product lasts for a long time. I also wanted to generate employment for the rural and urban populations."



Fig.(24.1) Preethi in grape field



Fig.(24.2) Preethi in banana field and with value added products

Fig.24: Preethi in Grapes and Banana field with Value added products

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SUMMARY AND CONCLUSION

SUMMARY

Women have always played a crucial role in farming, but have often been overlooked or underestimated. However, with the growing recognition of the importance of women's contributions to agriculture, more and more women are taking on leadership roles in the industry. These women are leading the way in sustainable farming practices, advocating for gender equity and empowering other women farmers. With their leadership, women in farming are making significant contributions to the global economy. Agriculture sector employs 80.0 per cent of all economically active women; they comprise 33.0 per cent of the agricultural labour force and 48.0 per cent of self-employed farmers. In India, 85.0 per cent of rural women are engaged in agriculture, yet only about 13.0 per cent own land.

The study was carried out as a 'desktop' type of study. Hence, the study was conducted online, and primary data was collected with the support and facilitation of KVKs and DRDA officers from Andhra Pradesh, Telangana, and Tamil Nadu. Thereafter, a total of 290 respondents were contacted using keywords. After the telephonic interview, only 7 women were finalized for documentation purpose. Secondary data was collected from the websites of KVK, DRDA, NABARD, NRLM, ICRISAT, USDA, FAO, thebetterindia.com, YOURSTORY, In this process, 250 literatures and articles were studied relating to women farmers and entrepreneurs in agriculture and allied sectors. 11 articles were finally selected based on the title and objective of the study. Also, 3 stories added by secondary articles have been seen and added additional data by the primary telephone interview method.

Therefore, the scope of the study was pan-India. The distribution of the respondents through primary and secondary sources is represented by 11 States: Andhra Pradesh, Tamil Nadu, Telangana, Karnataka, Kerala, Bihar, Gujarat, Rajasthan, Jammu, Assam, and Uttar Pradesh.

On analysis of the profile of the women farmers and entrepreneurs, it was found that majority of them were high school educated (53.0%), followed by illiterates (37.0%) and post-graduates (10.0%). As entrepreneurs, they had studied till matriculation, but they are not well trained in managerial and other skills required to run an enterprise. Initially they faced many problems due to this and took significant time to overcome them.

Among the women farmers and entrepreneurs, only 47.0% had been trained; remaining had directly started their enterprise, out of their own interest (53.0%). The trained women entrepreneurs received training from KVKs (Krishi Vigyan Kendra), ATMA (Agricultural Technology Management Agency), and JARDS (Jubilant Agriculture Rural Development Society) on technologies such as mushroom farming, sericulture, beekeeping, and value addition before starting their agriprenurship . Although majority (68.0%) of them were not leaders, they stood up and inspired many people in and around their villages.

As per the study, there are 10 entrepreneurs were selected, including Rekha Kumari from Bihar, who sells mushrooms and value-added products with mushrooms like mushroom pickle, mushroom powder, samosas, and biscuits; Joshimon from Kerala is selling value-added products with jackfruit and tapioca; Kanika sells vermicompost, earthworms, and vermiwash; Saroja Patil sells value-added products with millets; Nirmala, from Kadapa, Andhra Pradesh, sells value-added products with millets, ragi malt, and organic turmeric; Navalben- Gujarat sells milk; Suman Sharma is selling value-added products with soybeans. Sushma Rani sells value-added products with fruits and vegetables; Indira Barnyard millet flour; Anita Devi sells mushrooms.

In women's agribusiness start-ups, two women agri start-ups were selected regarding the study: one is Preethi from Theni, Tamil Nadu, who started value-added products with grapes and bananas like grape squash, banana and grape mix, banana flour, etc., in 2019 and received the Best Entrepreneur Award from CENDECT KVK. Another one is Mrs. Gargi Chauhan from Dwara village, Uttar Pradesh, who started growing mushrooms and making value-added products like mushroom pickles and mushroom powder, and also learnt about pottery, candles, diya, and organic colours.

Two women-led FPOs were selected for documentation of their success stories. One is Veerapandy Kalanjai Jeevidam Producer Company Limited, and its CEO is B Sivarani. This FPO is linked with 48 panchayats, 141 villages, 227 FIGs, and 2555 women farmers. This FPO was founded on 9th February, 2017 and has five female directors.

Another is Be'nishan Producer Organization located in Telangana State, covering 56 (46 FPCs and 10 cooperative FPOs) from 28 districts, 404 mandalas, and 3072 villages, covering 6967 FPGs and 1.09 lakh members (small and marginal farmers who are also SHG members). Incorporated on 20th August, 2019, it has nine women nominee directors and a male director-cum CEO.

- ✓ Women entrepreneurs play a crucial role in the development and growth of economies.
- ✓ They contribute to job creation, innovation, and wealth creation, which, in turn, contribute to economic growth.
- ✓ Empowering women entrepreneurs not only benefits individual woman but also the broader society by promoting gender equality and supporting social and economic development.
- ✓ Even though women entrepreneurs face several challenges, they continue to strive for success.

Suggestions

- Programs targeting women entrepreneurship must address their Time and Finance issues
- Creating access to e-platform for women to sell their produce, to overcome the mobility constraints and other socio-cultural factors.

- Capacity building of women with the stakeholders in market value chain to get competitive price for their produce, as well as purchase of the inputs to negotiate successfully.
- Leadership and managerial skill training programs for women entrepreneurs.
- Increased women's participation in economic activities can be a national priority.
- The efforts of women entrepreneurs to develop women need to be substantiated and strengthened which are still not widely supported and accepted.
- Priority to women in accessing credit on soft terms from banks and other financial institutions for setting up their businesses, buying properties and building houses.
- Provision of alternative and better employment opportunities through policies and programs to the eligible agricultural women laborers in rural areas.

Enabling Environment/ Factors for Promoting Women's Entrepreneurship

- a. Recognition of women as farmers.
 - b. Government's support to support women framers as agripreneurs through pro-women schemes.
 - c. Incentives to women for entry in MSME sector as entrepreneurs
 - d. Encouraging women to participate in national & international level trades/ fairs/ exhibitions.
 - e. Special provision for women entrepreneurs in export.
 - f. Easy credit facility.
 - g. Easy access to mandis & markets.
 - h. Family support & encouragement.
- In addition to the above, some alternative employment programmes and opportunities should be provided to agricultural women labourers in rural areas.

CONCLUSION

In India, the business scenario is changing day by day due to the development of technology, modernization, industrialization, urbanisation, spread of education, and development programmes initiated by the government. In such conditions, employment opportunities increased drastically for women. In India, the past image of restricted and homebound women is slowly changing. The Indian women, even after facing many challenges, is now trying to become economically independent. The government has come forward with many facilities, concessions, and incentives exclusively for women entrepreneurs. General measures can be adopted to encourage and develop women entrepreneurship. Even illiterate women have the potential and the determination to set up, uphold, and supervise their own enterprises in a very systematic manner. Rural women are not aware and literate enough to

handle all the legal and other formalities involved in taking out loans and establishing an industrial unit. They also lack confidence in their ability to run an entrepreneurial business. They need capacity building and training in functional areas such as finance, literacy skills, marketing, production, and managerial skills. The only urgent need is to create a favourable atmosphere to increase self-employment for women and all other developments in the country. Thus, there are bright prospects for rural women entrepreneurship in India.

REFERENCES

- Ajitkumar, B. (2019) Political participation of women in panchayati raj institutions: A case study of Nayagarh district of Odisha. *Mahila prathishta*; 5(1): 37-52.
- Andrew, K. (2015). The challenges of entrepreneurship as an economic force in rural development: A case study of kyaddondo east constituency, Wakiso district in Uganda. *East African Journal of Science and Technology*, 5(1), 105-120.
- Anjali singh, "Role of Women Entrepreneurs in India: A SWOT Analysis" *International Journal of Management and International Business Studies*. ISSN 2277-3177 Volume 4, Number 2 (2014), pp. 231-238.
- Anupama M, Pushpitha D and W.S.N. Sangma (2021). Handlooms Micro-Enterprises for Empowerment of women. *International J.Curr.Microbiol.App.Sci* (2021), 10 (01): 2493-2500.
- Chandwani, J., Bulsara, H., & Gandhi, S. (2015). Women entrepreneurship in India: A case study of Jaishree Kabra of Kothari Silk Mills. *International Journal of Business and Management Inventions*, 4(1), 8–13.
- Chatwani, N. (2015). Looking ahead: The feminization of leadership. In P. Kumar (Ed.), *Unveiling women's leadership* (pp. 137–152). London, UK: Palgrave Macmillan.
- Dayya (2021) Publish in national conference on range and scope of skill development for rural women. 36(37) pp 13-14.
- Danish Ahmad, Itismita Mohanty, Laili Irani, Dileep Mavalankar and Theo Niyonsenga (2020) Participation in microfinance based Self Help Groups in India. Project: Integrated Microfinance and Health. August 2020 PLoS ONE 15(8) DOI:10.1371/journal.pone.0237519.
- Endalew Terefe Alene (2020). Determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. *Journal of Innovation and Entrepreneurship* 9 Article (24),2020.
- Erstu Tarko Kassa (2021). Socioeconomic determinants of micro and small enterprise growth in North Wollo and Waghimira Zone selected towns. *Journal of Innovation and Entrepreneurship* volume 10, Article number: 28 (2021).
- G S N G Rama Mohan Rao (2016). status of women entrepreneurship in india *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH* ISSN: 2277-7881; IMPACT FACTOR –3.318; IC VALUE:5.16; ISI VALUE:2.286 VOLUME 5, ISSUE 5(2), MAY 2016
- James, H. G., & Satyanarayana, K. (2015). Women entrepreneurship in India. *International Journal of Academic Research*, 2(8), 2–12.

Jayanta (2017) Knowledge level about nutrition and home management practices among small and marginal categories of farm women. *Journal of Dairying food and Home Sciences*,14(4) pp 237 - 240.

John Annie (2017). Socio economic changes and women empowerment through Kudumbashree mission- a study of mukkam municipality.j.Evolution Med. Dent.sci.2017;6(55):4120 4123,DSOI:10.14260/Jem/2017/892UE:5.16; ISI VALUE:2.286 VOLUME 5, ISSUE 5(2), MAY2016

Michael (2017) Empowerment of rural women issues and implications, reading materials of winter course on PRA techniques for sensitisation and empowerment of women, Division of Agricultural Extension IARI, New Delhi p 36.

Mistry (2019) Empowering women through extension, *Indian journal of Extension Education* pp 33 - 38.

Padhi, P., & Padhy, A. (2013). Women entrepreneurship in India: Present status problems and prospects. *International Journal of Scientific Research and Management Studies*, 1(3), 72–79.

Parveen kumar(2015), *International Journal of Applied Science & Technology Research Excellence* Vol. 5 Issue 5, Nov.- Dec. 2015, ISSN NO. 2250-2718(Print), 2250-2726(Online), (Doubled Blind Peer Reviewed & Refereed Journal with Impact Factor 2.47).

Pharm A, and Sritharan (2013). R. Problems Being Faced By Women Entrepreneurs in Rural Areas. *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH* ISSN: 2277-7881; IMPACT FACTOR –3.318; IC VAL The International Journal of Engineering And Science, 2013, 2(9).

[S Agarwal](#), and [Lenka, U.](#) (2018), "Why research is needed in women entrepreneurship in India: a viewpoint", *International Journal of Social Economics*, Vol. 45 No. 7, pp. 1042-1057. <https://doi.org/10.1108/IJSE-07-2017-0298>.

Sabrina Korreck(2019), “Women Entrepreneurs in India: What is Holding Them Back?”, ORF Issue Brief No. 317, September 2019, Observer Research Foundation.

Sebastian, A. (2015). Women in joint liability groups: Do they take risks or innovate. In *Unveiling women’s leadership* (pp. 44–52). London, UK: Palgrave Macmillan.

Thulika khare (2019), *I J R S S I S*, women entrepreneurs in india - emerging issues and challenges Vol. VII, Issue (1), January 2019 : 01- 06 ISSN 2347 – 8268

Verhees F, Lans T and Verstegen J. (2012). The influence of market- and entrepreneurial orientation on strategic marketing choices: the cases of Dutch farmers and horticultural growers. *Journal on Chain and Network Science*. 12(2):167-180.

Yogita sharma (2013), IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 15, Issue 3 (Nov. - Dec. 2013), PP 09-14 www.iosrjournals.org.

Websites:

<https://www.villagesquare.in/anita-devi-anantpur-works-magic-mushrooms/>

<https://www.momspresso.com/parenting/article/62yearold-gujarati-woman-opens-dairy-at-home-sells-rs-1-crore-worth-of-milk-in-a-year-3jua204qof98>

<https://www.indiatimes.com/trending/human-interest/navalben-dalsangbhai-chaudhary-gujarat-milk-profit-531338.html>

<https://doi.org/10.1016/j.irurstud.2018.11.003>



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