



M S Swaminathan
Research Foundation
SCIENCE FOR SUSTAINABLE DEVELOPMENT



MSS@100:
Stories from
the Field

BIOHAPPINESS IN PRACTICE



Based on the true reflections shared during
the MSS@100 International Conference,
August 7-9, 2025

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A close-up photograph of a green sorghum panicle, which is a cluster of small flowers. A small, light-colored insect is perched on the panicle. The background is a soft-focus green, likely other plants in a field.

**DEDICATED TO OUR REVERED
PROFESSOR M S SWAMINATHAN**



FOREWORD


Biohappiness in Practice: MSS@100-Stories from the Field, a compendium of case studies from diverse agro-ecological zones—ranging from the southern deltas to the semi-arid west and coastal east of India is a tribute to Professor M S Swaminathan on his Birth Centenary. Professor Swaminathan had always valued the voices of rural and coastal communities and acknowledged their contributions. In particular, he had valued the contribution of women farmers to the food and nutrition security to the world at large.

The case studies presented in this compendium are a testament to the resilience and innovation of farmers and fishers. They are a reflection

of the challenges and opportunities faced by the rural and coastal farming communities.

The stories are rich in qualitative detail and reflect the transformative role played by MSSRF and other partner organisations. These case studies highlight the farmers' efforts to improve their livelihood and enhance income without harming the environment by adopting sustainable practices. The fact that many of the storytellers are women adds depth and significance to the document, highlighting the leadership and resilience of grassroots women innovators. These stories can be an impactful resource for advocacy and institutional learning.

My heartfelt thanks to our farmer friends for sharing their experiences. Their contributions made this compilation of case studies possible.



Dr. Soumya Swaminathan
Chairperson,
M.S. Swaminathan Research Foundation



Biohappiness in Practice: MSS@100 - Stories from the Field

INTRODUCTION



This compendium of farmer narratives, curated as part of the MSS@100 Centenary reflections, offers a compelling testimony to the transformative power of knowledge, community, and ecological stewardship. Spanning diverse agro-ecological zones, from the deltas of southern India to the semi-arid landscapes of the west and the coastal and rainfed belts of the east, these accounts reflect the lived experiences of grassroots innovators who have redefined the contours of rural development.

Notably, the narrators are predominantly women, whose leadership, resilience, and ingenuity have catalysed change

far beyond their fields. Through sustained engagement with institutions like MSSRF and those of others, they have adopted sustainable agricultural practices, revived traditional knowledge systems, and nurtured biodiversity. The concept of “biohappiness,” once abstract, now finds tangible expression in improved yields, reduced input costs, enhanced nutrition, and restored dignity.

These lived experiences underscore several critical lessons: that participatory, local/site specific approaches are essential; that women’s leadership must be central to rural transformation; and that technology adoption thrives when embedded in trust and relevance. The

narratives also highlight the role of local institutions, Village Knowledge Centres, Farmer Producer Companies, and Self-Help Groups, as anchors of resilience and innovation.

Looking ahead, policy frameworks must prioritize decentralized, inclusive innovation ecosystems that recognize and reward grassroots leadership. The firsthand reflections captured in this compendium offer MSSRF and the wider policy and research community valuable insights into what drives lasting change at the farm and village level. These lived experiences reaffirm that practices must evolve to integrate climate resilience, nutrition, and livelihood diversification in ways that are locally grounded and socially just.

Research in Food and Agriculture production sector must deepen its engagement with community-conserved agrobiodiversity, the social impact of bio-input enterprises, and the metrics of wellbeing that go beyond income, drawing directly from the village knowledge systems, aspirations, and adaptive strategies of farmers themselves. These chronicles are not just testimonials; they are strategic guides for shaping future-ready, equity-driven rural transformation.



The background of the slide is a landscape photograph. In the foreground, there is a lush green field of tall grass. In the middle ground, there is a line of trees, including several large, leafy trees. In the background, there are rolling mountains under a sky filled with soft, grey clouds. The overall scene is peaceful and natural.

Biohappiness in Practice: MSS@100 - Stories from the Field

Based on the true reflections shared
during the MSS@100 International
Conference, August 7-9, 2025



VOICES OF FARMERS

TAMIL NADU



TAMIL NADU





Ms Kasthuri

AGE:
32 Years

EDUCATION:
Class 12

VILLAGE:
Kolli hills

DISTRICT:
Namakkal

Ms Kasthuri

01

I, Kasthuri hail from Maruthankulamatti hamlet in Kolli hills, Namakkal District. I am 32 years old. I have studied up to Cass 12. There are only 14 households in our hamlet. We are primarily agriculturalists and mainly depend on seasonal rains for our cultivation. We cultivate crops such as *maanavari* (rain fed) rice, *cambu* (pearl millet), ragi and vegetables in our two acres of upland and pepper, coffee, pineapple and few other fruit crops in three acres which is a rocky area. Our traditional crops included several varieties of millets, pulses and fruits. Mixed cropping method was a common practice adopted which fulfilled various needs of food and other requires of the household. We rear two native cows and one Jersey.

M. S. Swaminathan Research Foundation (MSSRF) has been actively working in Kolli hills focusing on conservation and promotion of crop diversity with people's participation. The organisation focus has been on improving the livelihood of the local people.

I have always had a passion for agriculture. None of my three siblings has interest in doing faming as a livelihood. After my marriage, I decided to work on our land. My interest



got a boost three years ago when I joined agro-ecological programme implemented by the MSSRF. I came to know about this programme through Mr Shanmugam from my hamlet; he has been associated with the MSSRF for more than a decade. He encouraged me to participate in this programme. I received extensive training in integrated farming systems with livestock. This provided me a basis for my future endeavours leading to my economic independence and gaining recognition among my community. I have been trained and mastered the

I have been trained and mastered the production of various bio-inoculums-based products

production of various bio-inoculums-based products such as *Kaala jeevamrutham*, *Jeevamrutam*, *Nimbasthra*, *Agniasthram* and *Brabmasthra* and use the same for our crops. Initially, I experimented with a few crops in a smaller area. I could see the difference in crop performance. I tried with 25 pepper plants; my husband who ridiculed me could not believe it. From 25 plants the yield was 75 kilos whereas earlier it was 27 kilos from larger cropped area. Now, *kothamalli* (coriander) grows well and looks attractive. My father also experienced



75kg

From 25 plants the yield was 75 kilos whereas earlier it was 27 kilos from larger cropped area.

good yield of elakkai (cardamom). Pest attack has also reduced significantly. Weeds are controlled.

MSSRF also provides vegetable seeds. I distribute it to the households in our hamlet and nearby hamlets as well. I cultivate vegetables based on season. I normally cultivate *mullangi* (radish), *thakkali* (tomato) *kathari* (eggplant) and different varieties of leafy vegetables. Earlier, we used to cultivate vegetables



mostly for household consumption. Now I am cultivating for market, as well.

As part of the natural farming training programme, along with 30 persons I got an opportunity to visit places like *Pollachi* (five months ago) where we saw farmers growing tubers and jadicckai (nutmeg) in organic manner. During our visit to Thalaivasal near Selam we learnt about intercropping (with banana and moringa). In order to promote natural farming, MSSRF also provides desi cow to interested farmers.

MSSRF has provided processing machine for coffee and pepper and also for groundnut and maize. Sprayers are also provided for farmers for their use. Mr Shanmugam and I manage the unit.

My husband ridiculed me when I told him about the training; he said it was a waste of time and would not work

out for us. But I was determined to participate in the training, though I had also thought how are we going to increase our crop yield that could not be achieved through using chemical inputs! However, I wanted to try and see the performance. The crop performance based on natural farming gave me confidence to adopt the same in the entire crop area. I wish and hope more and more farmers from our area would soon adopt farming practices that will increase crop yield and also get produce that is free of chemicals.

250

I am happy to share with you that I have been able to train over 250 farmers (mostly women) from my hamlet and neighbouring villages.

If awareness is created about the importance and usefulness of natural farming I am sure farmers would understand and adopt the same in their fields.

I have started a small business enterprise with my husband's support specialising in farm-fresh vegetables and spices. It is a source of regular income for the household. I take the produce in my two wheeler to



the nearby market area, Thenbulam (distance 10 km) twice a week. We earn a net income of ₹12,000 per month. I wish to save from this earning and dig a well which will enable us to irrigate our vegetable crops.

I am happy to share with you that I have been able to train over 250 farmers (mostly women) from my hamlet and neighbouring villages. I have been encouraged to promote natural farming practices through collective action. So, with the support of MSSRF I initiated setting up a producer group with 12 women members to create awareness and motivate our farmers to adopt natural farming in our panchayat, Gundur Nadu. This is only few months old.

I am proud to be a farmer. We do not have to be a slave working under someone. A farmer is a manager and supervisor of her /his farming. We

need not be controlled by anybody (*Naam adimiyaga irukka vendam. Naam than adhikari. Naam than manager*). I am earning now. I do not have to depend on my husband.

It would be very helpful and useful if we could get necessary ingredients (ghee, tobacco, sugar cane juice and so on) for preparing the bio inputs. I have to go to Kaaravalli, a place located at the foothills. We would appreciate it if MSSRF could facilitate setting up a shop selling the ingredients for preparation of bio-inputs in our region.

We also face water shortage; we do not have irrigation facility. As I have said earlier, more than 80% of the land in Koli hills is raid fed. We carry water in pots to water the plants. I am thinking of digging a small pond or well where we can store water for irrigation purposes.

My self-confidence has grown

significantly. My self-esteem has also been boosted. I am proud to be respected as an internal resource person. I am appreciated for my entrepreneurial skills. Sharing knowledge and skills with fellow villagers gives a great sense of satisfaction and achievement. If today, I have come to this position it is because of MSSRF. I owe a great deal to this organisation.

It was a privilege to participate in the conference-MSS@100. We had an opportunity to visit the model farms in IARI campus.





Ms Malarkodi

AGE:
38 Years

EDUCATION:
MIDDLE SCHOOL

VILLAGE:
Kolli hills

DISTRICT:
Namakkal

Ms Malarkodi

02

I, Malarkodi come from a village namely Chittooranipatti, in Kolli hills, a hilly region. I am 38 years old. I could not continue my education beyond middle school. I got married at the age of 18 years. My husband passed away one and half years ago. We are primarily agriculturalists. Our farming entirely depends on the seasonal rains. We own two acres of upland where we cultivate mainly coffee and pepper. Our traditional agriculture involved mainly cultivation of different types of minor millet and pulses, vegetables, fruits and spices in smaller area. Crops and cropping system have undergone lot of changes. As a child I grew up eating *samai* (little millet) rice.

My association with the M S

Swaminathan Foundation (MSSRF) which started 11 years ago still continues. Besides working on our land I was also going as a wage labourer. MSSRF has a stall where value added products of different minor millets are sold in Semmedu, a central area in Kolli hills. Opportunity to associate with the MSSRF came when the person taking care of the stall could not continue her work. Fortunately, when one of the staff from MSSRF enquired about my availability, I immediately accepted the offer for a monthly salary of Rs 3000.



I gradually learnt to prepare valued added products from minor millets. Mr Madesh from MSSRF gave me the training under the millet value added products programme. I gained knowledge and hands on training gave me the confidence to prepare value added products and market them.

I worked for monthly salary for nearly five years and now I am the owner of the shop. Nearly fifteen different millet products (four varieties of millet rice, millet *bajji* mix, *dosa* mix, *payasam* mix,

laddu, ragi malt) and spices are sold in my shop. Along with value added products I have also started a small eatery providing fresh and hot items like *kuzhi paniyaram* (made from rice and black gram batter). I bought a flour machine one and half years ago using a loan amount of Rs 38000 from the Indian Bank. I have also repaid the loan without difficulty. I earn reasonably well during weekends and holidays when people from the plains visit Kolli hills. While sales sometimes are low, I am not discouraged.

I worked for monthly salary for nearly five years and now I am the owner of the shop. Nearly fifteen different millet products and spices are sold in my shop.

I have been promoted as master trainer, a role that allows me to share my knowledge with a wider audience. I have trained several women self-help groups and farmers from other states in collaboration with organisations such as KVK and the Veterinary University. When I go as resource person or a trainer I receive cash hanarorium. I receive Rs 2000 when I go as a reouce person for KVK.



I have been able to manage my unit and enjoy my work. It has given me a recognition in the society. My villagers appreciate me. My parents are proud of me. My elder daughter is studying in a private medical college in Namakkal, my two daughters are in college and my son is in school.

The MSSRF helped me to start this business, and I will continue making and selling value-added minor millet products. I want to make the MSSRF proud for helping me become an entrepreneur. From a trainee, today I am a trainer and a resource person. I am the owner of a shop. Coming from a small hamlet and studied only up to Class 8 today I am recognised and appreciated for my leadership and entrepreneurship qualities. In 2023, in recognition of my work I received Best Seller of Millet award through KVK. I have never gone out of my village. My life revolved around home and the

fields. My association with the MSSRF has brought me to the outside world. I had opportunity to visit Chennai office on a few occasions. I was touched when Professor Iyya recognised me and enquired about my wellbeing. He remembered that I was from Kolli hills. It was a rare opportunity for people like me to travel to New Delhi and participate in the conference-MSS@100. We had put up a stall during the conference. There was great demand for minor millet products. We had only little quantity. So we ran out of stock.



I have trained several women self-help groups and farmers from other states in collaboration with organisations such as KVK and the Veterinary University.



I have been able to manage my unit and enjoy my work. It has given me a recognition in the society. My villagers appreciate me. My parents are proud of me.



Mr Selvaraj

AGE:

53 Years

EDUCATION:

Class 10

VILLAGE:

Kolli hills

DISTRICT:

Namakkal

Mr Selvaraj

03

I, Selvaraj, is a farmer from Vendalpadi Village in Kolli hills, Namakkal district. I am 53 years old. I have studied up to Class 10. I own 3 acres of land where traditional variety of pepper and coffee are cultivated and in one acre rocky area *ragi* and *thinai* (Fox tail millet) are grown. I rear desi cows and chicken. In our traditional system of subsistence agriculture, we cultivated 4-5 varieties of *samai* (little millet), *thinai* (fox tail millet), pulses and also coffee, pepper and fruit trees. Subsistence farming was displaced by cash crops. Our village consists of 40 households. Approximately, 25 households cultivate *ragi*, *samai* and *thinai* for their consumption.

Intervention of M S Swaminathan

Research Foundation in Kolli hills focus on promoting minor millets cultivation; also cultivation of fruit trees, coffee, pepper and vegetables are promoted by adopting improved and modern agricultural methods and technologies. Under natural farming initiative, farmers are encouraged to prepare bio inputs and use them for their crops. I am associated with the MSSRF since 2000 .

I have been motivated to maintain a seed bank consisting of traditional varieties of millets. I collect seeds



from different parts of Kolli hills and conserve them in my seed bank. Seeds are provided to the interested farmer on a condition that she or he would return double the quantity borrowed. Now I have *ragi* and *thinai* in my seed bank. The demand for traditional millets has reduced in the last two years. I hope the demand would increase in future.

I have a small garden developed with the support of the MSSRF in 2019. MSSRF provided 10 numbers of *maa* (mango), *pala* (jack fruit), lime (20), *nelli* (Indian goose berry), *madhulai* (pomegranate), guava (2) and *sappota* (2). I harvested 100 fruits of lime; other tree crops are in flowering stage.

I maintain a nursery of coffee and pepper since 2020. This is a source of income to the household. Thanks to MSSRF. The organisation provided inputs and implements (examlle:

polythene bags, sprayer, shovel, hose pipe and a motor) necessary for raising and maintaining the nursery.

I participate in almost all the activities of MSSRF in Kolli hills and serve as a facilitator for development of soil and water conservation.

It will be a great help if loan facility is available for cultivating minor millets. This will motivate farmers to cultivate on a large scale. There is a demand for value added products of millets. In hotels they serve food items prepared with *samai*, *thinai* and *varagu*

“ I have been motivated to maintain a seed bank consisting of traditional varieties of millets. I collect seeds from different parts of Kolli hills and conserve them in my seed bank.





Ms Vennila S

AGE:
38 Years

EDUCATION:
BA, BEd

VILLAGE:
Kolli hills

DISTRICT:
Namakkal

Ms Vennila S

04

My name is Vennila. I am from a small village namely Oorpuram in Alathur Nadu, Kolli hills. I am 38 years old and I have done my BA, BEd course. I belong to a traditional agricultural family. Malayar, the inhabitants of Kolli hills are primarily subsistence farmers owning 2-4 acres of land. It is largely a rain fed area. Our traditional food crops included different types of millets and we practiced mixed cropping system and rotation of crops. Our subsistence farming was gradually replaced by market oriented one. My parents were no exception and started pursuing market oriented cultivation. *Avargalum varumnathai thedi odinargal* (they also ran in search of more income). Cash crops such as tapioca and other crops dominated Kolli hills

agriculture. It was during this time M S Swaminathan Research Foundation (MSSRF) came up with interventions to promote and maintain crop diversity through sustainable agricultural practices and also through that to enhance the income of the farming households.

I came into contact with MSSRF in 2014 as a woman farmer in the Wadi project. I actively participated in this project and encouraged others as well. This initiative promoted sustainable farming practices and cultivation of



crops such as coffee, fruit trees (like mango and jack fruit) and vegetables. Two hundred farmers were identified and were encouraged to cultivate fruit trees and silver oak trees in underutilised lands to help increase the income of the farmers. We have been trained to cultivate fruit crops and vegetables using sustainable improved agricultural practices to prevent and manage pest and improve the yield. *Palavanamaaga iruntha idathai pasumai aga maarrinargal*-the land that was like a desert has been transformed into a green area. We are reaping the benefits of this project.

We have started a Farmer Producer Company- Kolli malai Velan Urpathiyalar company. I am one of the 10 Directors of the FPC. Women are given importance. Thirty percent of the shareholders are women. Out of 10 directors five are women. The FPC's objective is to facilitate direct market

linkages to earn fair price for the products. We have a millet processing machine to create employment opportunities for women. We are preparing value added products from millets and marketing them through the FPC.

In partnership with NABARD, MSSRF implemented a project focusing on increasing the yield of minor millets. We underwent training and adopting the same in our lands. I served as a Millet Farm Facilitator. I encourage our men and women farmers to cultivate minor millets explaining about their role in improving the soil health and also in increasing the food and nutrition security of the household. I am hopeful gradually, people will increase the land under minor millet cultivation adopting modern agricultural practices such as row planting and so on. Adopting modern agricultural practices reduce

weed population, control pest attack and increase yield. It requires less labour. MSSRF has given us necessary machinery.

I am happy to share with you that we are in a position to retrieve our traditional millet crops – *siru dhaniyangalai meettu edukkira soozhnilayil naanga irukkekom*. I am proud to say that my role in this and in promoting and marketing of value added products is



very much appreciated by the MSSRF and other partner organisations. I am happy that I am able to help our farmers in improving their livelihood.

With the support of MSSRF I took efforts to mobilise women and form them in to Self Help Groups. Women have access to savings and credit. They are confident women and their self-esteem has enhanced. They are also actively involved in value addition of minor millets which provide them income.

Currently, as an Internal Farmer Resource Person I am involved in promoting natural farming practices in our region. My hands on training and the capacity to mobilise farmers help me to create awareness and encourage farmers to adopt sustainable improved agricultural methods.

I have gained the skills and capacity

to run the FPC and mobilise farmers. I have come to appreciate that like education, experience is very important. I have gained the experience relevant to my day to day life and in improving my livelihood. I have come to know that agriculture will enhance our livelihood (*Vinsayam dhan vazhvaadarathai uarthum enbatbatbai therndbu kondan*).

In recognition of my commitment and expertise I received Farmer Fellow Award from Indian Agricultural Research Institute (IARI), an ICAR institute in 2022. I owe my growth as a Director of the FPC and mobiliser of farmers, to MSSRF. I have grown personally as well. I request MSSRF to conduct health programmes targeting women. Anaemia is a common problem found in Kolli hills. Awareness programmes on health would benefit the inhabitants of Kolli hills. Owning a desi cow would surely help a farmer to

improve his yield and at the same time improving the soil health. If interested farmers are identified and given a desi cow each, it would go a long way in promoting natural farming. Farmers also will be motivated to prepare bio inputs and use them to their crops.

My participation in the New Delhi conference, MSS@100 was a revelation of work done by MSSRF across India in improving the farmers' livelihood. I was not aware of the presence and contributions of MSSRF in many states of India until then. We are indebted to Professor Swaminathan.





Mr Muthaiyah S

AGE:
48 Years

VILLAGE:
T Pudupatti

DISTRICT:
Dindigul

Mr Muthaiyah S 05

I am Muthaiyah, aged 48 years. I reside in T Pudupatti Village in Dindigul district. I own 1 acre of agricultural land. I have 4 cows of the native variety. I cultivate mainly *paruthi* (cotton) and *makka cholam* (maize) during September/October–January.

For over 30 years, MSSRF has been playing a very significant role in improving the livelihood of farm women and agricultural workers, particularly women, through Farmers Producer Companies (FPCs). We refer to the FPC as *Vidai* company or *Vivasaya* office. I have known MSSRF since 1998. I have participated in all the training programmes related to agriculture—'from seed to seed' training, 20-day training on crop

types and crop production, precision farming, cattle management and so on. I have taken an active part in the activities of Village Knowledge Centre (VKC) set up by MSSRF in our village. I encouraged more than 50 persons to participate in MUPP (Microsoft Unlimited Potential Programme), a course that provided skill development in computers. I was also part of the adult education programme conducted by the VKC. The VKC had a data base on crop-related information, livestock, human health, weather forecast and so on. The villagers benefitted a lot




through the services of the VKC. I also went to Jeypore in Odisha along with an MSSRF technical team to set up a VKC in that district.

Farmers in our area got exposed to many new agricultural technologies. Had MSSRF not come to our area, we would not have come to know about new technologies—use of bio-fertilisers, bio-pest control/management methods, water management and micro nutrients. The FPC conducts awareness programmes and training programmes on different

agricultural technologies and bio-input preparation. I learnt about quality seed production, precision farming, preparing *panchakavya* and so on. The training on quality seed production helped me to produce ladies finger seeds. Similarly, I was encouraged to prepare *panchakavya* for use in our land. I learnt about vermicompost preparation by attending a training conducted by MSSRF. I bought cows only for this purpose. I share my experiences through WhatsApp. More than 70% of the farmers in our village have undergone training in *panchakavya*

making and use it in their fields.

One of the best things that the farmers gained because of our association with MSSRF is pest/disease control and management. Earlier, we did not have knowledge about crop protection. We used to approach the agro-input dealer when we had a pest problem. The dealer would give different types of chemicals. Now, we can identify



Had MSSRF not come to our area, we would not have come to know about new technologies—use of bio-fertilisers, bio-pest control/management methods, water management and micro nutrients.



TN

whether a crop is affected by bacteria or *poonjan* (fungus). This awareness and knowledge has helped me and other farmers to cut down on expenses. It is through MSSRF that I learnt and gained knowledge about *nyir urangal* (bio-fertiliser) and micro-nutrients. Now, I have totally shifted to organic farming.

FPC brings out *Seidhi Solai*, a local monthly newsletter which carries relevant and appropriate information on local and season-specific agriculture and allied activities to the farmers. Timely advisories on crops and allied topics enable the farmers to take informed decision. The information/topics generally covered include crops and their varieties suitable for *maanavari* (rain fed) and *iravai* (irrigated) farming and for *kodai* (summer) season. The season for manavari cultivation is the *Aadi* (July–August) *pattam* (season) and for iravai it is *Ippasi* (October–

November) and *Karthigai* (November–December) *pattam*. Based on the information on pest control and pest management practices provided in the Newsletter, I have kept yellow sticky cards, pheromone traps and light traps in my cotton field. Not only I but a majority in our region have adopted this method of bio-pest control and management.

Farmers have come to realise the importance of summer ploughing and water management. A majority use bio-inputs and micronutrients. We also get agro advisories through voice mail and in the display board kept outside the company. Weather updates help the farmers to plan their field operations and take care of their cattle. We can approach the staff of MSSRF anytime for guidance. Farmers' WhatsApp group is another source to get information and exchange experiences. The advisories we get through different

modes keep us in constant touch with agricultural information relevant to that season.

Encouraged by MSSRF, I am putting my training on bio-inputs into practice. I prepare *panchakanya* and enriched farm yard manure for my own use and for sale. I also promote sales of bio-inputs prepared by our women groups. I am a trainer and a resource person for conducting training programmes



organised by MSSRF and other institutions. I am preparing cow-based products such as pain balm and soaps for the market.

MSSRF focuses on women empowerment through their economic and social development. If today women are coming out and going to the banks or participating in various training programmes, it is because of MSSRF. Women have become entrepreneurs. These women are not only producers and suppliers of bio-fertilisers and bio-micronutrients they are also researchers. This is one of the significant contributions of MSSRF. Marketing of bio-inputs beyond a few places seems to be a challenge. However, we see a positive change among the farmers. They are embracing sustainable agricultural practices. There is a demand for our products.

It was a great honour to participate in the Centenary Conference held at New Delhi. We were treated on par with the VIPs (*VIP listil vaithu azhagu paarthargal*). We could see our Prime Minister. The discussion among our farmers about Bio-happiness was interesting and useful. Field visit was organised for the farmer participants in the PUSA campus. I learnt about new ploughing implements. We had the opportunity to interact with the agricultural students of IARI from Tamil Nadu. We met the son of one of

our fellow farmer from Theni who is studying in that campus. I felt proud to see our boy from a farming community studying in a prestigious institution in the capital city of our country.

“
If today women are coming out and going to the banks or participating in various training programmes, it is because of MSSRF.
”





Ms Kalarani M

AGE:
40 Years

EDUCATION:
Class 12

VILLAGE:
Aalathuran Patti

DISTRICT:
Dindigul

Ms Kalarani M 06

My name is Kalarani and I am 40 years old. I come from a village called Aalathuran Patti in Dindigul district. I have studied up to Class 12. We own less than 1 acre of farming land, but we have also taken nearly 2 acres on lease. We normally cultivate cotton in our land and maize on the leased land. We also have nearly 20 chicken, four goats and a cow with a calf.

My contact with MSSRF started 12 years ago; I am a member of agricultural women's group named *Roja Magalir kuzhu*. As a member of the group, I attend all the meetings conducted by MSSRF and trainings conducted by other institutions such as the Gandhi Gram Rural University (vermicomposting and

handling farm implements/machinery) and agricultural or horticultural departments, on the recommendation of MSSRF. I have participated in a water management training programme as well as a gender meeting organised by MSSRF. I am an active participant of the Farmers' WhatsApp group. I have got the *Siranda vinasayi* award from Gandhi Gram Rural University and Reliance Foundation! Thanks to the encouragement and support rendered by MSSRF.

We are updated with local-specific



information on agricultural and allied activities through a local newsletter called *Seidhi Solai*, voice messages, WhatsApp and also through other social media. *Seidhi Solai* is a reminder and guide to plant seasonal crops. The information covers soil sampling, land preparation, seed treatment, intercropping, spacing, pest control and management, use of bio-inputs and all other activities related to that crop cycle. It also gives information on cattle rearing, poultry and so on. Using the information, I have learnt to reduce expenses and increase the crop

yield (*selavai kuraitthu varumanathai kootta therindhu kondan*). I am able to take care of our livestock and poultry. Weather update helps us to take precautions in carrying out our agricultural activities.

I came to know that leaving space between two farm beds enables free air circulation for the crops. It also prevents pest attack. I use yellow sticky cards and pheromone traps as recommended in the Newsletter. I also came to know that intercropping will help in preventing and managing pest and disease attack. I plant castor

as a border crop and *ulundu* (black gram), *paasi payaru* (green gram), *mochai* (lab lab) and *thatta paniru* (cow pea) as intercrops in the cotton field. I have reduced the use of chemicals in our crops.

I was one of the fortunate persons from the rural farming community to participate in the Conference organised at Delhi during the Birth

I have got the Siranda vivasayi award from Gandhi Gram Rural University and Reliance Foundation! Thanks to the encouragement and support rendered by MSSRF.



Centenary of our Swaminathan Aiyya. The Conference provided a forum to share our activities and experiences. The workshop conducted for farmers on Bio-happiness gave lot of insights; we learnt different perspectives from different farmers. According to me, Bio-happiness is living a healthy life; how is it possible? It is possible by consuming organic food. How can this happen? By practicing sustainable agricultural practices that are being promoted by MSSRF! This transformation should take place all over. This will result in Bio-happiness.

Awareness and training programmes on sustainable agriculture should be conducted focusing more on women who perform 70% of the agricultural work. MSSRF provides such trainings to the farming community in our area. *Engalakku kudaikkara maadiri marravargalukkum kudaikkanum* (I wish others also benefit like us). Reaching

a wider range of farmers with similar programmes is critical to increasing production by adopting sustainable agricultural practices.

I was one of the fortunate persons from the rural farming community to participate in the Conference organised at Delhi during the Birth Centenary of our Swaminathan Aiyya.





Mr Ramesh Kannan C

AGE:
44 Years

VILLAGE:
Pothiniayakan Patti

DISTRICT:
Dindigul

Mr Ramesh Kannan C 07

I am Ramesh Kannan and I am 44 years old. I hail from the village Pothiniayakan Patti. My family owns 5 acres of land. I have known MSSRF for more than 17 years.

The RSGA office (FPC supported by MSSRF) in Kittampatti village promotes sustainable agricultural practices and provides necessary guidance and support to the farmers in this area. Members of the Farmers Group attended many meetings and training programmes and visit places related to agriculture. I learnt a lot by participating in the meetings, training and visit to places. Most of the meetings pertain to sustainable agricultural practices. We are given the opportunity to clear our doubts. Through my contact and

interaction with the staff of MSSRF, experts and fellow farmers, I ensure participation in training programmes. I have gained knowledge on various aspects related to agriculture and live-stock care and management.

Training on preparing bio-inputs such as *Panchakanya*, *Amirda karaisal* and vermicompost were all very useful. I have been using bio-inputs for my crops for the past nine years. *Panchakanya* revives dried crop also; that was my experience with moringa. I am satisfied with the results. It involves less expenditure



(*Thrupthi yaga irukku; selavilla vivasayam*). I prepare (and also sell) *panchakanya*, meen amilam and waste compost. Plant waste increases the earth worm population in the field. Awareness is gradually increasing among the farmers on using bio-inputs. We avoid the indiscriminate use of inputs, which helps us to cut down our expenditure.

I also spray well-fermented curd on moringa during the flowering stage, resulting in abundant flowering. We get an extra 1 tonne of drum sticks. To control and manage *paṛṅha iee* (fruit fly) attack on moringa crop, in 4 acres

of my land I tried *inakavarchi pori* (fruit fly trap/pheromone trap) and *manjal attai* (yellow sticky card). It controlled nearly 75% of pests. I had cultivated in 4 acres of my land.

Staff from MSSRF are accessible for any help or guidance. They helped me to get a sprayer subsidy from the Horticultural Department. I listen to MSSRF's Voice Mail, which gives very useful information. Their weather information is 90% accurate, so we can take precautionary measures. Classes are conducted on YouTube and telephone uses. I find *Seidhi Solai*, a local

Newsletter issued and circulated by the FPC (the FPC is referred to as Vidai Company by the farming community), disseminates information on local and season-based agriculture and livestock. The Newsletter acts as a *thoondukol* (trigger) for the farmer.

I have come to know many minute aspects in cattle care and management, such as feeding the cattle *thaadhu uppu*



The RSGA office (FPC supported by MSSRF) in Kittampatti village promotes sustainable agricultural practices and provides necessary guidance and support to the farmers in this area.



(mineral salt) and deworming of adult cow and calf, by reading the Newsletter. Mineral salt increases milk yield also; it gives an additional 1 litre of milk and thereby our earnings also. If I get Rs 6500/ per month by selling milk, then I will get Rs. 7,500 by feeding mineral salt. We are able to bring down the mortality rate of the livestock these days. The treatment and maintenance/ care tips are very useful in raising the livestock.

I thank MSSRF and the FPC for everything they are doing for improving the lives of the farming community. They are doing their service without expecting anything in return. Whatever they undertake is completed. They teach everything very clearly and completely. The staff visit our fields. It is a great help! They give practical lessons also, which is important. MSSRF *vazhikaattudhal* (guidance) is good. This is not done by the Department! They are yet

to implement the Swaminathan *Arikkai* (recommendations of the Swaminathan Committee on MSP). If market rate is decided in advance, one can choose the appropriate crops for cultivation.

It was an honour and farmers had the opportunity to participate in Professor M S Swaminathan Birth Centenary Conference held in New Delhi. It increased our morale. I and other farmers from Tamil Nadu felt encouraged and motivated to continue farming activities. It helped me to enhance my self-esteem and made me feel that farmers are not inferior to anyone.

The Conference provided me the confidence and reassurance that I am on the right path in adopting agriculture using mainly bio-inputs and avoiding chemical application. The discussion on the concept of Bio-happiness among the farmer group was enlightening. Importance of soil health was

stressed. I realise (several other farmers also felt the same) that we should pass on healthy soil, water and environment to the future generations (*arokkijamana man, thanneer and churru pura soozhalai varungala sandhadiyarku oppadaikkanum*).

Cultural programmes held in the evenings were interesting and informative. I learnt more about Professor Aiyya.





Ms Chithra S

AGE:
46 Years

EDUCATION:
Class 8

VILLAGE:
Ramanathapuram

DISTRICT:
Dindigul

Ms Chithra S

08

My name is Chithra and I am aged 46 years. I belong to Ramanathapuram village in Dindigul district. I come from a landless household. I could study only up to Class 8. My husband was a labourer in a mill. Though coming from a socially and economically weaker section of the society, today I am an entrepreneur and President of Kuzhumai Kootamaiphu, a federation of SHGs of women and men from households of marginal farmers and agricultural labourers.

Coming from a landless household, I got the opportunity to associate myself with MSSRF in 2000. I joined one of the groups formed by MSSRF. The focus of MSSRF has been on promoting sustainable agricultural

practices through knowledge empowerment and capacity-building training programmes. Their focus has also been in encouraging women groups to take up micro enterprises, such as preparing bio-inputs.

Women groups were encouraged to start micro enterprises to earn income. MSSRF discussed with us about bio-input preparation as an economic activity. The idea was that this would provide income to the group and at the same time encourage production of bio-fertilisers or bio-fungicides such as



to enable the adoption of sustainable agricultural practices in the region.

Our group consisting of 12 members chose to produce bacteria-based bio-inputs, namely *Pseudomonas*. We underwent training at TNAU. MSSRF facilitated a bank loan to start our enterprise in 2006. MSSRF also gave financial assistance. We could repay the loan without difficulty within 6 years. We repaid the loan using our group savings and also from our product sales. Our group was given training in the preparation of *Bacillus subtilis* in liquid form during 2013.

During the production of the bio-input, we faced difficulties; challenges included issues with inoculation, bottle contamination and bottle-bursts. With the help and guidance from MSSRF scientists, we could overcome all of them. Periodical meetings and interactions with the scientist from

MSSRF provided encouragement and support. We always have had access to guidance from MSSRF. Otherwise, we would have given up. Their support keeps us going and meeting the challenges bravely.

The group earns reasonably well from the unit. As a group leader, I always ensure that we have a minimum stock of 500 kgs with us. Our Farmers Producer Company in Kannivadi, which is supported by MSSRF, buys our product regularly. Farmers from our village and nearby villages buy from us. The bio-input products produced by SHGs (supported by MSSRF) in Kannivadi are exchanged within our network and sold to the individual customers. Also, Mr Muthaiya, who has also been a very active participant of MSSRF's activities, produces *Panchakanya*, *Amirdha karaisal* and few other cow-based products for his own use and also for the

market. He helps our group and other three women's groups engaged in preparing other bio-products, such as *Azospirillum*, *Pseudomonas viridi*, *Beauveria bassiana*, *Metarhizium*, *Verticillium Lecanii*, *Basiliomyces*, VAM (Vesicular-arbuscular mycorrhiza) and Phosphobacteria, in marketing our products outside Kannivadi region.

The income from our sales and our



group savings helped me a lot in educating my daughters. Both my daughters are engineering graduates. Even in the initial stages of production, the earnings from sales helped our group members to manage small household expenses like taking care of the needs of our children. Today, we are confident of managing the financial needs of the household (such as children's education, paying electricity bill and investing in infrastructure) with the earnings from the sales of the product and also by taking loan from our group savings. The unit is operating in my house. I get a rent of Rs.7,000. The group takes care of the

unit. We do not hire outside labour. Our group members work and get paid for their service. We divide the work among us—three members per day contribute their time. The profit from our sales is also equally distributed among the group members. I manage the accounts and stock of the products.

We sometimes face difficulty in getting the mother culture for the preparation of bio-inputs. Staff from MSSRF and also the FPC located near Kannivadi help us in getting it from TNAU. Our production would increase if more and more area is brought under organic cultivation. Fortunately, because of

the sustained efforts of MSSRF, most of the farmers are adopting improved agricultural practices involving less of chemical usage. Farmers in our area are aware of the harmful effects of the indiscriminate use of chemicals, which affects the environment and other living beings.

Unpredictable weather and unseasonal rains discourage farmers from practising sustainable agriculture. If the rains come on time, a majority would adopt sustainable farming, which has been the primary objective of MSSRF.

I am grateful to MSSRF for providing me the opportunity to be part of Professor Aiyya's Birth Centenary Conference held in New Delhi. It was an enriching experience.



Our Farmers Producer Company in Kannivadi, which is supported by MSSRF, buys our product regularly. Farmers from our village and nearby villages buy from us.



Ms Angel Isabella Rani

AGE:

54 Years

EDUCATION:

High School

VILLAGE:

S. Pudoor

DISTRICT:

Dindigul

Ms Angel Isabella Rani 09

My name is Angel Isabella Rani. I was born in a farming household and had education up to high school level. I am 54 years old. We reside in S. Pudoor village near Kannivadi. We have 1 acre of land where we grow coconut trees. Previously we used to have bananas, sugarcane and cotton.

I used to be a very timid and shy person until I got exposed to the outside world through MSSRF. When MSSRF initiated its activities in Kannivadi region, my husband was drawn towards it. He along with few of his friends actively involved themselves in mobilising farming households including agricultural labourers, particularly women, to form groups. My husband inspired me to become

part of a farmer group.

Presently, I am a leader of an SHG. We have access to credit and savings. Our group is not just a savings group; we run a microenterprise unit producing fungicide-based bio-inputs primarily *Trichoderma viride* (a bio-fungicide) and also *Beauveria Bassiana*, *Metarhizium*, *Verticillium Lecanii* and *Basiliomyces*. I am very proud to say I am the leader of that group. When the seed company in our area (an FPC supported by MSSRF) told us about the micro economic enterprises, our group



showed interest in starting one to earn a higher income. We gained confidence to start one. We all understood the role played by bio-inputs in the healthy growth of the crops and in preventing damage to the environment.

Our journey has been full of challenges; but somehow we handled all the issues with the guidance and support of MSSRF. To start with, there were 20 in our group but 8 of them did not show interest. So, 12 of us started our production in a thatched enclosure where we used UV lamp for sterilisation. We made mistakes during sterilising the bottles: flask bottles were broken; bottles were expensive; we had to find an alternative, which we did. MSSRF scientists appreciated us for finding a locally available alternative: low-cost wine bottles. We were also cheated by some persons by not paying for our product. Presently, we are doing fairly well. We have a pukka lab-like

facility now. It took nearly 10 years for us to stabilise.

Along with MSSRF, our families continue to support us. We faced difficulties, but we were strong and did not give up. MSSRF has taken a lot of efforts to improve our lives both socially and economically. We should show our gratitude by running the unit successfully. We could do it. Today we have regular customers outside the state as well as online sales.

Like our group, there are three other women's groups producing different bio-inputs (bio-fungicide and bio-fertiliser). We exchange our products to cater to the needs of our customers. We take pride in supplying our product to a seed company, an FPC supported by MSSRF.

Along with other women, I underwent training at TNAU. We were all

overwhelmed when we looked at the campus. We did not have college education. We felt uncomfortable in the midst of an educated crowd. However, we had the determination to complete the course. It was difficult to grasp the subjects, but the teachers were kind and understanding. We were cautioned to use right proportion of ingredients while preparing our products. We were also told about the initial difficulties we



might face and how they can be solved. Later, we underwent training to prepare the bio-input in liquid form.

We are not ordinary rural farm women; MSSRF has moulded us as researchers and scientists. MSSRF has placed us in an honourable position (*Enngalai perumaikuriaya idathil MSSRF vaithulladhu*). I would like to mention here that the university changed its policy to include non-graduates for training programmes based on Professor Aiyya's (Professor M S Swaminathan) recommendation. He visited our villages in Kannivadi on several occasions. He mingled with farm women, men and children with ease and encouraged us to do farming using the latest technologies and based on right knowledge. I am very happy that, along with many farmers from different parts of India, I could participate in Professor's Birth Centenary Conference held in New

Delhi.

Group discussions organised during the Conference for farmers on Bio-happiness were very educative. I understood the concept. It was interesting to listen to farmers expressing their views from different perspectives on the concept of Bio-happiness.

“ We are not ordinary rural farm women; MSSRF has moulded us as researchers and scientists. MSSRF has placed us in an honourable position





Mr Sakthivel

AGE:
57 Years

VILLAGE:
Kannivadi

DISTRICT:
Dindigul

Mr Sakthivel

10

I am Sakthivel, aged 57. I come from a landless household in the village Kannivadi in Dindigul district, Tamil Nadu. For over two decades, I have been associated with MSSRF. MSSRF's goal has been to enhance the lives and livelihoods of rural agricultural women and men in the area. This is done by providing information and training in capacity-building programmes related to agriculture.

Initially, the intervention focused on seed production of ladies finger, tomatoes and sunflower. This was followed by pulse production. Village Knowledge Centres (VKCs) were set up for information dissemination, and a local Newsletter, *Seidhi Solai*, was brought out, which covers season- and

crop-based information. This timely information through the Newsletter, voice messages and WhatsApp helps farm women and men to adopt improved agricultural practices.

Approximately 5000 households in the area practice sustainable agriculture. Based on their interest, some women SHGs have been given training in preparing bio-fertilisers such as *Trichoderma viride*, *Pseudomonas*, *Vam* and *Trichogramma* (a bio-pesticide). The Farmer Producer Company supported by MSSRF continues to encourage



women and men farmers to participate in training programmes and meetings to improve their livelihood and enhance their capabilities. Veterinary camps are also organised. Meetings and training programmes on various other aspects have also been conducted, such as *thalaimaithuva payirchi* (leadership training) and gender workshops.

MSSRF's concern for agricultural labourers, particularly women, has been significant. They have been mobilised into groups of 12–20 members. These groups have access to credit and savings. The groups have received cattle loans (facilitated by the FPC and Kuzhumai (Federation of SHGs)) through banks, which the members repay.

I help the FPC to organise training programmes and meetings. I also help the farming community by providing the right information and helping

them obtain bio-inputs from the FPC. I help the SHGs involved in bio-input production to obtain the mother culture.

My only income is from MSSRF. My son and daughter are now earning. I am grateful to MSSRF because, with their help, I was able to educate my children in prestigious institutions such as the Anna University in Chennai.

“The Farmer Producer Company supported by MSSRF continues to encourage women and men farmers to participate in training programmes and meetings to improve their livelihood and enhance their capabilities.”





Ms Arokiya Mary

AGE:
57 Years

EDUCATION:
Higher Secondary School

VILLAGE:
Dharmathu Patti

DISTRICT:
Dindigul

Ms Arokiya Mary

11

I am Arokiya Mary, aged 57 years. I was born into an agricultural family in the village Dharmathu Patti in Dindigul district of Tamil Nadu. I have finished higher secondary school education. We have 2.5 acres of land and some cattle. The land, which belonged to my grandmother, was uncultivated and had been leased to someone in the village. After taking the land back, our family began to cultivate crops. We have since gained good yields, and it has been reasonably profitable. Thanks to MSSRF, my participation in training programme on seed production and other agricultural training encouraged me and the family to reclaim our leased land and start farming ourselves.

As a young woman of 28 years, my

journey with the MSSRF programme started in the Kannivadi block. It has been a wonderful and fruitful journey since 1996. I am glad this journey continues till today, contributing within my capacity to the sustainable agriculture and rural development programme of MSSRF.

My inquisitiveness about a meeting that was going on in a well-known farmer's land in Kannivadi brought me into contact with MSSRF. I was told that it was a meeting for farmers organised by MSSRF to promote sustainable



agriculture and rural development (*Valankundra Velanmai and Ooraga Valarchi*) for the socio-economic well-being of the rural population of Kannivadi. The inquisitiveness subsequently turned out to be earnest interest to know more about sustainable agricultural practices and rural development activities.

The Seed Village project was the first intervention of MSSRF in Kannivadi. Training was given to 2500 farm women and men including agricultural labourers on hybrid seed production technology. Training on seed production of ladies finger, onion, tomato and sunflower was provided. After the training, only 50 showed interest in seed production. I, along with my friend, took up ladies finger seed production in a field provided by a big farmer. It was a good experience. Quality seeds were produced, but the seed company with whom we had tied

up did not pay the farmers on time. We sold our tomato produce in the local market and got a good profit of Rs 8000 each in a short time. This was big money then.

MSSRF has continued its contact with the 50 farmers, and I am one of them. Regular meetings, training and awareness programmes were conducted for us in the Departments of Agriculture, Horticulture/Animal Husbandry as well as in the regional centre of MSSRF. The more I participated in the group meetings and training programmes, the more I gained knowledge on improved agricultural practices/technologies. I shared the same with my fellow farmers. The group meetings enabled exchange of information, express our needs and get clarification on farming practices.

During 2000–2001, the Village

Knowledge Centre (VKC) programme was initiated. My friend and I were selected for undergoing training in skill development in computers. It had been difficult for me to learn the use of computers. However, I succeeded in acquiring the necessary computer skills. I was appointed as a Knowledge Worker in one of the VKCs. As a manager of the VKC, I, along with others, collected information from



households in the surrounding villages about the crops cultivated, associated agricultural practices adopted, issues faced and how they were handled and so on. All the information was compiled and uploaded entered into the computer. A data base was created with local-specific crop details, pest/disease management, cattle-related information, government entitlements, market details and so on.

VKCs provided local-specific information to farm women, men and agricultural labourers. The villagers found it very useful. For example, providing timely market details enabled the farmers to take their vegetables and flowers to the right market at the right time. I was part of the Functional Literacy Programme conducted by the VKC for rural illiterate women and men. User-friendly and local-specific learning materials were made available. It was a satisfying experience for me.

Several aged women and men learnt to put signature and to read bus routes.

MSSRF encouraged the 50 farmers to form an association named RSGA – (Reddiyarchathiram Seed Growers Association), which was registered under the Tamil Nadu Societies Act. By 2007, there were nearly 800 farmers in the Association. In 2010, it was decided by the farmer members (with the support of MSSRF) to start the Reddiyarchathiram Sustainable Agriculture Producer Company, registered under the Farmer Producer Company Act.

Based on the needs expressed by the local farming community, MSSRF in association with TNAU decided to set up a weather station in Kannivadi to cater to the needs of the rural community. This was developed by India Meteorological Department. I was given training to take readings and

to manage the weather station. It is a medium-range weather forecast station (with instruments to record parameters such as the sunshine, wind velocity, soil temperature and so on); it serves six districts covering a radius of 30 km.

The weather-based information helps the farmers and cattle owners to plan their field operations and safeguard their cattle. The main purpose of the weather station is that a farmer should



not suffer due to lack of timely weather information and to prevent losses to farmers (MSSRF's *nokkam vaiasayigal nashatpada koodathu*).

A local Newsletter issued by the Farmers Association covers local-specific, timely and season-based information on crops, new agricultural technologies, livelihood training programmes and cattle care and management. The Newsletter is used as a reference material. The information is valuable and the farmers appreciate it a lot. Information is also disseminated through voice messages, WhatsApp and also by conducting Plant Clinic programmes. A majority in our area have been motivated to adopt sustainable agricultural practices. They are preparing bio-inputs and applying them to their crops. They are aware of the benefits of using such bio-inputs for their crop growth and in reducing the harmful effects of chemicals.

I also give training in bio-input production. I feel happy when farm women and men share their best experiences of adopting sustainable agricultural practices. I visit such farms, take videos of that field and upload them in media such as YouTube and Facebook. I struggled to learn to use a computer, but now I have the skill and confidence to take videos and upload them in social media channels. MSSRF helped me to grow to this level. Today, I am one of the staff of the MSSRF Centre in Kannivadi. I got an opportunity to travel to Scotland to share our experiences in reaching more farmers through our social media channel (You Tube and Face book). My presentation was much appreciated. That was the first time I travelled in an aeroplane. This happened only with the blessings and encouragement of Aiyya. I am ever grateful to him. When Professor Aiyya visited one of our VKCs, he appreciated the

Knowledge Workers, and in particular me for my skills in managing the VKC and also the Weather Station. Observing and learning the activities that have been going on in Kannivadi, he said to our then Senior Scientist Dr Rengalakshmi (now ED, Area Operations) not to give up rural development work in Kannivadi! Encouraged by Professor Aiyya and with the support of scientists, we continue our services to the farming community through our Farmers Association's Reddiyarchathram Seed Growers Association (RSGA), Reddiyarchathiram Sustainable Agricultural Producers Company Ltd (RESAPCOL) and Kuzhumai Federation (federation of SHGs of marginal land holding farmer women and men and also agricultural labourers)—all supported by MSSRF. We wish to work for sustainable rural development leading to Bio-happiness to all the living beings.





Ms Muthulakshmi M

AGE:

61 Years

EDUCATION:

Primary School

VILLAGE:

Thirumalairaya Samuthiram

DISTRICT:

Pudukottai

Ms Muthulakshmi M 12

I am Muthulakshmi aged 61 years. I have studied up to primary school level and now cultivate my 5 acres of land in my village Thirumalairaya Samuthiram in Pudukottai district. After my husband's death 20 years ago, the entire responsibility of managing my land fell on me. Whatever the dealer of inputs suggested for controlling pest and other crop issues, I blindly followed until I came in contact with the MSSRF 15 years ago. It was a turning point for me and for the entire village, particularly the women farmers. Improvement in our lives and livelihoods came in the form of the Plant Clinic programme, a significant intervention which impacted many farmers' lives. Till the entry of MSSRF, like me, all the others were totally

dependent on the local dealer to handle pest and other issues of their crops. We used to spend lot of money on chemicals but the pests soon made their appearance again. Presently, we are in a much better situation; we get appropriate crop advisories from the Plant Doctor. Our cultivation expenses have come down considerably (for instance, our expenses have come down to Rs 1000 from Rs 3000–4000 per acre).

Women and men have been mobilised to form groups. Access to credit



and savings has been made possible. Training on bio-input preparation and cattle care and management has been provided to us. We have started using bio-fertilisers and bio-pesticides. We are experiencing tremendous improvement in crop yield. We have learnt about new technologies such as System of Rice Intensification ((SRI) of cultivation. We have understood the role of soil health in crop growth and environment protection. I am proud to say that I have motivated more than 100 women and mobilised them to form groups and adopt improved agricultural practices.



My crop yield steadily increased from 15 bags of paddy per acre to 30, then from 35 to 40, from 40 to 45 and from 45 to 47. It has been possible because of MSSRF intervention mainly through the Plant Clinic programme.

I have personally gained a lot. My crop yield steadily increased from 15 bags of paddy per acre to 30, then from 35 to 40, from 40 to 45 and from 45 to 47. It has been possible because of MSSRF intervention mainly through the Plant Clinic programme. The MSSRF scientists also visit our lands and we have a Helpline number. We have easy access to the experts; we can contact them over the phone for any clarification.

In our village, cattle population is high and we earn income from selling milk. We are able to prevent and manage

seasonal diseases that affect cattle. We are alerted through phone messages and sometimes through phone-in programmes. Access to the Helpline number is of great help to us; we can easily contact the veterinary doctor to handle any issue related to cattle. Through the Helpline we also get to know about the weather and other climate-related alerts. With all the help and guidance, they get, farmers in our



village, particularly women, are in a much better position now. We thank the MSSRF for the same. We pay our sincere homage to our late MS Aiyya for his concern for the farmers. We request MSSRF to continue to provide us with updated information and create awareness on new technologies. There are approximately 100 progressive farmers, mostly women, and we wish that others also should adopt sustainable agricultural practices to get improved earnings and at the same time safeguard our environment. Since we have a sizable cattle population in our village, it would be a great help and useful if training is given to make vermicompost for our use and as well as for marketing it. It would help the farmers to enrich the soil as well as to get some additional income by selling it. Our village needs a drying yard; it is a request from our farmers.

I have received several awards, and it is my sincere wish that like me many more should get awards. Women should be encouraged to take an active part both in social and economic spheres.

Six of us from Pudukkottai district participated in Professor Aiyya's Birth Centenary Conference at New Delhi. *Vivasayigalukku mukkiythuvam alithu, vivasayigalai kondaadum maanaadaaga irundhatu* (it was a conference that gave importance to and celebrated the farming community).

“ I have received several awards, and it is my sincere wish that like me many more should get awards. Women should be encouraged to take an active part both in social and economic spheres. ”





Ms Gouri J

AGE:
54 Years

VILLAGE:
Iluppur

DISTRICT:
Pudukkottai

Ms Gouri J

13

I am Gouri aged 54 years. I am a postgraduate and hail from Iluppur village in Ennai Panchayat. I am a farmer. Earlier, we used to cultivate many traditional varieties of rice in our village. We are now trying to bring them back into our cultivation.

We are fortunate to be associated with the MSSRF (since 2007), which has done significant work in promoting soil health, improving agricultural practices and conducting training on bio-fertilisers, bio-pesticides, and so on. A Farm School is also functioning in our village. Another area where awareness has been created is water management (by digging farm ponds, forming canals, etc.). MSSRF covers six more Panchayats in addition to

ours. Groups have been formed to promote savings and enable access to credit. Presently there are 71 groups having 1000 members, including both women and men. In 2015, with the support of MSSRF, the Iluppur Farmer Producer Company was registered. It has established many facilities for the benefit of the rural farming community, such as a dal machine, a modern rice mill, a godown with 500 tonne storage capacity, a cold storage unit and a seed processing centre. I coordinate the activities carried out by the farmer Producer Organisation and



the MSSRF.

We have access to seed material (for rice and pulses), bio-inputs and so on. Agriculture-related training programmes are conducted regularly. Some farmers including me prepare *panchakavya*, herbal pest repellents and vermicompost. We sell the excess quantity to fellow farmers. Some groups are engaged in preparing vermicompost as a micro economic enterprise.

Through the Village Knowledge Centre (VKC) based in Melapattu village, we get advisories for crops, cattle and other relevant matters. Another notable intervention carried out through the VKC is the Plant Clinic programme.

I underwent training in preparing *panchakavya*, herbal pest repellents, vermicompost and a few more. A female staff from the Village Resource

Centre of MSSRF based in Pudukottai provided the training. I am proud to say that I have given training to 250 farmers. I create awareness about the application and use of bio-inputs, the Plant Clinic programme as well as cattle care and management. I help the farmers to get rice and pulse seed material and bio-inputs and encourage them to participate in training programmes (e.g., bio-input preparation).

I am one of the farmers who has benefitted by participating in Plant Clinic sessions. I encourage many more to participate; at least 10 from a village should have awareness and share the knowledge or the services of the Plant Clinic and other activities of the MSSRF. This would significantly improve the lives of women (and men) farmers across 54 hamlets in our region. Further, if 50 persons adopt sustainable agriculture, it would inspire

more farmers to adopt the same. Regular meetings are important for updating group members on the latest information on agriculture and allied activities.

Through the Village Knowledge Centre (VKC) based in Melapattu village, we get advisories for crops, cattle and other relevant matters. Another notable intervention carried out through the VKC is the Plant Clinic programme.



Ms Mekala Muthu

AGE:

56 Years

EDUCATION:

BA

VILLAGE:

Onangudi

DISTRICT:

Pudukottai

Ms Mekala Muthu

14

I am Mekala Muthu aged 56 years. I was born in a marginalised section of the society in Onangudi village, Pudukkottai district, Tamil Nadu. I have risen to become the Panchayat Union Chairman of Arimalam Panchayat Union, Pudukkottai district. I hold a Bachelor of Arts (BA) degree in economics and a postgraduate degree in Tamil literature.

I began my public service career at the village level as a member of the Women's Development Committee. Subsequently, I served as the block-level co-ordinator for the Total Literacy Campaign (*Arivoli Iyakkam*). My political journey began in 2006 when I was elected as the Village Panchayat President of my village Onangudi.

I served as the Village Panchayat President for two consecutive terms from 2006 to 2016. In 2020, I was elected as the Panchayat Union Chairman of Arimalam Union for the term 2020–2025. The MSSRF has played a significant role in my growth.

My association with MSSRF started during 2004–2005 through Dr Rajakumar, who played a significant role in Adult Literacy Programme before he joined as a Scientist at the Village Resource Centre (VRC) of MSSRF at Pudukkottai. I learnt about



the Village Knowledge Centre (VKC) programme of the VRC and its role in the socio-economic development of the villages through knowledge empowerment. After I was elected as the Village Panchayat President, I took the opportunity to set up a VKC in our Onangudi village.

Using the platform of the VKC, and with the support of VRC of Pudukkottai, I initiated numerous development activities in collaboration with block- and district-level

stakeholders. The VKC also serves as platform to reach government schemes and entitlements. In recognition of my significant contributions to the development of the VKC, I received appreciation and recognition from the District Collector. Our work focuses on key areas such as agriculture, animal husbandry, health and sanitation, nutrition, reproductive and child health and digital literacy. Many training and awareness programmes to enhance the knowledge and capacity of the village women, men and children

are conducted regularly. We have a considerable livestock population, so veterinary programmes are conducted during summer and the rainy season. The Plant Clinic programme is literally a god-sent. It helps the farmers to get immediate solutions for their crop issues. Based on knowledge and understanding, the farmers carry out their farming operation. They avoid unnecessary usage of chemicals to the field. They are aware of the damage it causes to living beings and the environment.

The VKC has encouraged women to learn to use the computer. The Knowledge Worker being a woman from their own village, women and elders feel free to access VKC's services. Women are able to manage their farms without help from men. Men in most households work outside the village.



I learnt about the Village Knowledge Centre (VKC) programme of the VRC and its role in the socio-economic development of the villages through knowledge empowerment. After I was elected as the Village Panchayat President, I took the opportunity to set up a VKC in our Onangudi village.

Professor Aiyya visited our village once. The whole village was in a festive mood. Professor interacted with farm women, men and children. He listened to their issues and problems patiently. The village was fortunate to have had him set foot in it. He encouraged the young to take up leadership roles and contribute to the social and economic well-being of the humanity. I was inspired by him. The VRC provides leadership training to our young women and men. The VRC also organises Bala Sabhas to children.

In 2007, I was made a National Virtual Academy Fellow (NVA-Fellow) in recognition of my commitment to grassroots governance, education and community development. My efforts in promoting water and sanitation, including construction of toilets in individual households and achieving open defecation-free (ODF) status for my village, have been well recognised.

I was awarded the Nirmal Gram Puraskar by the Government of India, presented by the Hon'ble President of India.

I am very fortunate to be part of the Professor's Birth Centenary Conference. I sincerely hope that his work through the Foundation will continue to inspire the coming generation to contribute to biodiversity conservation and sustainable rural development.

In 2007, I was made a National Virtual Academy Fellow (NVA-Fellow) in recognition of my commitment to grassroots governance, education and community development.





Mr V Kamarasu S

AGE:

56 Years

EDUCATION:

Class 10

VILLAGE:

Karambakkadu

DISTRICT:

Pudukottai

Mr V Kamarasu S

15

I am Kamarasu aged 56 years. I have studied up to Class 10 and am a farmer. I am also a National Virtual Academy (NVA) Fellow, hailing from Karambakkadu, a rain-fed area in Pudukkottai district. My journey with the MSSRF started in 2000. MSSRF made me aware of the importance of biodiversity conservation and sustainable agricultural practices. I began to participate in the programmes/trainings related to sustainable agriculture, biodiversity conservation, climate change, global warming, poverty alleviation, food security and so on, organised by the MSSRF. I can proudly say that I am a seed grown in the *naatrangal* (seedbed) created by the MSSRF. If today, I am able to practice and

create awareness about sustainable agricultural practices not only in my village but in many more villages in different Panchayats, it is because of MSSRF. I have been greatly inspired by Professor M S Swaminathan; I was fortunate to participate in his 85th birth day celebrations. The concept of sustainable agriculture promoted by Professor inspired me significantly. I admire him and continue to hold him in high esteem. Many had misconception about the effects of Green Revolution; I felt I should create awareness as to what brought



about Green Revolution and why it was necessary at that period of time. I understood the value and the necessity of biodiversity conservation. So, with the help of MSSRF, as a progressive farmer, I conduct classes creating awareness about conserving plant genetic resources and protecting and managing sacred groves to students and, importantly, to 498 Village Panchayat Presidents.

I have given training in sustainable

agricultural practices to 750 farmers and I can confidently say that approximately 150 farmers are adopting the same and also share the information with others as well; it is encouraging. Access to knowledge and technology is available. The biggest hurdle is marketing. It is a problem faced by the farmers. It would help if they are given training in grading their products such as *milagu* (pepper) and *jaadi kai* (nutmeg), which would help them in marketing their products in a

better way.

I have had several opportunities to interact with Professor M S Swaminathan during biodiversity training programmes and other events held in MSSRF. He was kind and friendly who thought about the well-being of the coastal and agricultural communities. To be in New Delhi during the Birth Centenary Conference was something special for me. This visit provided the opportunity to interact with ICAR students and to know about the major activities of IARI. By talking to people and listening to the various speakers, I came to know a lot more about our dear Professor.



I have given training in sustainable agricultural practices to 750 farmers and I can confidently say that approximately 150 farmers are adopting the same and also share the information with others as well; it is encouraging.





Ms Vasumathi

AGE:
43 Years

EDUCATION:
BCA

VILLAGE:
Punalvassal

DISTRICT:
Thanjavur

Ms Vasumathi

16

My name is Vasumathi aged 43 years. I am resident of the village Punalvassal in Thanjavur district. I was born in a traditional agricultural family and have a BCA degree. My family owns 10 acres of land.

I am proud to belong to a district where our Professor, who was later awarded the Bharat Ratna, was born. I was fortunate to be part of the Birth Centenary Conference held at New Delhi. It was a proud and memorable moment for us when the Prime Minister of our country released a coin and stamp honouring Professor. Many speakers spoke on 'Bio-happiness'. We also understood the importance of that concept. Many stalls displayed only organic and eco-friendly products.

These are signs of people gradually changing to sustainable farming and which in turn will ensure Bio-happiness.

My association with MSSRF dates back to more than 20 years when I joined as a student of the MUPP (Microsoft Unlimited Potential Programme) course. Training in basic computer skills provided me with opportunity to be selected as a Knowledge Worker of the Village Knowledge Centre (VKC) of MSSRF in our village. Teaching and training children, college/school



children and adults in basic skills in computer gave me immense happiness and satisfaction. I trained nearly 300 female students from in and around our village. This programme changed many youngsters' lives. Some women are employed in banks, co-operative societies and private institutions. Some of them were motivated to pursue their education related to computers. In recognition of this service and helping farmers in providing agricultural and livestock information, I was facilitated as an NVA Fellow (Jamsetji Tata National Virtual Academy) in a

function held at Mumbai.

I was inspired to start a computer centre in a nearby town; along with it, I run a tailoring unit and a herbal sales unit. This has been possible only because of the guidance and motivation of the Village Resource Centre of MSSRF in Thiruvaiyaru. From an ordinary village girl, I gained computer skills and became a Knowledge Worker of the VKC and then became an NVA Fellow and now I have started a computer centre on my own.

Another significant aspect in my life is getting training as a Plant Doctor. If computer skills provided me the opportunity to work with children and students, this has enabled me to share up-to-date agricultural information with and encourage the community to adopt sustainable agricultural practices. Initially, I used to find it difficult to mobilise and convince farmers to make use of the plant clinic's services. Today, we do not have to call them; whenever plant clinic sessions are held in our village, we can see farm women and men waiting with their plant samples. I am happy to share with you that participating in plant clinic sessions has inspired many women to involve in farming activities more confidently. This is because we get immediate solution to handle issues regarding our crops. Up-to-date knowledge on new technologies and timely crop advisories help farm women and men to improve crop yield with reduced



The role of VRC in Thiruvaiyaru has been crucial to the livelihoods of farmers. There are approximately 90 villages utilising the services of the VRC. One can see many farmers daily visiting the VRC for crop advisories.



production expenditure. WhatsApp classes have been conducted to a group of farmers by the VRC. The lessons were on rice cultivation. As part of the course, a question-and-answer session was conducted. It was a very useful course. We (the participants) were given a certificate at the end of the course. It is my (and also others') request that similar WhatsApp group sessions for different crops are arranged periodically.

MSSRF is not only concerned about our food security; it gives equal importance to nutrition security. Recently, MSSRF organised nutrition classes to NVA Fellows. We found these sessions to be useful. Simple but effective tips were given on nutrition. We have come to know that consuming groundnut is equivalent to consuming *badam* (almonds). Other aspects, such as utilisation of cooking oil and how many biscuits we can have

in a day, were also covered. We share this information with our neighbours and relatives. The participants of this programme were given certificates.

We have a request to the MSSRF. Agriculture is the major economic activity of this region. The role of VRC in Thiruvaiyaru has been crucial to the livelihoods of farmers. There are approximately 90 villages utilising the services of the VRC. One can see many farmers daily visiting the VRC for crop advisories. The presence of a dedicated agricultural scientist at this VRC would significantly boost its effectiveness.

It has been a great honour for me and other farmers to participate in the Birth Centenary Conference of Aiyya (Professor M S Swaminathan) at New Delhi. I got to interact with farmers from other parts of Tamil Nadu.

Farm women and men were given the opportunity to present their activities and perspectives about Bio-happiness. I was very happy to see many stalls with organic and herbal products during the conference. Field visit was organised for us. It was useful.





Ms Nithya

AGE:
38 Years

EDUCATION:
BA

VILLAGE:
Vilangudi

DISTRICT:
Thanjavur

Ms Nithya

17

I am Nithya, aged 38 years. I am a B A graduate with a diploma in teachers training. I reside in Vilangudi village, Thanjavur district. We are traditionally agriculturalists. My husband is a retired military person.

I am an active member of the Village Management Committee (VMC) of the Village Knowledge Centre (VKC) functioning in the village. I appreciate the services of VKC, particularly the Plant Clinic. After my father-in-law passed away 7 years ago, I took over the responsibility of taking care of our 10 acres of land. My husband does not have interest in agriculture. I was totally new to farming but was determined to manage the agricultural operations. Today I am a confident woman and

reaping a better harvest than my father-in-law ever got (*en mamananarai vida naan niraya magasool edukkiren*). He used to get 35 bags of paddy in an acre, but now I am producing 40–45 bags. Credit goes to the *payir maruthuva mugam* (Plant Clinic) organised by MSSRF. I started participating in the Clinic sessions sometime during 2017. My input expenses are very low now. I do not go by the advice of the input dealer.

I carry out my agricultural operations as per the guidance of the Plant Doctor. Based on the knowledge I



gained through my interaction with the Plant Doctor, I can identify the symptoms of *pugaiyan noi* (brown plant hopper), *kuruthu poochi* (stem borer) and *ilai pen* (thrips). Though I know the prescription to treat kuruthu poochi and ilai pen, I would take the advice of the Plant Doctor. In case a plant clinic session is not on when I encounter a problem in my crop, I would take a photo of it and post it in the WhatsApp group; I would immediately get the necessary recommendation. I have come to realise that zinc sulphate is essential for crop growth; it is

something like mother's milk. Earlier I was not aware of the necessity for applying it. It is particularly important for *kalar vayal* (alkaline soil).

I am thankful to the VKC and the VRC for audio-conferencing Plant Clinics during the COVID-19 pandemic. Since the majority of the households in the village are engaged in agriculture for their livelihood, the services of the Plant Clinic are always sought by the farmers. It is helping them to adopt sustainable agricultural practices without incurring much expenditure. I

acknowledge the support extended by my neighbour in farming activities.

I share the information with my fellow women and men farmers and encourage small and marginal farmers to participate in the Plant Clinic sessions because I am benefitting a lot by it. It is my view that small and marginal farmers need the help and guidance of the Plant Clinic; now many have started going to the Clinics. The number of farmers attending the Plant Clinic has increased in the last 7 years because they have experienced its usefulness and benefits. It has become popular programme in and around Vilangudi. I wish the entire village use the services of the plant clinic. *siru/kuru vivasayigal vara yosikkirargal; avargalaiyum varavazhaikkanum* (small and marginal farmers hesitate; they should be encouraged (to avail the Plant clinic's services)).



The number of farmers attending the Plant Clinic has increased in the last 7 years because they have experienced its usefulness and benefits. It has become popular programme in and around Vilangudi.

The village community also should support and cooperate with the VKC in organising meetings and in other activities. Ms Devika, the Knowledge Worker, is always available for any help or guidance. She can also be contacted over the phone. I have great regard for the Knowledge Worker and value her contribution for making the services of VKC available continuously.

Observing my interest and enthusiasm in adopting sustainable agricultural practices and helping the VKC in mobilising people for a programme and sharing information with fellow farmers, I have been made one of the VMC members.

I was delighted to be present along with great scientists when a stamp and Rs 100 coin were released in honour of Professor Aiyya by the Prime Minister of India. That evening, the play enacted by the agricultural students

on the life of Aiyya gave us goose bumps. I was happy to be part of the cultural programme at the MSS@100 conference and happy to have danced the *gummi* (traditional Tamil dance performed by a group of women during festivals).

Our field visit on the following day was useful. Being a rice farmer, I found information on rice helpful. We saw nurseries of different crops. We were also informed about nursery care and management. We were told how a nursery can be raised by using water economically and how it can be protected from pest and disease attack.

When I watched women farmers and fisherwomen speaking on the stage, I felt proud of them and it enhanced my self-confidence. It motivated us to do farming in sustainable manner. I, on behalf of the farming community, request the MSSRF to continue to

support us. We seek the support of MSSRF because these days, agriculture is viewed economically unviable; climate and weather conditions worsen the situation. In this context, it is crucial that institutions like MSSRF support and guide us in our farming activities.





Mr Maniyan

AGE:
63 Years

EDUCATION:
Class 8

VILLAGE:
Punavasal

DISTRICT:
Thanjavur

Mr Maniyan

18

I am Maniyan aged 63 years. I hail from Keela Punavasal in Thanjavur district in Tamil Nadu. I studied up to class 8. My father was a small farmer with 3–4 acres of land and a few cattle. I do not own any land. But I am interested in agriculture. I have taken 35 cents of agricultural land on lease, and have been working for a landowner for nearly 34 years, also maintaining 15 acres of the latter's land. I promote innovative agricultural practices among the farmers in our area. I motivate them to go in for alternative crops, and advise them on it depending on the soil characteristics and water availability. I constantly update myself with latest agricultural developments and share the same with others as well. I believe that one should integrate the

latest technology with the traditional practices of the field to ensure optimum results.

Officials from the Agricultural Department always approach me whenever new technology or crops are introduced to talk to farmers about it. I have attended more than seven Farm Schools virtually conducted by All India Radio, and have been awarded certificates for the same. I have also participated in a number of training programmes conducted by the Tamil Nadu Agricultural University and the



Agricultural Department, NABARD and MSSRF covering topics such as organic farming, water management, vermicomposting and herbal medicines. I was a coordinator of Farmers Field School programme conducted by Department of Agriculture and have been a convener of Farmers Discussion Group of the Farmers Training Centre since 1984, from which I gained exposure to new ideas.

I read a lot on agriculture and related subjects, and I share the knowledge with others. Villagers approach me to

clarify their doubts. For instance, in the case of any pest attack or disease, people consult me to suggest remedies for them. I derive immense satisfaction and fulfilment by helping everyone. I help maintain paperwork related to training programmes and training modules in the Village Resource Centre (VRC) of MSSRF, Thiruvaiyaru. This way, other farmers who visit the Centre would have access to the material and benefit through them. I am a frequent visitor at the VRC in Thiruvaiyaru. I help the staff of MSSRF to meet different farmers and organise

programmes in the villages.

I feel it is good for farmers to change their cultivation practices according to the situation. It is important to adopt organic methods of cultivation to the extent possible and also endeavour to protect the environment. Fifty or 60 years ago, there was a need to adopt high-yield varieties that demanded application of chemical fertilisers and pesticides. This was because the country's food security was at stake. There was also the imminent danger of widespread starvation in the country. The continued use of chemicals has depleted the soil health and the environment. But the position today is totally different. Today, we can gradually eliminate the use of chemical fertilisers and avoid the dangers of rapid depletion of soil nutrition and gradually change over to organic farming methods.



I strongly feel that subsidies should be discouraged, and self-reliance ought to be the goal. However, I know that most people will not share my views on subsidies.



According to me, lack of education and knowledge are major hurdles in the way of development. I believe I was able to expand my knowledge base by listening to the radio ever since childhood. I was a keen listener of programmes that focused on farming and social issues: “*Enn arivu valartchikku karanam Vanoli*” (the radio was responsible for the increase of my knowledge).

I strongly feel that subsidies should be discouraged, and self-reliance ought to be the goal. However, I know that most people will not share my views on subsidies.

I am a NVA Fellow (since 2005); it was a great honour for me to get such an award from our country’s First Citizen. This has not only improved my self-image but has also given me the impetus to rededicate myself to the service of the society. This award has

enhanced my status among friends and villagers. I was quite aware of the ‘ten commandments’ of the Honourable President of India even before I received the NVA Fellow Award. I made great efforts to convince others to donate for the cause of education of poor children. My own campaign has also helped my son in pursuing higher studies in a college through the sponsorship of a well-wisher.

It was a pride moment to be present in the Conference along with international scientists. Various sessions during the Conference enlightened me more and more about Professor’s contributions to the food security of India and biodiversity conservation.

The discussion among farmers on the concept of Bio-happiness was interesting and enlightening. Farm visit organised on 8 August by MSSRF was very useful. I learnt about

a Basmati rice variety 12, which is tolerant to weedicides.





Ms Kalaivani Rajendiran

AGE:
59 Years

EDUCATION:
Class 10

VILLAGE:
Pasupathikovil

DISTRICT:
Thanjavur

Ms Kalaivani Rajendiran 19

I am Kalaivani Rajendran, aged 59 years. I was born, brought up and married in Kallar Pasupathikovil village, Thanjavur District, Tamil Nadu. I belong to a traditional agricultural family, and my husband is also from a similar background. I have studied up to class 10. Like any other woman from small farmer household, I have been of great help to my husband in farming activities without knowing much about the latest developments in the agricultural sector. Our family had been farming mostly using traditional methods till 1992. It was during this year that I had an opportunity to participate in a training programme conducted by Tamil Nadu Women in Agriculture (TANWA), a project funded by DANIDA for the benefit

of small and marginal farmwomen. Since then, a gradual but steady change occurred in my outlook about agriculture. I learnt about seed treatment and other low/no cost technologies, which we adopted in our farm.

By participating in training programmes conducted by the Department of Agriculture, Tamil Nadu Agricultural University and NGOs such as Chutru Suzhal Iyal Ayyu Maiyam (Centre for Ecology and Research, a Non-Governmental



Organisation) and, most importantly, MSSRF (since 2006), I have been encouraged to follow innovative practices. I generally first look into the economic viability and evaluate the benefits before adopting any new crops or practices. I demonstrated the value of the concept of 'lab to land' and its importance in our field. I introduced new varieties of rice like Aduthurai 43, IR 50, Ponni, Vellai Ponni and ADTRH1 in our field. I am happy to share with you that I pioneered the System of Rice Intensification (SRI) in my village. It is economical

in terms of seed, water, labour and input applications, and there is increase in yield. Other farmers have been encouraged to adopt the same.

I have been motivated to adopt organic cultivation since 1994, when Chutru Suzhal Iyal Ayvu Maiyam conducted a Farmer's Field School. I was aware that there should not be a sudden shift from inorganic to organic farming: rather, it should be a gradual process. We have been motivated to use vermicompost, coir pith and green leaf manure and also apply biofertilisers

such as *Phosphobacteria*, *Azospirillum* and *Pseudomonas*, a biofungicide and use *Amirtha Karaisal*, a plant growth stimulator. I share the knowledge with others during self-help group (SHG) meetings. I have been the convener of the Farmers Discussion Group of the Farmers Training Centre. I am a contact farmer. My husband and I help the State and Central governments in promoting or implementing their schemes (e.g., Agricultural Technology Management Agency (ATMA) Scheme). My husband has been a great support throughout.



It was a proud moment for me when Professor M S Swaminathan identified me for setting up a Farm School. I am happy to share with you that the Farm School is functioning very well in our village in the place provided by our family; this facility is used for conducting training/awareness programmes by MSSRF and the line departments.

Being an ordinary village woman, I did not expect to receive an award (L.M Patel National Award) from a scientist. When I received the NVA Fellow Award, it was really a proud moment to receive it from the Honourable President of India. It was an unforgettable moment for me. Having been inspired by the 10

points given by the then President of India for the development of the society, I advise youngsters and also the elders who indulge in gambling and consuming arrack to desist from such harmful habits. I, along with few other farmers, took initiative in setting up VKC in our village because we felt that the VKC would help farmers to adopt sustainable agricultural practices and also help in their children's education. I have also received few more awards—from TNAU for SRI Method of Cultivation (2004) and the third prize from Anaithu Manila Uzhavar Manram.

My interest and involvement in practicing agriculture in the organic way got a further boost from my association with MSSRF. Our village was identified for setting up a Farm School with financial support of the Indian Overseas Bank. It was a proud moment for me when Professor M S Swaminathan identified me for setting

up a Farm School. I am happy to share with you that the Farm School is functioning very well in our village in the place provided by our family; this facility is used for conducting training/awareness programmes by MSSRF and the line departments.

The VRC conducts regularly Plant Clinics (at various stages of field operation) in the villages, which provide access to the farmers to get crop advisories. I was trained as a Plant Doctor. It gives me satisfaction to help the farmers. Most of the farmers do not depend on the input dealer these days and thus they avoid the indiscriminate use of inputs. This not only helps increase the yield but also cuts down the expenditure. The VRC also conducts phone-in programmes and audio/video conferences enabling interaction with agricultural /veterinary experts and get necessary guidance and advisories related to crop or livestock

issues.

When I go for any training programme, I take my group members and other women from my village. During the meetings, I reiterate that if they learn about 10 new methods, they must experiment and adopt at least one of them. Initially, the sceptical villagers ridiculed me when I went for trainings and meetings. They have gradually



come to realise the purpose of attending such trainings and the value of information and knowledge. Today, the village women take part in the training programmes or camps in large numbers. Even the men seek my advice if they have any doubts regarding the crops and I recommend the right treatment. If I am confident, I provide the necessary advisories; otherwise, I consult the VRC and help the farmer with proper details. I realised that people do not make the effort to purchase Azospirillum and Rhizobium from the market; so I procure these for them on their behalf; such gestures go a long way in motivating them to adopt innovative practices.

The VRC draws both women and men farmers, including youngsters, from 70 villages in and around Thiruvaiyaru. The staff patiently listen to the farmers' crop problems and, after examining the sample crop, provide

them suitable advisory. So, I request MSSRF on behalf of the farmers from Thiruvaiyaru to appoint an agricultural scientist to help and improve the livelihoods of Delta farm women and men.

I was very happy to be present and participate during the M S Swaminathan Centenary International Conference held during 7–9 August in New Delhi. This was my second visit to New Delhi, and I am happy to mention that the meeting was held in the same auditorium where I received the NVA Fellow award from Honourable President of India, Dr Abdul Kalam Aiyya in the presence of our beloved Professor M.S. Swaminathan. I am eternally indebted to him for the concern and care he had shown to me and to the farming community as a whole for their well-being.





Mr Kannan

AGE:
58 Years

EDUCATION:
BA

VILLAGE:
Nedumozhiyur

DISTRICT:
Villupuram

Mr Kannan

20

I, Kannan aged 58 years, hail from Nedumozhiyur Village. I have done my B.A. degree in economics. I am a farmer. I came into contact with MSSRF 1 year ago. The organisation forms farmer groups to promote sustainable agriculture and improve farmers' income. I help them in mobilising people to form groups. The group members have access to credit facility. MSSRF provides loans during *Karthigai pattam* (season) to buy seeds and carryout ploughing. Awareness and training on bio-inputs are provided to manage and control pests/diseases.

Another significant intervention is the Plant Clinic where farmers have easy access to crop advisories from a trained person called the Plant Doctor and

other agricultural experts. Farmers can go to the Clinic with the affected plant for diagnosis and advice. Farmers are explained in detail how to identify the problem in the initial stage itself and how it can be managed with minimum expenditure. I could not control thripp and fungal attack on my *mara velli kizhangu* (sweet potato; a tuber crop) with chemical application. However, the problem was solved with advisory from the Plant Clinic.

MSSRF gives a lot of importance for the socio-economic development of



women. Women are encouraged in seed production. The seeds are bought by the FPO. When women participate in such activities, it is of great support to men of the household.

There are 400 households in our village. Farmer groups are formed consisting of 20 members. Members of the group come to know about the uses and application of bio-inputs, new agricultural technologies as well as the available schemes and subsidies. I can confidently say that now there is awareness about the utility of bio-inputs in improving the yield, reducing the expenses and safeguarding

the environment. Approximately 40 farmers have begun to use bio-inputs. They will be role models for others soon.

I am *preparing punnakku* karaisal (groundnut cake solution) and *poochi viratti* (bio pest repellent). I realise that my expenses have come down, and there are some indirect benefits (protecting and promoting soil health and safe guarding environment) of using bio-inputs. I sincerely believe that farmers in our village would adopt sustainable agricultural practices by minimising the use of chemicals.



MSSRF gives a lot of importance for the socio-economic development of women. Women are encouraged in seed production. The seeds are bought by the FPO. When women participate in such activities, it is of great support to men of the household.





Ms Malar

AGE:
44 Years

EDUCATION:
Class 12

VILLAGE:
Sozhiya Sorkulam

DISTRICT:
Villupuram

Ms Malar

21

I am Malar aged 44 years. I reside in Sozhiya Sorkulam, a village in Tamil Nadu. I have studied up to Class 12. I am a single woman. I own 5 acres of land. My brother was a great support to me in cultivating the land but he passed away 2 years ago. I cultivate paddy and groundnut as well as flowers such as *saamandhi* (chrysanthemum) and white *sampangi* (tuberose/champank); selling flowers in market provides daily income.

Water in most of the wells in our area was not sufficient to irrigate the entire land owned by the respective households even during main cropping season, i.e., *Karthigai* (October–November) *pattam* (season). One can see the bottom of the well soon after

irrigating the land 2–3 times a day. We had to wait till the ground water got recharged. The condition used to be worse particularly when the well is shared by two or three households. The land could not be irrigated evenly, which affected the crop yield. Patches of land were left without water, and this water crisis impacted the livelihood of the farmers. Almost all the open wells were in a dilapidated condition.

Under these circumstances, a credit of Rs.80,000 from MSSRF encouraged many farmer households (Members of



Farmer Producer Company supported by MSSRF) to deepen their wells and also construct inner walls to prevent soil from sliding in.

I am one of the woman farmers who could deepen the well (from 13 feet to 19 feet) and construct side walls using the loan of Rs 90,000/- through MSSRF and Rs. 2,50,000 borrowed from outside. The credit facility as well as motivation from the MSSRF gave us the confidence to borrow additional funds needed to construct the sidewalls. Continuous monitoring

of MSSRF played a very significant role in deepening and rejuvenating the open wells.

After my brother's demise, I have been managing agricultural activities single-handedly. Well with more than sufficient water for irrigation is a source of strength for a single woman like me. It is a great blessing for me and others. Previously, when there was insufficient water in the well my brother used to arrange water from others. There is no problem now as regards water for irrigating the lands



The credit facility as well as motivation from the MSSRF gave us the confidence to borrow additional funds needed to construct the sidewalls. Continuous monitoring of MSSRF played a very significant role in deepening and rejuvenating the open wells.

(mundi annan poi ketpar. Ippa naan thaniyaga iruppadhal thannerukeku poi nirka vendiyadillai; ippa andha prichanai illai). Previously, I had to spend up to Rs.15,000 for pumping water (for rice crop) at a rate of Rs.100 per hour.

My land was left fallow in the past. Now all round the year well water is available. So, crops can be cultivated in both seasons. Previously, during summer the land used to be left unused. Even if there is no rain, now I can cultivate paddy in 2 acres and other crops like *ulundu* (black gram), *kaaramani* cowpea and groundnut in the remaining 3 acres. There has been a significant yield increase in rice and *ulundu*; from 1 acre I am able to harvest 25 (75 kg per bag) bags of paddy now, which is an yield increase of 7 bags. Previously, we could harvest 18 bags provided there were sufficient rains, sometimes supplemented by well water. Similarly, from 2 acres I harvest 18 bags

100 kgs per bag) of *ulundu* now; earlier, during water scarcity, it used to be 3–4 bags. During *Adi* (July–August) *pattam*, I do not cultivate any crop because I do not have any support. However, with water available in the well, I help other needy farmers.

My frequent visits to the FPC and contact with MSSRF have widened my knowledge about *farming*. *I practice rotation of crops. Our farm women are benefitting a lot through the contact with and help from the FPC and MSSRF. Most of us have become aware of the importance of soil testing and application of inputs at right time and in the right proportion. With the guidance from MSSRF/FPO, I select suitable seed varieties (based on the soil type) such as black gram and groundnut. I do proper seed treatment (vidai nethi) to ensure good harvest.*

I feel cultivating sugar cane and savukku (casuarina) in my field in

future would be better than rice. Rice crop is very labour-intensive and I am not in a position to mobilise it. Sugar cane requires labour only at the time of harvest. Sugar mill offers advance payment also. I am planning to cultivate rice only for home consumption and short-duration variety of savukku in my irrigated land.

We are grateful to the FPC and MSSRF for guiding us in our day-to-day farming activities and improving our livelihood. It was a great honour for us to participate in Professor M S Swaminathan's Birth Centenary Conference held at Delhi. It was encouraging to see farm women and men sharing the dais along with scientist and great people. We had our FPC products displayed in one of the stalls set up in the Conference Hall.



TN



Ms Rukmani

AGE:

50 Years

EDUCATION:

Class 8

VILLAGE:

Nallavur

DISTRICT:

Villupuram

Ms Rukmani

22

I am Rukmani aged 50 years. I live in Nallavur Village, Villupuram district, Tamil Nadu. I had education up to Class 8. We are primarily agriculturalists.

Our village comes under Mylam Block of Villupuram district. It is a drought-prone area; the farming community faces challenges due to water scarcity. Our irrigation traditionally depended on rain water, small ponds and lakes; other sources of irrigation are open wells. However, most of the wells used to dry up and were in a dilapidated condition.

Many villagers wished to deepen the wells to store more rainwater, but they could not do so because of financial

constraints and lack of access to credit. There was no motivation or required support to undertake deepening of wells; so, no efforts had been taken to convert our desire into reality. We were resigned to the fact that it was something beyond our capacity.

Our yearning to rejuvenate our wells, which had remained at the thought level, came to reality when MSSRF through our FPC (Nallavur Farmer Producer Company) implemented a project (2017–1018) that provided access to credit of Rs.80,000 to women



shareholders or members of the FPC, to deepen the wells. Fortifying the side walls of the well to prevent caving in of soil was also to be done.

Most of us knew that we had to organise additional funds for constructing the side walls. We were confident that we would be able to repay the loan taken from MSSRF and also from others. Availability of water means more land can be brought under cultivation and multiple crops can

be grown in both the seasons, which would enable us to repay the debts.

Open dried wells were revived; it recharged the wells and raised the ground water level. This brought more land under cultivation. In addition to the credit facility, MSSRF's technical inputs and guidance helped significantly in rejuvenating the wells. MSSRF staff visited the sites often and monitored the progress of work.

“Availability of water means more land can be brought under cultivation and multiple crops can be grown in both the seasons, which would enable us to repay the debts.”

Now there is sufficient water in the wells to enable irrigation in both the seasons. We used to pay Rs. 100/- per hour to irrigate our land (minimum 5 hours per day). It used to cost Rs.4,500 to irrigate the 3-month duration rice crop. Now our well has sufficient water after deepening from seven *gajam* (yards) to 14 *gajam*. We could repay the loan, at least a major portion of it, within 3 years.

During the rainy season, dependence on well water is less. So, the water in the well is saved and there will be ample supply of water for the following seasons. We are very confident that our wells would not get dried up easily now. During the *Karthigai* (October–November) *pattam*, we would use rain water to irrigate the land and can save well water to cultivate the summer or *Adi* (July–August) *pattam* crops.



With the guidance and support of MSSRF/FPC, most of the households are adopting sustainable agricultural practices. Usage of bio-inputs is encouraged; they organise training programmes and update us with the latest technologies. Conducting Plant Clinics in our villages is helping the farmers, particularly women, to have access to expert advice and recommendation to handle crop issues. We have learnt to use inputs in proper proportion and at the right stage of the crop growth. We have learnt to adopt *orrai narru murai* (single seedling method—a system of rice intensification).

Most of the group members had taken loan from a Joint Liability Group (JLG) on more than two or three occasions facilitated by MSSRF before we got the loan for deepening the well. The loan amount was usually utilised to meet our household/agricultural expenses,

repair the house and so on. None of the households thought of using the loan amount to deepen the wells. We were apprehensive of our capacity to borrow and repay the amount. When we were provided with the opportunity in the form of a loan of Rs.80,000 specifically to rejuvenate our open wells, many of us were encouraged to avail it. Water availability in the well (subsequent to deepening) gave us confidence to undertake and complete the construction of sidewalls as well.

Water availability in our wells, coupled with the households' hard work—particularly the women's labour in our fields, has brought about a remarkable improvement in our socio-economic status. We are educating our children without much financial strain. We are able to redeem our pledged jewels in a timely manner. Some of us have bought a few new pieces of jewellery.



Ms Valarmathi

AGE:

40 Years

EDUCATION:

Class 10

VILLAGE:

Mudasal Odai

DISTRICT:

Cuddalore

Ms Valarmathi

23

I am Valarmathi, aged 40 years. I have studied up to Class 10. I come from Mudasal Odai, a fishing village, Cuddalore district. I am one of the fisher women who has benefitted a lot from MSSRF intervention. When my husband passed away in 2019, I felt utterly helpless as to how I was going to lead a life with my two children. I faced a lot of difficulties.

Fortunately, I came into contact with the MSSRF in 2020. Now I am in a much better position economically. I feel confident that I can bring up my children comfortably with the income I am earning by selling dry fish and value-added fish products. I am happy to share with you that our products have gone beyond Tamil

Nadu, as far as Hyderabad. All this has been possible because of MSSRF's intervention in our village.

Fisherwomen were mobilised and formed into groups. For every group of five women, a pushcart and a fishing net have been provided. Pushcart saves our energy and time; otherwise, we had to walk quite a distance from sea to the land area carrying headloads of fish. We were given training on hygienic handling of fish, in which awareness about the importance of hygiene in fish processing was explained to us.



Based on their guidance, we are selling dry fish processed under hygienic condition.

I am getting a reasonable income from selling dry fish and fish products such as fish/prawn pickle. I manage my household expenses without borrowing from others. Also, I am able to educate my daughter (16 years) studying in Class 10 and son (aged 18 years) studying in a college. We live in a thatched house which requires maintenance; I am able to manage the maintenance expenses. MSSRF's *vazhikaattudal moolam varumanam perugiyulladhu* (through the support and guidance of MSSRF my household income has improved).

It would help us if our market expands. Though our products have gone beyond Tamil Nadu, we find it difficult to market in our area. People think it is expensive; they compare the rate with

the dry fish processed under sunlight in the open air. Also, our fellow women dry-fish vendors object to our sales. We tried to sell our product to the visitors in a nearby picnic spot (mangrove forest) and sale was encouraging. Again, we faced opposition from the local fish vendors; they objected to our presence there. We seek the support of MSSRF in arranging credit facility from banks or from AD Fisheries. We generally get fish on credit from the fishers; however, during lean season, the boat owners expect ready cash, which we may not be in a position to do. Under such circumstances, if we have access to a short-term loan (which we can repay in instalments), we can do our business without stress. We need to strengthen our skills in fish production through more training programmes and knowledge empowerment.

I never imagined I will get an opportunity to visit New Delhi. It was

a great honour given to farmers and fishers. We had our dry fish products displayed in one of the stalls set up in the conference venue. We interacted with the other participants who came from different parts of Tamil Nadu. We enjoyed the evening cultural programmes, particularly the skit on Professor.

Fisherwomen were mobilised and formed into groups. For every group of five women, a pushcart and a fishing net have been provided.



Ms Sharmila

AGE:
40 Years

EDUCATION:
Class 12

VILLAGE:
Vanagiri

DISTRICT:
Seerkazhi

Ms Sharmila

24

I am Sharmila aged 40 years. I hail from the fishing village Vanagiri in Seerkazhi district. I have studied up to Class 12. Like every other fisher woman in our society, I was confined mostly to our village, helping the household by selling fish in the local market. A turning point came in my life and to the entire village as well when MSSRF organised the World Fishers Day (2019) 6 years ago, in which Dr S Noorjahan Beevi (Additional Director of Fisheries and Fishermen Welfare) was the Chief Guest.

The visit of Dr Noorjahan was significant for our village. Responding to the fishers' request (facilitated and supported by Dr. S Velvizhi from MSSRF), she helped us establish a gas

station in the village, which relieved the fishermen from stress and tension. Previously, fishermen had to travel to Tarangambadi, 20 km from our village, to buy diesel, or rely on vendors selling diesel at considerably higher rates than the Gas Station. Incidentally, it has also significantly reduced the number of road accidents involving our men. In their hurry to start fishing operations in time, they used to speed on their bikes to get diesel. Thanks to MSSRF, we could address the critical need of the fishers through Tamil Nadu State Apex Fisheries Co-operative Federation



Limited (TAFCOFED). Through TAFCOFED, a harbour is also coming up, of which 60% work is completed.

Along with fishermen, fisherwomen were invited to participate in the World Fishers Day. That was the first time I (along with some women) participated in a village programme. This was the first step in my socio-economic development. MSSRF did not stop with celebrating the World Fishers Day; it initiated interventions to improve the lives and livelihood of fishers, particularly women. Women were mobilised and organised into small groups. We were provided with training on hygienic handling of fish and dry fish. This intervention, and the one that followed this, changed our lives on the positive side. We were not aware of the importance of maintaining hygiene in dry fish processing; we used to sun-dry them in the open air, resulting in an unpleasant odour.

After the training, we started to process dry fish using solar dryers and store them correctly. As a result, value to the product increased. We have also been given training on value addition of fish products. I along with group members learnt to prepare *nethili thakkali thokku*, prawn pickle, *idli podi* (powder), pasta, soup and so on. We sold the product under the brand name Samudra. Observing our progress, Dr. Velvizhi from MSSRF encouraged us to form a company with the support of NFDB, Hyderabad. After undergoing a 5-day training on the details and functioning, a Farmer Producer Company (FPC) called Win Meen Federation came into being with a membership of 10 women. Presently, it consists of 200 members from five nearby fishing villages. We participated in the Food Festival India (5 days). We also participated in fairs conducted in Tanjavur and Puducherry. We had also received the First Prize from the

Puducherry fair organisers.

MSSRF did not stop with this. It identified women fish vendors and formed them into 12 groups. They were provided with a tablet computer (TAB) in 2023. The 'Fisher Women Connect Challenge' APP is downloaded for them in the TAB. The APP has details of product, market, bus timings and so on.

The GPay and Phone Pay modes of transaction help the women significantly. They do not lose money. Since the payment goes to their respective bank account, the tendency of spending all the money is reduced. It has promoted the saving habit among the women.

The APP is not only a *meenava nanban* (fisher friend); it is for the entire fishing community, MSSRF is a good friend (APP *mattum meenava nanban illai*;

Meenava samudayathirke MSSRF nanban). We look at MSSRF as our *kuraigalai ketkum, kuraigalai theerkum mandramaga paarkirom; idarku inai edhum illai; pengalai uarvana idathil vaithullanar* (a forum that listens and redresses our grievances; nothing can be compared with this organisation; it has kept women in a high place). Women used to be confined to their fishing village. They could not sit when men are present. But today we are treated on par with men; we share the platform with them. However, at the village meetings women still follow the traditional practices; they do not sit in front of men. It will change gradually.

I am proud to say that I am the Chairman of the Producer Company. I am not a graduate.

I would like to mention about a new initiative/scheme called Koottu Melanmai Thittam or Co-management.

Two villages—one small village, Madathukuppam, and a big village, Vaanagiri—have been identified to implement this scheme. I sincerely wish that this initiative, which aims at increasing the fish population without affecting fishers' livelihood, would yield the expected results and be expanded to other coastal villages.

MSSRF has done much to the well-being of the fishers, particularly women. I would be greedy if I demand or expect more. However, I am tempted to request for more capacity-building training to improve and strengthen our production of value-added products.

MSSRF has always been supportive to the fishing community. They give importance to us and give us the opportunity to share our experiences in many forums. We can never forget our New Delhi visit. Participating in such

a conference (MSS@100) with several scientists and government officials was a great honour. Farmers and fishers were encouraged to share our experiences on the stage.

Women and men from the farming and fishing communities participated in the cultural programmes; one evening was specifically assigned for us.

We look at MSSRF as our forum that listens and redresses our grievances; nothing can be compared with this organisation; it has kept women in a high place..





Mr Gunasekaran

AGE:
73 Years

DISTRICT:
Mayiladhuthurai

Mr Gunasekaran

25

My name is Gunasekaran, aged 73 years. I am a post-graduate and belong to a traditional agricultural family from Mayiladhuthurai. I have 7 acres of land. We cultivate rice, black gram and vegetables. We experienced a drought-like situation in 2015. It was during that time MSSRF visited our village and distributed vegetable seeds and promoted cattle rearing, poultry, bee keeping as well as the cultivation of Azolla, vegetables and mushroom. It was then that I had dug a small pond very near my house. MSSRF guided me to use the pond for fish farming and provided me fingerlings.

I did not think of growing fish in the pond (35 cents), but when the idea was given, I decided to take it

up. *Meen valarpen enru ninaikkavillai; adbhuvaga nadanthathu* (I did not think I will engage myself in fish farming. It happened). I am very happy about the suggestion and my decision. It has helped me to cope with the financial demands of the household. It fetched me a good profit of nearly Rs 80 lakhs with which I bought 35 cents of land. I have also been encouraged to dig another pond for fish farming.

When I do not get any income from farming, fish farming comes to my rescue. Every week I sell my fish.



This is crucial to meet our daily and weekly expenses. Ours is a big family consisting of myself, my wife, three sons and two daughters. With this earning, I educated my children. One of my daughters is a doctorate, one son has done B.Sc. agriculture and another son did PCA. My sons support and help me in land farming and fish ponds.

I mobilise people for MSSRF programmes. I have participated in five trainings on fish farming. I have grown to become a trainer myself. Nearly 15 persons have dug ponds. There were two groups, and in November, 2013 a fish FPC by name Kaveri Fish Farmer Producer Company was registered with 130 shareholders including 16 women. Two of the directors are women.

We would like to have continuous support and guidance from MSSRF. We require some small equipment such

as ice boxes, fish feed, *valai kunju* and other essential inputs. Training needs to be given to the farmers.

I would like to conclude saying that we have benefitted a lot through MSSRF. We are grateful for that.

It was a great honour to attend New Delhi conference (MSS@100). The play on Aiyya's life by the students of IARI was very good. It helped us to know more about Aiyya. I sincerely believe that Aiyya was a gift of God to all of humanity. I feel proud that this great man was from Tamil Nadu. Today, we are in a position to export food grains to other countries and the credit goes to Aiyya. He was concerned about improving the lives of rural and coastal farming and fishing communities. He followed a holistic approach; few people can think and act like that. I considered him as God because he had dedicated himself to

the welfare of all living beings.



We would like to have continuous support and guidance from MSSRF. We require some small equipment such as ice boxes, fish feed and other essential inputs. Training needs to be given to the farmers.





Mr Sankar M

AGE:
58 Years

EDUCATION:
Class 10

VILLAGE:
T. Maravakkadu

DISTRICT:
Thanjavur

Mr Sankar M

26

I am Shankar, aged 58 years. I hail from the village T. Maravakkadu and have studied up to Class 10. There are 300 households that depend on canal fishing in the mangrove forest. Canal fishing is unique to our village. Degradation of the mangrove forest previously caused difficulties for the villagers' livelihoods. The mangrove forest ecosystem is a breeding ground for fish. The degradation of the forests harmed both the environment and the livelihoods of fishers, leading to a decline in the fish population. The year 1997 was a significant one for the fisher population in this region; that was the year MSSRF came into our lives. MSSRF worked to regenerate and maintain the mangrove forest and improve the fishers' livelihoods,

including those of women. Our village is located near Muthupet where MSSRF has been actively involved in mangrove restoration work for over 25 years.

The work at our village, Thambikkottai Maravakadu, along with two other villages, is part of a larger effort to conserve and restore mangrove wetlands in Tamil Nadu. MSSRF's initiative has been on restoring mangrove ecosystems, using techniques like digging canals to re-establish tidal flow and planting mangrove saplings on either side of the canal and forming



community institutions to manage and monitor the activities. This initiative also aims to protect the coastline from tidal surges, prevent erosion and support biodiversity.

MSSRF in collaboration with Tamil Nadu Forest Department and involvement of local community restored degraded mangrove areas in more than 300 hectares by excavating canals to improve tidal flow. This helped create livelihoods for local fisher populations and protect the coastline. Our women's lives have also improved. Widowed women used to earn their living by selling firewood. They were given training in cane basket-weaving. Some others were given cattle and some were helped to set up small flower shops.

I have been an active participant of the restoration work of the canals. I mobilised the community. I am still involved with a lot of programmes to spread awareness among coastal

communities in the neighbouring regions and in conservation activities. However, I consider my contribution in digging the canals my most important work. I have received the National Award for conservation work. I also received an award called the Mangrove Man from Ulaga Thamizh Sangam, and the Water Conservation Award from Tamil Nadu Chief Minister.

I am confident that by conserving and managing the mangrove forest, employment opportunities of local population can be increased with the support of the State Forest Department. Through bio-diversity promotion, livelihood of the fishers can be ensured.

I was really fortunate to be part of the Birth Centenary celebration of Professor M S Swaminathan in the form of a conference held in New Delhi. Professor had always

been concerned about biodiversity conservation, ecological security and livelihood of fishers and farmers. It is my wish that *sadbuppu nila kedugal* (mangrove forest) should be protected and this should be brought out as a government scheme called the Waterbodies Management and Protection Scheme (*Neer nilaigal paramarippu marrum padbukappu thittam*).

“
The year 1997 was a significant one for the fisher population in this region; that was the year MSSRF came into our lives.
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Ms Christinal

AGE:
38 Years

VILLAGE:
Thangachimadam

DISTRICT:
Ramanathapuram

Ms Christinal

27

My name is Christinal and I am 38 years old. I come from the fishing village Thangachimadam in Ramanathapuram district. I came to know about the hazards of waste nets affecting the marine resources and also affecting our livelihood 2 years ago through MSSRF.

MSSRF, supported by the World Wildlife Fund (WWF), has been actively involved in addressing the problem of ghost nets in the area. Various initiatives have been implemented with the participation of the local fishing community, including women. These initiatives include awareness programmes, clean-up drives to remove existing ghost nets and training fishers in proper management

practices to reduce discarded fishing gear from entering the environment. MSSRF mobilised women's groups to participate in the ghost net waste management and production initiative. This initiative aimed at reducing the harmful effects of marine pollution while providing alternative livelihoods for fisherwomen.

MSSRF conducted training sessions for fisher women; the training provided us with the skills to transform waste nets into innovative, eco-friendly products, such as foot mats, wall hangings,



mobile phone pouches, laptop mats, wall hangings, bangles, vessel mats, pen stands and so on. Using such skills, I learnt to convert waste ghost nets into economic value products. I have also undergone training in making candles and sea shell articles.

I, along with four other women, started giving training to other women in our area and outside also. I have been appreciated as a best trainer. I earn money through conducting training sessions. For every 10 sessions, I earn Rs.5,000. This opportunity is available occasionally. I gave a speech about ghost nets and how they affect marine resources and the livelihoods of the coastal community.

I am good at making articles out of waste nets. My husband supports me and helps me in making products out of these nets. He also gives me ideas to try with new items; the idea to make

vessel mats was his.

Marketing is a problem. We have to promote our sales. Most of us do not realise that we have undertaken this initiative to prevent marine pollution. We have learnt that a net takes 700 years to degrade. Many comment that finishing is not good. However, there are a few who appreciate our initiative and encourage by purchasing our articles made out of waste nets. We hope to reach more people with our products. We should keep our spirit alive.

I feel proud that I have been given the opportunity to showcase our products made out of ghost nets during the Conference (MSS@100). I am happy I could participate in the cultural programme organised after the conference sessions.



“
I, along with four other women, started giving training to other women in our area and outside also. I have been appreciated as a best trainer. I earn money through conducting training sessions.”



Mr John Kennedy

AGE:

44 Years

VILLAGE:

Muttam

DISTRICT:

Kanyakumari

Mr John Kennedy

28

My name is John Kennedy and I am 44 years old. I come from the fishing village Muttam in Kanyakumari district. Prior to the entry of MSSRF into our village, most of us were dependent on the government for weather alerts and climate information. We were not aware of wind speeds and sea conditions. It was common those days to get caught in the sea due to heavy winds or high waves. Based on our traditional knowledge and experience, we carried on with our fishing activity. In the present climatic conditions, our traditional knowledge also fails us at times.

Thanks to MSSRF! We are all much relieved, and we venture into sea without much anxiety now. The


deployment of Wave Rider buoys in our sea waters brought us in contact with MSSRF and INCOIS. Initially, when we were told about the Wave Rider buoys, there was a lot of apprehension. We doubted the purpose of deployment and thought it might hinder our fishing activity. However, MSSRF took lot of efforts to explain the utility of the Wave Rider buoys, and we half-heartedly agreed. We soon realised its value and the vital role it plays in our lives.

We are provided with FFMA and Fishers Helpline. We can contact MSSRF through the Helpline and the staff in charge would promptly respond to our queries. Potential Fishing Zone (PFZ) information enables us to get fish without wasting time and fuel. Weather alerts, wind speed and wave height information are vital for safe fishing. We are fortunate to get these services from MSSRF/

INCOIS.

We look forward to providing our support for future interventions of the MSSRF. We are convinced that these interventions would be for the well-being of the fishing community. Thanks to MSSRF, today our women and other elders at home are confident about our safety in the sea.

“
MSSRF took lot of efforts to explain the utility of the Wave Rider buoys, and we half-heartedly agreed. We soon realised its value and the vital role it plays in our lives.
”

 We are provided with FFMA and Fishers Helpline. We can contact MSSRF through the Helpline and the staff in charge would promptly respond to our queries.





STORIES FROM PUDUCHERRY





PUDUCHERRY



Mr Arjunan J

AGE:

54 Years

EDUCATION:

Class 10

VILLAGE:

Villiyanur

DISTRICT:

Puducherry

Mr Arjunan J

29

I, Arjunan hail from Pillayarkuppam a village in Puducherry. I am 54 years old and I have studied up to Class 10. I am a farmer holding 2.5 acres of land. I cultivate traditional varieties of rice such as *Seeraka Sambha* (flavour rice) *Karauppu Kavuni* (Black rice), *Ratha Sali* (red rice) and ground nut – Grinar 4 and G7, black gram – *Vamban* 4,5 and 8. I have two cows and I also rear chicken.

My association with the MSSRF goes back to 1993. Since then I have been experiencing positive changes and developments in my livelihood ie agriculture. Our village consists of 500 households; only 80-100 households own land. Professor Swaminathan not only focused on improving

the livelihood of land holders but he also gave equal importance to landless people particularly women. Periodically, trainings are conducted on various sustainable agricultural practices and cropping methods. Women have been trained on mushroom cultivation and rope weaving and some have been provided with goat to improve their household income. Some continue to benefit from the rope weaving and mushroom cultivation training.

I am one of the most fortunate



persons to have been associated with the MSSRF for more than three decades. This association, as I have already mentioned has been a wonderful journey. This journey helped to me travel to places such as Maharashtra and Bangalore to participate in vegetable cultivation training. I am of the nature that whatever I learn new I will make it a point to try in my land first. This in a way, encourages other farming households in our village as well as neighbouring villagers to follow the same technique. It is not that I started cultivating vegetables after participating in the trainings; I have always been cultivating vegetables. I only changed the method of cultivation based on what I learnt at the training sessions. For instance, I have been inspired to cultivate tomato using trellising method. It is now more than 10 years that I have been cultivating using this method and I am experiencing better

yield.

We have been empowered with knowledge and the motivation to practice agriculture with minimum use of chemicals and avoid over usage. We understand that excess use of chemical inputs harms the crop and also the environment. Awareness on bio inputs (*Azospirillum*, *Phosphobacteria*, *Pseudomonas* and so on) azolla cultivation, inter-cropping and border cropping with sunflower and marigold (as pest control measure), importance of rotation of crops and so on was almost absent in our village. Now, most of us use bio inputs and follow other sustainable agricultural practices. I prepare bio pest repellent using leaves of neem, *adhatoda*, *nochi* (*Vitex negundo*) and green chilli, garlic, ginger and so on. I did not have knowledge on the utility of Azolla cultivation until it was introduced in our area by MSSRF. I have come to understand the role it

plays as a weed controller, moisture retainer for the soil and atmospheric nitrogen fixer.

I practice rotation of crops in my field. I leave my land fallow for the third season because the land should get some rest and we should allow it to rejuvenate. I encourage farmers in our village and surrounding villages to practice rotation of crops.

I am one of the contact farmers for the Super Farm project implemented by MSSRF in our village during 2020-21, when Covid pandemic was prevalent in India. My land was used for demonstration purpose. I could mobilise farmers and encourage them to participate in the project activities.

The project activities focused on production increase but without harming the environment. Through this project I have come to learn the



importance of role of pollinators in our agriculture production. Just as earthworm is important to the soil health, the bees are important for pollination.

The staff from the Village Resource Centre of MSSRF in Pillayar kuppam, Puducherry have been of great help and support to the farming community. They encourage me to share the knowledge with fellow farmers which I do. My fellow farmers have been motivated to use green manure and other bio inputs following my example. I guide them if they need any help. I promoted azolla cultivation by explaining its utility for the crop production and soil health. More than 80 % of farmers in our village are cultivating sun flower and marigold as border crop and inter crop because they are aware of the role they play in pest control.

Based on the guidance of MSSRF, I have taken up value-addition of locally available crops like groundnut and black gram for market. I now run a value-addition unit that extracts oil from organically grown groundnut and sesame, as well as a pulse processing centre. In all these farming and processing activities, my wife, a nurse, provides valuable assistance. With MSSRF support and guidance we cultivate our crops despite labour shortage and uncertain climatic condition.

We, the farming community, are truly indebted to our Professor Aiyya. He brought smiles to our faces and was such a simple and kind person. He would mingle with us just like an ordinary man, and we miss him dearly. It was a great honour for farmers like me to participate in the MSS@100 conference in New Delhi. This was an opportunity to meet with

fellow farmers from different parts of Tamil Nadu and other states. Our group discussion on the concept of 'biohappiness' gave us a chance to reflect deeply, and the experience was both useful and enlightening. The field visit to the IARI research and model farm was highly beneficial.





Mr Subramaniam V 30

Mr Subramaniam V

AGE:

61 Years

EDUCATION:

Diploma

VILLAGE:

Mannadipet

DISTRICT:

Puducherry

I, Subramniam belong to Sillukaripalayam, a village in Villianur Block of Puducherry. I am 61 years old and I am a diploma holder in Cooperatives. I have two sons. Agriculture is the primary occupation of our household. Entire family is interested in doing agriculture. I have a passion for organic farming, I own two acres of land. For the past 10 years I have been cultivating minor millets such as *ragi*, *thinai* (Fox tail mille) , *cumbu* (pearl millet), *varagu* (kodo millet) , *samai* (little millet) , *kudhiraivali* (banyard millet), *cholam* (maize) and so on. In another one acre of land I grow traditional varieties of rice like *Karuppu kavuni* (black rice,) , *Mappilai samba* (Bridegroom rice) , *Rattha sali* (red rice) etc., I rear cow, goat and poultry.

I have participated in many trainings organised by MSSRF and KVK. I am a National Virtual Academy (NVA) Fellow. I earned this honour from the MSSRF in 2023 for my contribution to growth of millet production and value addition. . Since then I have been given support and guidance in marketing, value addition and capacity building by the MSSRF.

I always adopt new technologies and try to grow crops organically. I motivate fellow farmers in my village as well as from other villages to cultivate



millets explaining about its nutritive value and its role in conserving biodiversity. For the past five years I have been preparing value added products from different millets. I always put up a stall in every agri Expo and promote my products. I had a shop (place provided by the Department of Agriculture) where I displayed and sold millet value added products. When we were afflicted by the covid pandemic, I had to close the shop. Presently, I undertake door to door sale of my products.

I train women to prepare millet rich food *sathumavu* (flour processed from different nutri-rich food grains) *thinai laddu*, millet *Aval* (flakes)) and encourage them to include the same in their diets.

Plant clinic sessions are conducted by the MSSRF in our village for farmers. I, personally take a lot of efforts to mobilise farmers and encourage them to make use of the facility. The plant clinic offers instant solutions for our crop problems. The farm women and men are explained about the

causes of a particular crop issue and advisory is given accordingly. When farmers understand and are convinced they follow the guidance and advice. Many are benefitting by attending this programme. Farmers have been able to reduce chemical inputs application. They are using right proportion of inputs, to a great extent possible.

I extensively, make use of Farmers Helpline of MSSRF while working at the field. Sometimes, I post affected crop images through WhatsApp. I also get audio advisories related to agriculture and allied activities.

I have received awards from Department of Agriculture and from Non-Governmental organisations for my interest and contribution for organic farming and promotion of minor millet cultivation. Like me, few more farmers in our village cultivate millets to promote



I always adopt new technologies and try to grow crops organically. I motivate fellow farmers in my village as well as from other villages to cultivate millets explaining about its nutritive value and its role in conserving biodiversity.

crop diversity and encourage people to include millets in their diet. Processing millets is difficult; we do not have a millet processing unit in our village. It is a great challenge for the farmers. We have to travel to Villupuram (more than 20 km from my village) for processing millets. We would be grateful if MSSRF or the Agricultural Department help us in setting up one processing unit in our village. This will motivate many farmers to cultivate minor millets in their fields. This will be a great tribute to Professor Iyya who advocated cultivation of minor millets to promote crop diversity and to improve food and nutrition security of people.

I was fortunate to participate in the MSS@100 conference held at New Delhi. The workshop on biohappiness kindled farmers thinking on the concept. The discussion among the farmers provided different perspective of the concept-biohappiness. More time should have been given for this

workshop.

Filed visit to the IARI model farms was very helpful to know the latest research areas and technology development. I could understand that many scientists work hard to release a variety. We visited genetics and breeding department. The scientist explained in detail about the current research component in Basumathi rice and cumbu. (pearl millet). We have collected information as well as contact details of the scientist to discuss further about our crop challenges.



PY



Dr Mohanraj

AGE:
46 Years

DISTRICT:
Puducherry

Dr Mohanraj

31

My name is Mohanraj and I am 46 years old. I come from a fishing background. It has been my wish that I should do something for the good of our community. Market opportunities were very weak and fishers were not getting a fair rate for their catch. Opportunity came in the form of a project from the National Fisheries Digital Platform (NFDP) in 2023. This project encouraged us to set up a company. So, in this regard, we approached the Fisheries Department, who directed us to contact Dr S Velvizhi of the MSSRF. Dr Velvizhi was kind enough to extend full support, guidance and all the necessary help for setting up the company. Based on her suggestion, we mobilised fishers to form into small groups and

identified leaders. Today, there are 15 groups comprising 152 members (women 70; men, 52) which includes 80 farmers from the scheduled castes.

The establishment of the company has brought out significant economic gains, enabling direct engagement of fishers in marketing. Dr Velvizhi facilitated to get a *Meen Virpanai Koodam* (Fish vending centre) from the Fisheries Department. We are now able to sell our catch for a good rate. We engage in direct marketing now, which has resulted in a profit of Rs. 80 per kilo



of fish, which is a substantial increase compared to earlier rates.

We require new fishing technologies. Also, training on Sea Bass would be useful to us. Rajiv Gandhi Centre for Aquaculture (RGCA) provides this training. It would be helpful if seeds are provided to us. Similarly, new technologies are available with the Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar. We would appreciate it if exposure visits to institutions like CIFA are organised for fishers (women and men). We would like to learn about the technologies related to *kendai meen* (Catla fish) and sea bass. We very much appreciate the continuous support and guidance from MSSRF.

This Conference (MSS@100) helped me to learn about Professor Swaminathan's contribution to the food security of our country. IARI students'

skit on Professor's life was very good. Through that play I became aware of Professor's contribution for the growth and development of institute. It was an inspiring and informative play. My heartfelt thanks to MSSRF for giving us an opportunity to participate in such a great event.



Today, there are 15 groups comprising 152 members (women 70; men, 52) which includes 80 farmers from the scheduled castes.





FARMERS' REFLECTIONS

KERALA



KERLA





Ms Padmini Sivadas

AGE:
55 Years

EDUCATION:
UG

DISTRICT:
Wayanad

Ms Padmini Sivadas 32

I am Padmini Sivadas aged 55 years from Wayanad. I am technically qualified in home science. I work in my small piece of land with great interest. I have a passion for farming. This gives me happiness. Our small field takes away my mental/physical fatigue and energises me.

I must tell you that my journey as a resource person and food processing trainer began with the association of MSSRF (Wayanad Centre) two decades ago. The opportunity to work with MSSRF came when the organisation was involved in the Biodiversity Register preparation in two panchayats (Puzhuthana and Thariyode, both agricultural areas). At that time, I was working for an NGO in one of the

Panchayats and provided help in this exercise; it was an entry point with the MSSRF, and this association still continues.

Later, I received support for Njavara rice and vegetable cultivation, and later became a resource person in value addition sharing my knowledge with others in the community. Through this engagement, I gained recognition as a farmer who not only cultivates but also educates others. I have been rendering my service as a resource person and food processing trainer



through government departments and institutions in Kerala and others states. I have worked as a resource person for 10 years at MSSRF.

I have received awards and recognitions from the Horticultural Department (honouring me for the promotion of jack fruit) and other institutions. I am a Jamsetji Tata National Virtual Academy Fellow. I conduct technical and entrepreneurial development classes and training for youth and farmers. I have worked as a resource person and entrepreneurship trainer (both on site and online) in places like Goa, Tamil Nadu, Karnataka and Odisha. It gives me happiness that I am able to help entrepreneurs, farmers and youth develop technical and business skills, both within and outside the state. Through the MSSRF, I participated in several training programmes. I learnt a lot from the booklets distributed during these sessions. MSSRF has

played a major role in my development; it enhanced my confidence. I am proud to say that if Padmini Sivas is a recognised trainer today, it is because of MSSRF.

If I have developed skills as a resource and food processing trainer, the credit entirely goes to MSSRF. I wish MSSRF would set up a food processing centre, which would help many women. It would do a lot of good if technology is provided free. Marketing of our products needs to be strengthened. We wish that MSSRF continues its efforts towards the socio-economic development of our people, particularly tribal population. Awareness about conservation of biodiversity and the importance of practicing sustainable agriculture should be promoted to achieve the vision of Bio-happiness!

At the Bio-happiness Conference, held at New Delhi, I was deeply inspired

by the discussions on organic farming, sustainable development and value addition. The platform allowed me to share my own experiences while also learning from the journeys of other farmers. I returned to my place with a renewed commitment to promoting Bio-happiness through agriculture. For me, the future lies in ensuring greater youth participation in agriculture. I believe that young people must be encouraged and trained in new technologies to secure the future of farming, I look to MSSRF to play a central role in this.

MSSRF has played a major role in my development; it enhanced my confidence. I am proud to say that if Padmini Sivas is a recognised trainer today, it is because of MSSRF.



Ms Sajitha Biji

AGE:
45 Years

EDUCATION:
VHSE

DISTRICT:
Ernakulam

Ms Sajitha Biji

33

I am Sajitha from Vadakkekara, Ernakulam district. I am 45 years old. I have undergone Vocational Higher Secondary Education (VHSE) course. I have been able to put into practice the knowledge I gained during my VHSE course in my life, years later. I came to know about MSSRF in 2018. In 2021, a team of four women (including me) has been able to set up Cee Bees Dry Fish Unit through the HDFC Bank Parivartan Project, which was implemented by MSSRF. This project promoted rural entrepreneurship. We prepare a variety of items such as dry prawns, dry fishes, roasted prawns, prawn pickles and fish pickles.

Fish (such as lape fish, anchovies,

sardines, pearl spot and shark) and prawns are procured directly from the harbour and from the market during the trolling season. The skin of lape fish is carefully removed, and the fish is then processed using a dryer. During sunny days, the fish are dried naturally under the sun; otherwise we use the dryer. This process enables us to deliver high-quality products while also generating a source of income for ourselves.

We also received training on the preparation of pickles and spice



powders through Kudumbashree. We sell our products at fairs and exhibitions. During July 2025 alone, after covering all expenses, each member earned around Rs.6,000. My participation in the Delhi Bio-happiness Conference was a once-in-a-lifetime experience, which broadened my perspective on farming and agriculture. I was inspired by the knowledge shared by fellow farmers from Wayanad, including women like Molly and Saleen, who had vast experience in cultivating pulses and conserving rice varieties. Listening to their stories made me realise that I, too, could diversify my products (beyond dried fish) and take up new activities. I value the collective learning from peers as one of the greatest takeaways of the conference.

Knowledge and skill empowerment are important. We require continuous training, motivation and access to

suitable technologies. We request MSSRF to provide us with such opportunities. I hope that MSSRF would continue to provide trainings and necessary support so that women like me have access to new opportunities. I share my knowledge with others and encourage women to take up farming and value addition.

💬
We also received training on the preparation of pickles and spice powders through Kudumbashree. We sell our products at fairs and exhibitions.
💬





Ms Saleen Manuel

AGE:

54 Years

EDUCATION:

Graduate

DISTRICT:

Wayanad

Ms Saleen Manuel

34

My name is Saleen Manuel and I am from Pulppalli in Wayanad District, Kerala. I am 54 years old and a graduate. Let me begin by offering our respect to the work of M S Swaminathan Sir, who always stood alongside the farmers.

Our women's collective, Thanima Group, engaged in on-farm conservation of agrobiodiversity from Pupally, Wayanad, first connected with MSSRF in 2005 during a training on agriculture. Later, I worked as a local representative in a watershed project implemented by MSSRF. Over the years, I along with Ms. Molly and three other members of group actively participated in Seed Fest exhibitions, learning about the importance of

conserving traditional crops and building livelihoods through seed sales and networking. As a women's collective, we gained confidence and pride, becoming role models in our community.

We have been cultivating and preserving 130 varieties of beans. Besides, I have been cultivating organically a wide range of crops, including 50 varieties of fruits, 30 varieties of vegetables, 30 varieties of yam, 33 varieties of *chembu* (Colocasia), 15 other tuber crops, 12 varieties of



spinach, several varieties of tomato, 30 varieties of mango and citrus fruits, different types of guava and many other fruit crops. We mainly cultivate traditional crop varieties.

I have been aware of the Foundation's activities since 2005 and have also had the opportunity to take part in several of its smaller initiatives. The Foundation has been extending its support to us for the last 10 years. It is because of this support that I have been actively participating in various seed festivals. The objective of these

seed festivals is to make high-quality seeds available to farmers. Traditional seed varieties are being preserved and they are handed down to future generations so that they do not disappear.

I am also running a farm school, recognised as the Kerala State Biodiversity Board (KSBB) Farm School, and I have received accreditation from the Organic Board. Students from the Regional Agricultural Research Station, Ambalavayal, have come here and

It is my belief that through organic farming, it is possible to conserve soil, water and biodiversity. In our surroundings, there are many plants that can withstand and resist various pests.

bought seeds too. Compared to hybrid crop varieties, the yield from traditional crop varieties is generally lower. But traditional varieties possess higher levels of disease resistance. Traditional varieties are able to withstand and adapt to changing climatic conditions.

It is my belief that through organic farming, it is possible to conserve soil, water and biodiversity. In our surroundings, there are many plants that can withstand and resist various pests. The main challenge is that many of us are unable to identify such plants. Hence, it would be highly beneficial if the Foundation could also undertake initiatives in this direction.

Organic farmers often do not receive fair prices for their produce and, many times, are forced to depend on the conventional market. If possible, a potential solution would be to develop district-level branding for traditional

crop varieties. Recommendations must be put forward to the government to give special recognition to farmers who preserve seed banks.

Women are often not recognised or addressed as farmers. But in reality, women's participation is greater—from sowing the seeds to harvesting the crops.

We conserve seeds through freezing, but additional training in this area would be highly beneficial. Support in fields like online marketing and modern packaging would be greatly beneficial for us.

In our locality, large quantities of mangoes, sapota, jackfruit, guava and many other produces often go to waste without being utilised. It would be good if training and machinery for processing these crops into value-added products could be made available.

Farming is joy. From the moment a seed sprouts until the time of harvest, it gives the farmer immense happiness. The greatest joy is experienced when farming is done organically.

From the tiniest ants to the many species of birds, their presence—and the music of their songs—fills the environment with delight.

I appreciate the Foundation and its activities. Participation in MSS@100 Conference in New Delhi was an honour. It was inspiring to see a stage enriched by the presence of women (particularly farm women), a significant departure from the usual male-dominated scenario. For women who often operate in the background of society, this programme provided a powerful platform. It has empowered them by helping them to find their voice, fostering self-reliance from production to marketing and building

the confidence to speak publicly

Once again, I sincerely appreciate the activities and vision of the foundation, and I assure you that all our support will always be there.



Ms Sheeja Susheela

AGE:

50 Years

EDUCATION:

Pre-degree

VILLAGE:

Perumbavoor

DISTRICT:

Ernakulam

Ms Sheeja Susheela

35

I am Sheeja Susheela from Perumbavoor Village, Kerala. I am 50 years old. I have completed my pre-degree course. We have 12 cents of land where we cultivate crops and vegetables. I got myself fully involved in agriculture only in the last 15 years. Luckily for me, during that time I came into contact with MSSRF, Wayanad Centre.

I first came to know about MSSRF through a farmer's meet in my village. Impressed by the sincerity of the staff, I soon became a volunteer, helping MSSRF to identify and mobilise farmers for project activities. Though not an official staff member, I acted as a bridge between the Foundation and my community—building trust and

strengthening local participation. The contact helped me to participate in many agriculture-related training programmes. The knowledge about sustainable agricultural practices I gained through the training, by reading the booklets given during the training programmes, interaction with the experts and through sharing of knowledge with fellow farmers encouraged me and gave me the confidence to practice the same in my small piece of land.

I practice organic farming to the



extent possible. In the available space, I cultivate fruits and vegetables. I am growing dragon fruits in drums. I do fish farming as well. I prepare compost from waste and use them in my field. Weeds are converted into manure. I prepare and use bio-inputs such as bio-fertiliser and bio-pest repellents.

As a practicing farmer of sustainable agriculture, I have grown to be a resource person. I conduct classes on organic farming at the block and ward level. Presently, I am taking classes in four blocks in our Panchayat. I do not stop with taking classes. I visit the areas now and then to get feedback from farm women and men. It gives me immense satisfaction when I observe their fields with crops cultivated by adopting sustainable agricultural practices. They are aware of the benefits of such farming: reducing the expenses, increasing the crop yield and in safe-guarding soil health and

the environment around. More than economic returns, it is being replicated, which gives me *bayangara sandosham* (immense satisfaction and happiness).

I have great passion for agriculture (*krishi ishtam*). It gives me energy. Whenever I feel low, I immediately get into my farm and start working. This energises me.

Pest management poses a great problem for farmers. If MSSRF could help in this, we would very much appreciate it. Participating in Professor M S Swaminathan Centenary International Conference was a great opportunity for farm women like me. The best tribute we can pay to the Professor is by practicing sustainable agriculture and conserving the crop diversity.

For me, the Delhi Bio-happiness Conference was nothing short

of a dream come true. It was a 'wonderland', filled with joy and inspiration. The respect and equality given to farmers during the event deeply moved me; for the first time, I saw farmers seated alongside scientists and officials as equals. The field visits also taught me the importance of adapting technologies to local climates, even though they were successful elsewhere.

I strongly believe that MSSRF can continue to empower farmers by fostering peer-learning and enabling them to share their knowledge. I am committed to passing on the lessons I learned to others, helping them to engage better in agriculture and strengthen their livelihoods.



Sooraj C S

AGE:
28 Years

EDUCATION:
Graduate

VILLAGE:
Sultan Bathery

DISTRICT:
Wayanad

Sooraj C S

36

I am Sooraj from Sultan Bathery, Wayanad in Kerala. I am 28 years old and I am a graduate in Agriculture. I have a great passion for conservation and promotion of biodiversity. As a young boy I started taking interest in this field. This interest and commitment to conservation and sustainable agriculture encouraged me to set up Aaryal Farms Ltd and Farm Formulas. These two ventures aim to transform India's organic farming landscape. At Aaryal Farms, my focus is on breeding and conserving heirloom and hybrid seed varieties, particularly tomatoes, peppers, rice and fruit crops. I place importance to traits such as flavour, nutrition, resilience and local adaptability. I support small growers across India.

I take efforts to provide organic farming solutions, bio inputs and microbial formulations empowering farmers to adopt eco-friendly, cost effective alternatives to chemicals.

My objective is to make farming productive, sustainable and accessible to everyone. Food is the most important basic need and the harmful effects of chemicals on food has to be avoided. It is important, that we reduce the use of chemicals and promote eco-friendly inputs for healthier future. It is my strong belief that it is



possible through practicing sustainable agriculture.

It is my sincere wish to develop and share high yielding, climate resilient and nutritious crop varieties that need minimal effort but maximum benefit for farmers, consumers and the planet.

I have been associated with the MSSRF for many years. I benefitted from their trainings and guidance in sustainable farming, biodiversity conservation, and climate-resilient practices. These opportunities not only improved my

farming but also strengthened my role as a voice of farmers.

Attending the MSS@100 conference held at New Delhi gave me valuable insights into global perspectives on biodiversity conservation and climate change. I realised how crucial it is to integrate these issues into farming and the importance of involving farmers in policy-making. The event also gave me opportunities to connect with farmers, experts, and organisations across India working on biodiversity, seeds, and climate adaptation.



It is important, that we reduce the use of chemicals and promote eco-friendly inputs for healthier future.

It is my strong belief that it is possible through practicing sustainable agriculture.

I was given the opportunity to present my work and experiences at MSS@100 conference. I am thankful to MSSRF for that. Using that opportunity, I had put forth some of my views and expectations. For me conservation is a passion and it is not for economic returns. For others there should be incentives. It is my request to initiate listing of edible plants. People can be encouraged to consume traditional food items. We have to come up with new crops linked with biodiversity. We have hundreds of rice and pepper varieties. Production quality is important. We do not pay attention to that. Quality is important for market. Focus should be on nutrient crops for health security. To scale up organic farming we should use bio inputs. Government should promote use of quality bio inputs. Young farmers do not get any recognition in the society. Farming is not economically viable and rewarding.

Following are some of the aspects I emphasised.

- Advocated for economic incentives for conservation, including documentation of edible species, DUS characteristics, and nutritional profiling for neglected and underutilised crops and varieties in the same way as millets
- Emphasized the shift from intensive farming to nutrition-sensitive and climate-resilient farming systems.
- Suggested niche product marketing and export opportunities to enhance farmer incomes.
- Highlighted the importance of engaging youth through start-ups, FPOs, and SHG linkages.

I hope the MSSRF will continue to provide training on climate-resilient crops, marketing support for unique and heirloom varieties, and more

opportunities for youth leadership in agriculture. I envision MSSRF as a bridge between grassroots farmers and policymakers.





Ms Jolly Jose

AGE:
53 Years

VILLAGE:
Kanjoor

DISTRICT:
Ernakulum

Ms Jolly Jose

37

I am Jolly Jose aged 53 years. I hail from the village Kanjoor in Ernakulum district. I come from a farming family. I have done a nursing course. We own 5 acres of land where we cultivate areca nut, coconut, pepper and so on. We do fish farming and poultry. My husband is employed in the Gulf. Though I have done my nursing, farming has always been my passion. Ours was almost a barren land, which I have now converted into cultivable land.

My association with MSSRF began when I attended an agriculture training programme in Perumbavoor. Subsequently, I participated in a Seed Fest. I was very happy when our village was selected under the HDFC Bank Parivartan Project

implemented by MSSRF, Wayanad Centre. It is one of the new villages selected in Ernakulum district. I am one of the farmers who is a stake holder. One of the positive aspects of this intervention has been the formation of groups by farmers. This project in our village focuses on the socio-economic development of the agricultural community. One of the livelihood initiatives established to help farm women has been the Echo Natural Food Processing Unit. It is run by seven women and is based in Thekkumbhagam village, Kanjoor.



This unit is committed to promoting local entrepreneurship and natural food practices. It focuses on producing high-quality, preservative-free products that reflect the traditional culinary heritage of the region.

Inspired by the sincerity and dedication of MSSRF staff, I soon became part of a dairy unit formed with the support of the Foundation. MSSRF provided training to our group on preparing dairy products with an objective to enhance our livelihood opportunities. I (along with our group members) received training in milk product processing, including exposure visits to Idukki. As mentioned, our unit—The Echo Natural Food Processing Unit—is a women-run enterprise. For me, this was a turning point, giving me confidence to start my own enterprise and work collectively with other women.

We underwent training only on dairy products; however, inspired by the dairy training, we expanded our products to include traditional pickles (mango, lemon and so on), vegetable chips (banana, tapioca), homemade sweets such as *laddu* and *halwa* and other value-added products. There is a great demand for our oil and vinegar prepared using coconuts. This has been a positive outcome of our training on dairy products and marketing them in different places. We have enough support from MSSRF. Because of their support and encouragement, we are running the unit and earning good income. We would like to have training on fruit and vegetable processing to expand our market. This will help scale up our income.

We thank MSSRF for the opportunity provided for us to be part of the M S Swaminathan Centenary International Conference in New Delhi. It was

an honour given to the farming community. Attending the Delhi Bio-happiness Conference was an emotional and inspiring experience for me. The joy I felt cannot be explained; it is a deep sense of fulfillment never found even in my nursing career. The conference and field visits inspired me to adopt new practices such as row planting of millets and motivated me to diversify my farming approaches. Valuable knowledge is also gained from fellow farmers, learning about natural fertilisers and other farming methods. I strongly believe that MSSRF plays a crucial role in training and empowering women in agriculture. In future, I hope to see more women brought into farming and start enterprises, creating networks of capable women farmers. I am eager to continue my training and share my knowledge with others, contributing to building resilient farming communities.





Mr Balakrishnan A

AGE:
75 Years

VILLAGE:
Mananthavady

DISTRICT:
Wayanad

Mr Balakrishnan A 38

I am Balakrishnan aged 75 years. I hail from Mananthavady, Wayanad, and have been closely associated with MSSRF since the 1990s, right from the time the Centre at Wayanad was established. Over the years, I have actively participated in organic farming trainings and Seed Fest programmes as a participant and later as a resource person. Inspired by the knowledge gained, I started conserving biodiversity on my land by organically cultivating rare, endangered and threatened (RET) species, medicinal plants and local crops. My association with MSSRF gave me the confidence to market my produce at premium prices and share my expertise with fellow farmers and others in the local Panchayat. I have not only improved

my livelihood but has also become a knowledge resource for the community. I have developed three pepper varieties and one turmeric variety.

Attending the International Conference on Bio-happiness in New Delhi was one of the most significant milestones of my life. The conference provided me the opportunity to actively contribute in discussions, present my work to a larger audience and learn from experts and farmers across India. I was particularly inspired by the idea that sustainable development



and better farmer livelihoods can be achieved through value addition and collective action via SHGs and FPOs. The connections I built with farmers from Tamil Nadu, Odisha and Kerala, and with individuals like Anuraj Singh, reinforced my belief in collaborative growth.

Looking ahead, I hope MSSRF will provide training and capacity-building on branding, packaging and marketing of agro-products, along with policy awareness for farmers. I strongly feel that farmers conserving traditional crops and varieties such as tubers, millets, medicinal plants and indigenous rice must be supported before they are lost forever. For me, conservation is not just a farming practice but a legacy of bio-happiness for future generations.

I strongly feel that farmers conserving traditional crops and varieties such as tubers, millets, medicinal plants and indigenous rice must be supported before they are lost forever.





Mr Anandan

VILLAGE:
Madamkunnu

DISTRICT:
Wayanad

Mr Anandan

39

I am Anandan, an indigenous Paniya farmer from Madamkunnu, Wayanad. I am engaged in on-farm conservation. I first learnt about MSSRF through a fellow farmer, Krishnadas, who introduced me to the concept of nutrition gardens. With MSSRF's support, I have been encouraged to establish a home nutrition garden. I got support to cultivate cowpea, tubers, banana and other vegetables as well. This has not only increased my income but also ensured nutritional security for my family members. Interventions of MSSRF included more than farming. My children have been enrolled in the Green Skills programme. This programme provides environmentally focused vocational training to empower youth with livelihood opportunities.

Initially, my peers did not understand the importance of my conservation work; however, over time they began approaching me for advice/guidance. My consistent efforts in conserving crops/plants inspired many to take up similar work.

My trip to New Delhi (to participate in the MSS@100 Conference) was thrilling and transformative experience. It was my first visit to the Capital. Though language was a barrier, I could learn about new crops, sustainable farming techniques



and the importance of resilience in agriculture from farmers from other states. The exposure broadened my horizons, motivating me to experiment with new methods and to diversify my cultivation.

I am determined to cultivate and conserve every crop or seed. I expect MSSRF to continue to provide training, seeds and technical guidance to expand my efforts. It started with a simple nutrition garden which has now grown into a lifelong commitment to conservation and farming excellence. I have begun to regard agriculture with newfound respect and purpose. I am grateful to MSSRF!



Initially, my peers did not understand the importance of my conservation work; however, over time they began approaching me for advice/guidance. My consistent efforts in conserving crops/plants inspired many to take up similar work.





Mr Balan N M

VILLAGE:
Erumad

DISTRICT:
Nilgiris/Wayanad

Mr Balan N M

40

My name is Balan. I belong to Kuruma community from Erumad, Nilgiris district. Driven by a passion for organic farming, I connected with MSSRF to learn vermicomposting. Soon I became a member of the Wayanad District Tribal Development Action Council (WDTDAC), a grass-roots institution of MSSRF. Participation in the Seed Fest organised by MSSRF (Wayanad Centre) provided me an opportunity to interact with scientists and fellow farmers. That experience greatly improved my agricultural practices and broadened my outlook on sustainable farming.

My participation in the Bio-happiness Conference held at New Delhi further strengthened my belief in sustainable

agriculture. I was particularly impressed by the focus on soil health as the foundation for productivity and Bio-happiness. Meeting women farmers like Ms. Mutthulakshmi and connecting with farmer groups from Kolli Hills, Pudukkottai, and other regional centres of MSSRF reinforced my conviction that cross-learning among farmers is vital for agricultural progress. We thank MSSRF for providing this opportunity to farmers.

Looking to future, I envision promotion of organic farming and value-added products through youth engagement and social media platforms. I hope MSSRF will continue to create opportunities for farmers to collaborate and form networks. This, I hope, will ensure conservation and promotion of traditional crops and practices while adapting to changing times.



Ms Sathyavathi

VILLAGE:
Puzhathana

DISTRICT:
Wayanad

Ms Sathyavathi

41

I am Sathyavathi. Along with Ms. Rabiya from Puzhathana, Wayanad, I came into contact with MSSRF when it formed a Krishi Sangham, by selecting members from 10 Kudumbashree units. We received training from MSSRF and *Vanamoolika* experts in herbal medicine and Ayurvedic product preparation. With sustained support over more than a decade, we established a small-scale, women-managed herbal unit in Wayanad: the Navachaithanya Herbal Unit. This unit is equipped with processing machinery such as pulverisers and dryers mainly to process medicinal plants and herbs for primary healthcare practitioners and potentially other applications such as coconut fibre extraction. Soon, it became a small but thriving enterprise.

One day, we had visitors from Mumbai. They enquired about the skills we possessed and what we were doing using those skills. They understood the effort and expertise involved in preparing herbal formulations. We were given equipment such as a pulveriser, a dryer for processing and a sealing machine. They even facilitated provision of a building from the Panchayat for us. They also took care of the electricity and the construction of building for us.

Our group produces a variety of




traditional and herbal products, including *Murivenna* (medicated oil for wounds), *Thalipodi* (herbal shampoo powder), *Mylanchi* (henna), *Neela Amari* (indigo hair dye), *Kasthuri Manjal* (best for skin care), pain balm, *Panchanivedini*, *Keshvardhini* (hair oils and Thalees powder. During the month of Karkidakam (July–August), we prepare and sell *lehyams* (herbal tonics) and powders. This brings us considerable income.

At present, we have a grinding machine for producing herbal powders. If we can get another flour mill for preparing curry powders, it would provide us a regular and sustainable source of income. Our tooth powder unit has some electrical problem; it requires rewiring. Marketing our products poses a problem. We need to expand our market. Many prefer using tooth paste; so, the demand for tooth powder is not much. We wish to increase the sales.

Our visit to the Delhi Conference was a great experience. We were exposed to different agricultural products, technologies and farmer experiences across India. Despite the language barrier, we were able to learn from and connect with others through shared emotions and mutual understanding. We realised that promoting organic farming and herbal products would contribute significantly to farmer well-being and sustainability.

Looking forward, we hope that MSSRF will provide further training and capacity-building in marketing herbal products and expanding our production into ready-to-use powders and rice-based, value-added products. We wish to strengthen our enterprise while continuing to support biodiversity conservation and farmer health.



At present, we have a grinding machine for producing herbal powders. If we can get another flour mill for preparing curry powders, it would provide us a regular and sustainable source of income.





Mr K Shaseendran

VILLAGE:
Thekkumthara

DISTRICT:
Wayanad

Mr K Shaseendran

42

I am Shaseendran from Thekkumthara in Wayanad district. My association with MSSRF spans over 15 years. I have participated in trainings and Seed Fests organised by MSSRF. My association with MSSRF inspired me to establish Shyam Farms, where my main focus is on conservation of rare, endangered and threatened plant species. With MSSRF's handholding, I gained visibility, recognition and even received awards from the Kerala State Biodiversity Board. My farm has become a place for learning, attracting other farmers and visitors; my conservation efforts have been appreciated by them. I am also a breeder and cultivator of rare fish varieties.

The Delhi Bio-happiness Conference (MSS @100) was a turning point for me. It has been an enriching experience. I could the sense of unity felt among the farmers from different communities and countries, who were all brought under one umbrella. The discussions helped me to appreciate the link between biodiversity conservation and Bio-happiness. I also learnt about new seeds and improved varieties showcased by IARI.

It is my request that MSSRF should continue supporting traditional farmers and seed conservators by connecting them with markets and ensuring supportive policies. I strongly feel that Bio-happiness conferences should be organised at the regional level to reach more farmers.





Mr Jobish Varghese

DISTRICT:
Idukki

Mr Jobish Varghese

43

I am Jobish Varghese from Idukki. I became associated with MSSRF through bamboo craft training. I am an Artisan and Master Trainer in Bamboo Crafts in Idukki district certified by the Handicrafts Department, Ministry of Textiles, Government of India. I am a trainer under the Kerala State Bamboo Mission. I am good in bamboo and coconut shell craft, preserving and promoting traditional handicrafts through Bamboo Aura. Our products include mobile stands, ornaments, toys, pen stands, lamp shades and kitchen utensils. I have trained numerous artisans and youth through skill development initiatives. Though not directly engaged with MSSRF in farming, I have collaborated as a trainer in skill development projects for tribal communities in Ernakulam

and Idukki. This partnership provided me opportunities to support local livelihoods while promoting traditional crafts.

My participation in the Delhi Conference was enriching. Handicrafts made of coconut and bamboo were displayed in the MSSRF stall of Wayanad Centre. I particularly valued the opportunity to exchange knowledge with organisations from other states and to explore mutual product exchanges. This reinforced my belief in the importance of cross-regional collaboration.

As regards the future, I sincerely hope and wish that MSSRF will continue to organise programmes/events that bring farmers and artisans together on common platforms. I wholeheartedly appreciate MSSRF's ability to identify and encourage farmers and believe these efforts will have a lasting impact on agriculture and rural development.



Mr M Sunil Kumar

VILLAGE:
Cheeral

DISTRICT:
Wayanad

Mr M Sunil Kumar

44

I am Sunil Kumar from Cheeral, Wayanad. I have developed an interest in organic farming. I am also an on-farm gene conservator and an innovative famer. I first connected with MSSRF in 2010 through trainings on traditional seed varieties. I was supported with paddy, vegetable and tuber seeds. I soon expanded my conservation plots. Recognizing my work, MSSRF featured me in a book on seed conservators, which motivated me further.

I conserve 150 traditional rice varieties, 20 vegetables, 25 tubers, 10 pulses, 10 leafy greens and also fruits and medicinal plants. I have native cows, poultry and goats. I have a fish pond with different breeds.

The Delhi Bio-happiness Conference

was a rare treasure. I met farmers from different states, scientists, ministers and even international delegates. For me, the event reaffirmed that farmers are central to agricultural prosperity. I am grateful to MSSRF for the opportunity and the constant support from the staff throughout the visit.

I hope to see farmers engaged in conservation of crops, particularly from tribal communities, rewarded and recognised for their efforts. I seek marketing support to sustain conservation work and want youth to be retained in farming. I believe long-term support for farmer-conservators is essential for protecting India's agrobiodiversity.





FARMER NARRATIVES

ODISHA



ODISHA





Mr Kusha Jan

AGE:
25 Years

EDUCATION:
Class 10

VILLAGE:
Bahraguda

DISTRICT:
Koraput

Mr Kusha Jan

45

I am Kusha Jan aged 25 years. I hail from a tribal hamlet of Bahraguda. I has studied up to Class 10. Our hamlet economy is based on agriculture; we also rear cattle. Our household own 3 acres of agricultural land. We generally cultivate rice, ragi and vegetables. We have 12 cows (10 native breed). Native breed is essentially used for agricultural purposes and Jersey for milk.

The Alternative Seed System Model (ASSM)—an intervention implemented by MSSRF (since 2018) in our area—brought awareness on improved agronomic practices and quality seed production. Women are given equal importance. It was only after the intervention that we realised we could increase yield by adopting suitable

agronomic practices. I also serve as a volunteer in the ASSM project.

Earlier, we used to adopt broadcast method of sowing; now, through the intervention, we are following line-sowing which has reduced the weed population. Previously, weeding operation would continue for a week; presently, we are able to complete it within 3 days. Labour expenses have drastically reduced and yield has increased. In half an acre, I used to harvest 5–7 bags (50 kg per bag); after the intervention, in the same



half an acre land I harvest 15–20 bags. Similarly, our ragi yield has also increased.

For the first time I came to know of quality seed production; I was not aware of it earlier. We are producing quality seeds because of better agronomic practices. We have sufficient grains for household consumption and to preserve as seeds for the following season. We also sell the excess grains.

One of the primary focus areas of MSSRF has been improving the capacity of farm women. They are mobilised and formed into groups. They take part in the training and awareness programmes conducted by MSSRF. They have gained knowledge and enthusiastically practice the agronomic practices.

Through the initiative of MSSRF, our village has got a seed storage and a

millet processing unit. I am in charge of running the units. Women take active part in the activities of these units.

I have been motivated to do farming in purely organic way. It is also my wish that the entire village should soon be converted into an organic one.



The Alternative Seed System Model (ASSM)—an intervention implemented by MSSRF (since 2018) in our area—brought awareness on improved agronomic practices and quality seed production.





Mr Manohar Kamar

AGE:
47 Years

EDUCATION:
Graduate

VILLAGE:
Kundra

DISTRICT:
Koraput

Mr Manohar Kamar 46

I, Manohar Kamar, aged 47 years, hail from Kundra block of Koraput district of Odisha. I am a graduate. I come from a traditional agricultural family. We own 1.5 ha of cultivable land. I practice organic farming. My wife is also engaged in agriculture. I believe in organic cultivation and adopt sustainable farming practices. So, I rear 4 desi cows for this purpose; I also have a pair of bullock

M S Swaminathan Research Foundation (MSSRF), Jeypore Centre has been contributing a lot to improve the lives and livelihoods of Adivasi people in our region through its various interventions. I have been associated with the MSSRF for more than two decades. I have participated in many

of the training programmes and seminars organised by the MSSRF. With MSSRF's guidance and support, I have tried innovative methods of compost making, green manuring with sun hemp, inter cropping of pulses and so on for sustainable soil health management. I also adopt IPM practices like use of bird perches, use of NSKE, pheromone traps, trap crops, etc in paddy and vegetable fields. For the last 10 years I have been experiencing increased crop yield. I harvest 13 quintals of *Kalajeera* rice, 8-10 qtls. of organic vegetables and 12-



15 q finger millet every year and earn 30 % more than other farmers. My cost of cultivation has also been reduced by 40%.

I have undergone vocational trainings on processing and value addition of *Kalajeera* (a traditional variety) rice, fruits and vegetables through Odisha Rural Development and Marketing Society (ORMAS). My efforts and success have been appreciated by farmers in the district. With ORMAS guidance, I have marketed more than 9 qtls. of *Kalajeera* rice (from one acre) @ Rs.16000 per qtls. and finger millet value added products by participating in different *melas* and district level fairs. I have been recognised as an innovative organic farmer and producer of *Kalajeera* rice, finger millet, vegetable and pulses like green gram, black gram and so on.

I have motivated many men and

women through interacting with them, by giving motivational talks and participating in district level fairs to adopt sustainable farming practices and avoid using of chemical inputs to the crops.

With the support of MSSRF I have also formed a Self Help Group (SHG) namely Mahima SHG for collecting NTFP products such as *mabua* (*honey*), *amla* (Indian gooseberry), *harada* (*Terminalia chebula*) and *jhuna* (a benzoin resin from the Sal tree) to generate income for women.

I got an opportunity in the Centenary conference- MSS@100 to share my experiences in front of scientists, researchers, policy makers, students, and farmers on opportunities and challenges in cultivation, biodiversity conservation and climate change.

I wish to share some of the points I highlighted:

- Stressed the need to introduce agriculture into school curricula to inspire youth.
- Recommended budgetary provisions for supporting traditional seed systems and biodiversity conservation.
- Illustrated the profitability of unique traditional varieties such as *Kalajeera* rice, showing higher returns than hybrids.
- Called for more government recognition and incentives for conservation and organic farming, linking them to “biohappiness.”

Along with farmers from different states, I visited demonstration fields of IARI. During my visit I discussed with farmers from different states like Maharashtra, Punjab, Tamil Nadu and Kerala.





Ms Asamati Pujari

AGE:
32 Years

VILLAGE:
Murja

DISTRICT:
Koraput

Ms Asamati Pujari 47

I am Asamati Pujari, aged 32 years. I come from a farming household in the tribal village Murja. We own 2 acres of land. Most of us in our village rely on agriculture for livelihood. Ours is a rain-fed area. I have been engaged in farming since the age of 14 years. I like working in the fields.

Our village began to experience development in both social and economic spheres from 2014. We are ever grateful to MSSRF for this. Ours is one of the villages identified for implementing MKSP by MSSRF. Awareness about education, improved agricultural practices, nutrition and so on, have been created by MSSRF through MKSP. Prior to the project implementation, we were practicing

agriculture without any knowledge about new technologies. We (both women and men) did not have any interaction outside our area. We were scared to meet outside people.

Things began to steadily change with formation of women's SHGs. Women were given training on agronomic practices, line transplanting, seed treatment, seed collection methods, bio-fertiliser preparation and so on. Then we were given training in value-added products. We sold snacks, pickles and tamarind in the local markets and



we still continue with it. Women have been encouraged to develop nutrition-rich vegetable gardens. Consumption of vegetables improved the nutrition of household members. The excess produce is either shared with neighbours or sold occasionally.

Habit of saving has come with the formation of SHGs. Women have access to savings and credit now. Women participate in Panchayat meetings. It is a significant development. Women, who once ran into the house to avoid meeting outsiders, today are bold enough to go outside the village and participate in meetings. The credit for this goes to MSSRF! There are three SHGs formed from members of 35 households. Now, they are registered with the Mission Shakti Scheme/Programme.

Adopting improved agronomic practices has improved crop yield: from

10 quintals to 15. We used only farm-yard manure earlier. Now we apply enriched farm-yard manure.

I am a volunteer; I help MSSRF in mobilising people for meetings or any programmes, creating awareness about improved agricultural prices and the importance of nutrition. I share the knowledge not only with my villagers but also with other villagers. I have contact with 6–7 villages. Technology adoption has been done in nearly 1,500 households.

Ours is a rain-fed area. When it does not rain during the season, it affects seed germination. It results in debts. It is a great challenge that farmers face.

It is great honour for farm women like me to be present during the Professor M S Swaminathan's Birth Centenary Conference at New Delhi. We have been encouraged to continue our

sustainable agricultural practices for Bio-happiness.

💬
We are ever grateful to MSSRF for this. Ours is one of the villages identified for implementing MKSP by MSSRF. Awareness about education, improved agricultural practices, nutrition and so on, have been created by MSSRF through MKSP.
💬





Ms Tulsa Balia

AGE:
45 Years

VILLAGE:
Kukuguda

DISTRICT:
Koraput

Ms Tulsa Balia

48

My name is Tulsa Balia and I am 45 years old. I am a resident of Kukuguda village and belong to a tribal community called Bhumia; we speak our own tribal language. My parents did not send me to school because it was 2 km away from my village. They felt that being a girl it was not safe for me. My three brothers were sent to school. I helped my mother with household chores.

We own 3 acres of land where we cultivate crops such as rice, finger millet, little millet, horse gram and vegetables. We cultivate vegetables throughout the year both for household consumption and for the market as well. We earn Rs 400 per month by selling vegetables.

It is because of MSSRF's intervention that farmers including women have learnt about sustainable agricultural practices, importance of nutrition, government schemes and so on. Adoption of improved agricultural practices have increased the crop yield and reduced the production expenses. We share the knowledge with one another.

Prior to the intervention of MSSRF, our awareness level in several spheres was low. We were not aware of concepts like quintal or kilogram.



Traders used to cheat us with wrong measures. Now they cannot cheat us!

MSSRF's another significant contribution is improving the status of women. Today, I am a bold woman. Even though no education, I participate in meetings held at Block and Panchayat level. We women discuss with the Chairman and Panchayat President about issues related to agriculture and other social issues. Thanks to MSSRF!

We face difficulty in farming primarily because we depend on rain. It is a major issue affecting our livelihood.

I am happy that I had the opportunity to be in New Delhi during Professor M S Swaminathan Birth Centenary Conference. It has been a proud moment to be one of the participants along with learned persons.

“
Prior to the intervention of MSSRF, our awareness level in several spheres was low. We were not aware of concepts like quintal or kilogram. Traders used to cheat us with wrong measures. Now they cannot cheat us!
”





Ms Rayamati Ghuria

AGE:
40 Years

VILLAGE:
Nuaguda

DISTRICT:
Koraput

Ms Rayamati Ghuria 49

I am Rayamati, an Adivasi woman from the Bhumia tribe. I hail from Nuaguda Village in the Koraput District of Odisha. I am 40 years of age. Farming is our primary economic activity. Agriculture is carried out in 3.8 acres of land. Paddy is the main crop cultivated. In a small area vegetables are also cultivated.

I had met Swaminathan Sir for the first time nearly 20 years ago when he had visited our village. We were cultivating our traditional millet crops but we had almost lost them all. Millets were replaced by rice in our diet. It was Swaminathan Sir who re-awakened us towards our traditional millet crops and conserving our heritage. Following the guidance and the support from

MSSRF, we learnt to cultivate millets adopting sustainable agricultural practices including line-sowing methods, transplanting the seedlings and other technologies that are under the systematic millet intensification methods, like using organic inputs, reducing fertiliser use and so on. I was so inspired by the results that I began to encourage other women to start cultivation of millets and get back our heritage. I encourage our villagers to use organic inputs.

The Mahila Kisan Sashaktikaran



Pariyojana (MKSP) is a programme implemented by MSSRF in our village for empowerment of women farmers. This programme focuses on the promotion of sustainable agriculture with reduced application of chemical fertilisers and pesticides. I attended a series of training programmes on Non-Pesticide Management (NPM), Integrated Pest Management (IPM), preparation of organic-fertilisers and organic-pesticides. I have been inspired to adopt these practices in our field. I prepare organic pesticides such as *Handikbata*, *Neemasthra*, *Agneyastra*, *Jeebamrutha* and organic fertilisers such as *Hadri*, vermicompost and *Amrutajal*.

Awareness about nutrition has been created in our village through MKSP. Quality seeds of vegetables are used to grow them in the garden. I have a nutrition garden with different vegetables; many are cultivating

nutritious vegetables, which are used essentially for household consumption. We do not buy vegetables in the market. We are self-sufficient.

Millets are good for health. We are now conserving our seeds and with the minimum support price assured, we are also getting good prices. Through MSSRF we are getting back our forgotten heritage through the cultivation of millets. I have been able to nurture and conserve over 30 millet varieties. This has fetched me a great recognition as the 'Millet Queen of Odisha'. It is a great honour bestowed on me.

We need this initiative to continue. I am happy to say that I have been able to change the cultivation practices in my village and Panchayat; It is my wish that MSSRF should take this beyond our panchayat. I will continue to collaborate with MSSRF in this

endeavor.

On International Women's Day this year, I was felicitated with an award presented by the Vice-Chancellor of the Central University of Odisha, for the lead role I have taken in promoting organic farming as a woman farmer. My farm and kitchen gardens are a model for others, and farmers and visitors from different places come on exposure visits to learn more about my organic initiatives.

I have developed a good mushroom cultivar and earns a substantial income. The Odisha Livelihood Mission has selected me as an ELSP (External Livelihood Supporting Person) and I am deputed to other Blocks to act as a resource person.





Mr Chakradhar Burundi

AGE:
36 Years

EDUCATION:
Class 10

DISTRICT:
Koraput

Mr Chakradhar Burundi 50

I am Chakradha Burundi and hail from a tribal village from the Koraput district of Odisha. We speak our native tribal language at home. I am 36 years old and have studied up to Class 10. We own 7 acres of land where we cultivate rice, ragi, little millet and vegetables. We also own cattle, mainly for use in agricultural activities.

Our village, with 45 households, depends on agriculture for livelihood. We are fortunate to have the presence of MSSRF in our village. None from our village had any contact with agricultural or horticultural departments. We did not have knowledge on the latest agricultural technologies. Seeds were sown using broadcasting method. We did not

conserve seeds for future use because the yield was not sufficient even for household consumption. So, the concept of preserving some grains for seeds was absent among us.

The scene changed with the implementation of the Alternative Seed System Model (ASSM). This intervention, implemented by MSSRF in our village, has brought about significant positive changes in farming practices, thus improving our yield and seed system. I joined as a volunteer of this intervention.



The village which once cultivated crops using the broadcasting method now has adopted the line-sowing method. Ragi is cultivated following the line-planting method. We are adopting improved agricultural practices, too. We avoid the indiscriminate use of inputs. The yield of the crops has increased. It is not only sufficient for household consumption but we have also surplus. Seed production has been given importance. We have been provided seeds by the Foundation. Any surplus is sold as seeds to the Agricultural Department.

After the introduction of seed production in our village, we are selling seeds. Out of 45 households in our village, more than 30 are engaged in seed production. I have come to know that we can earn by selling our seeds as well. Earlier, not even one kilogram could be sold. Now, I produce 500 kg seeds per year. Now, there is healthy

competition among us to produce quality seeds.

My association with MSSRF not only helped me to adopt improved agricultural technologies but helped me in many other ways also. Prior to my association with MSSRF, I could not speak Oriya properly; now I speak Oriya fluently. I can also understand a little bit of English and Hindi. I work with the Agriculture Department. I have gained awareness on nutritious food and its importance in our growth.

I am encouraging many in our village to have nutrition gardens. Gradually they are developing interest in such gardens. The concept of cleanliness and hygiene was almost absent among our people. These concepts are gaining importance in their day-to-day lives. Two nearby villages did not have water facility. With the support of MSSRF, those villages have access to water now.

I am one of the directors of an FPC. It is not active. It should be made active. We have a revolving fund of Rs. 7,67,000. Also, our government has registered a women's Self-Help Group, which needs to be strengthened.

I am happy I have gained knowledge and economic empowerment. It is my wish that the entire district will be converted into a green belt, which was the wish and vision of our Professor M.S. Swaminathan.

Earlier, not even one kilogram could be sold. Now, I produce 500 kg seeds per year. Now, there is healthy competition among us to produce quality seeds.





Mr Hari Nayak

AGE:
47 Years

EDUCATION:
Class 8

VILLAGE:
Atalguda

DISTRICT:
Koraput

Mr Hari Nayak

51

I am Hari Nayak, a resident of Atalguda, a tribal village in Odisha. I come from an agricultural household. I am 36 years old and have studied up to Class 8. I am a marginal farmer having 2 acres of land. We generally cultivate paddy in 1.60 acres, groundnut and tomato in 0.3 acres and ladies finger in 0.1 acre. Besides working on my field, I also work on other's fields as a labourer for daily wages. We were not aware of improved methods of cultivation; so we used to follow traditional practices. Gradual change has started taking place in our cultivation practices since 2015 with the intervention on watershed management by MSSRF, Odisha Centre. Since then, MSSRF has also been encouraging us to adopt sustainable agricultural

practices to enhance our livelihoods. Awareness has been created on soil and water conservation practices. I have participated in many training programmes. I have been motivated to adopt new technologies in farming. I participated in the groundnut foundation seed production programme launched in April 2023 in our village and a few other villages. I used to cultivate groundnut in 0.2 acre of land following traditional broadcasting method. Weeding was a tedious task for me. The yield from that land used to be 0.6–1.0 quintals.



Awareness meetings, training and capacity-building programmes were organised to promote seed production in groundnut cultivar GJG-32. Under the seed production programme by MSSRF in our village, we were trained on various improved agronomic practices and different methods of cultivation, such as land preparation, furrow-bed method, FYM with gypsum application, seed treatment with *Trichoderma viride* and rhizobium culture, timely weeding as well as organic manure and bio-pesticide preparation.

Initially, I was hesitant to try the new seed variety in my 2 acres of land. So, I decided to cultivate GJG-32 variety in half an acre. I adopted the recommended agronomic practices and followed organic cultivation. The crop performed well (in comparison to my traditional variety), despite the unconducive weather condition during

that kharif season. The yield from the traditional variety (and practices) was 1.47 quintals in half an acre, whereas it was 3.28 quintals from the improved variety, i.e., GJG-32 (by adopting improved agronomic cultivation practices). I never dreamt of getting such yield increase from the improved variety.

In the following rabi season 2024, after harvesting paddy, I cultivated groundnut using the foundation seed GJG-32 in 1.5 acres of land for seed production. I could harvest 14.60 quintals of seeds, which I sold to the Odisha State Seed & Organic Products Certification Agency (OSSOPCA), Jeypore at Rs.7,600 per quintal. I earned Rs. 1,10,960 (the cost of cultivation per acre was Rs.38,866). Thus the new groundnut variety (GJG-32) yielded more number of pods per plant and higher pod yield per acre compared to the traditional groundnut

variety. Incidence of root rot disease was also very low. As I am convinced about the performance of the new variety of groundnut, I shall continue to grow it and also recommend other farmers to cultivate the same using improved agronomic practices. Awareness and capacity-building training programmes related to oil seeds motivated me to cultivate the GJG 32 variety for seed purpose. I whole-heartedly appreciate the technical support provided by staff of MSSRF. The Foundation's work in our area continues to improve the livelihood of tribal women and men. I was fortunate to participate in the New Delhi Conference (MSS@100) along with some farmers from Odisha. We came to know more about Professor's contributions to the farming community and conservation of biodiversity



OR



FARMERS' VOICES MAHARASHTRA





MAHARASHTRA



Mr Baburao Sarowar

AGE:
55 Years

VILLAGE:
Dongaon

DISTRICT:
Aurangabad

Mr Baburao Sarowar

52

My name is Baburao Sarowar and I am 55 years old. I belong to Dongaon village, Aurangabad district, Maharashtra. Cotton and maize were two main crops cultivated in my land. Mono culture was the common cropping system followed. This affected the soil health. We did not have access to improved seeds and bio-inputs. Knowledge on pest/disease prevention and management was very poor. We were not aware of different cropping patterns and the cultivation of different crops in a single plot. Farming posed a great problem. There was no steady income. Now I have been cultivating more than two crops for the last 5 years by adopting sustainable agricultural practices.

Better Cotton intervention in collaboration with MSSRF has been bringing about positive changes in farming practices and thereby in the lives of farmers. With MSSRF's support and guidance, farmers like me in our villages have begun to change our cropping pattern. I do not depend on a single crop now. I practice crop diversification: cotton, maize and soybean are cultivated. I also cultivate green gram, black gram and vegetables. This helps in improving the nutrition of the household. On the field bunds, I have planted moringa trees, which



provide nutritional benefits and serve as an additional source of income.

I now use bio-inputs and soil health management techniques that enhance productivity in an eco-friendly manner. I discuss with fellow farmers and the scientists in diversifying my farm with different crops and adopting different cropping pattern such as inter-cropping and mixed cropping.

I have an indigenous cow, which provides milk for household consumption and serves as a source for bio-farming inputs.

As part of the project, MSSRF has set up Bio-Inputs Production Resource Centres in Maharashtra. The objective of the Centre is to make farming more sustainable and resilient to climate change. Its focus is on biological solutions to reduce dependence on chemical fertilisers and

pesticides. Farmers are trained to use bio-inputs scientifically for pest and disease prevention and control. These centres conduct training programmes on soil health promotion, water management, biological pest control and management measures and so on.

I thank MSSRF for inviting farmers to participate in the Birth Centenary Conference (MSS@100). It was a memorable one. Interaction with farmers from Odisha and Tamil Nadu gave me confidence that by cultivating minor millets and through value addition we can increase our income.

Our field visit to IARI research plots provided the opportunity to learn more about inter-cropping and integrated farming. We can adopt the same in our village. Discussions with IARI scientists gave me clarity on the benefits of bio-inputs, soil health management and the role of moringa

as a ‘superfood’.

It is my wish and request that the government encourages community-based organisations and cooperatives to lead sustainable development efforts as well as to ensure easy access to working capital loans for small and marginal farmers engaged in organic and diversified farming. Also, they should promote integrating medicinal plant cultivation schemes with rural health programmes to improve preventive healthcare.

Better Cotton intervention in collaboration with MSSRF has been bringing about positive changes in farming practices and thereby in the lives of farmers. With MSSRF's support and guidance, farmers like me in our villages have begun to change our cropping pattern.





Mr Vijay Jawandiya

DISTRICT:
Vidharba

Mr Vijay Jawandiya

53

I, Vijay Jawandiya, is fortunate to have been closely associated with Bharat Ratna M S Swaminathan, the Father of India's Green Revolution. I had interacted with him closely during his visits to Vidharba and in many other forums.

I am very happy that the Maharashtra government has declared August 7 as 'Shashwat Sheti Din' or 'Sustainable Agriculture Day', to commemorate the birth centenary of Prof M S Swaminathan. The announcement not only acknowledges Dr Swaminathan's monumental contributions to Indian Agriculture, but also aims to inspire policy focus on sustainable and inclusive growth in the sector.

Prof Swaminathan revolutionised Indian farming through path breaking research, particularly by enhancing wheat and rice productivity, freeing India from dependency on American PL480 wheat imports. His efforts helped transform India from a food-deficient nation to a food-exporting power house.

The first National Farmers' Commission, set up in 2004 under Professor Swaminathan, had one clear goal – improve farmers' incomes. One of its key suggestions was that



the minimum support price (MSP) for crops should be set in a way that farmers earn at least 50% profit over their full cost of production, including rent for their land and wages for family labour. This is called the C2+50% formula.

Though the Government promised to implement this formula in 2014, but in practice, the government uses a lower formula that doesn't count land rent and family labour (A2+FL+50%), which results in much lower prices; farmers today get 20-30% less than what they should. For instance, in the 2025-26 season- red gram is priced at Rs 8,000 per quintal but should be Rs 10,400 per quintal; cotton is at Rs 8,125 per quintal, but should be Rs 10,500 and soybean is at Rs 6,900 per quintal, but should be Rs 8,100. Farmers are not paid enough for their crops, even when the government says MSP is given. To add to the distress, even

the declared MSPs are not effectively enforced in the market, leaving farmers at the mercy of middlemen and fluctuating prices. MSP should ensure at least 50% profit.

In this context, I urge the government to set up a Farmers' Pay Commission. Following are some points I emphasised during my presentation at MSS@100 conference held at New Delhi.

- Stressed that agricultural progress should focus on income growth of farmers and not just on increase in crop production and productivity; ensuring proper prices for the produce is one way to guarantee a rise in farmers' income.,
- Advocated for the implementation of the Swaminathan Commission's recommendations, particularly MSP based on comprehensive cost;
- Highlighted inequities in subsidies,

noting that support goes mainly to chemical fertilisers while neglecting farm yard manure and livestock-based inputs.

- Called for farmer-friendly insurance, contract farming codes, and greater rural banking access, linking agricultural policy to farmer "biohappiness."
- Farmers should be able to lead a dignified life through the right sociological and economic politics.

I am very happy that the Maharashtra government has declared August 7 as 'Shashwat Sheti Din' or 'Sustainable Agriculture Day', to commemorate the birth centenary of Prof M S Swaminathan.





CASE STUDIES

ANDHRA PRADESH



ANDHRA PRADESH





Mr Veera Raghavaiah

AGE:
60 Years

EDUCATION:
Primary School

VILLAGE:
Giripuram

DISTRICT:
Krishna

Mr Veera Raghavaiah 54

My name is Veeraraghavaiah from Giripuram, Krishna district. I am 60 years old. I had school education up to the primary level. I come from a traditional fishing community. There are approximately 200 households in our village. Most of us have medium-sized boats for fishing. There are 35 mechanised boats in the village.

I have been participating in mangrove conservation and restoration activities conducted by MSSRF in Machilipatinam. The intervention of MSSRF in delivering advisories of INCOIS services over the last 15 years has significantly contributed to the welfare of the fishing community. INCOIS-MSSRF services started with displaying weather- and ocean-related

information on an electronic board in a centre place. Subsequently, we started getting short text messages in our button phone. It was followed by the FFMA App, which could be downloaded in our smart phones.

We are grateful to MSSRF-INCOIS for providing us with near-real-time information on Ocean State Forecast and wind speed. The forecast enables us to take informed decisions. We can prevent loss of life and material. Fuel is saved. Reduced diesel consumption contributes to a less polluted



environment. Using the GPS facility in the App, we can mark the fish availability area and go to that place to carry out fishing. Our income has also increased.

I find Fisheries Helpline service very supportive and valuable. I do not hesitate to call the Helpline whenever I have doubts about OSF information.

The stress and tension while venturing into the sea have significantly reduced. Women in our households are confident about our safety in the sea. Thanks to MSSRF-INCOIS services!

We would be happy if training is given for our women on dry-fish processing using hygienic methods.



We are grateful to MSSRF-INCOIS for providing us with near-real-time information on Ocean State Forecast and wind speed. The forecast enables us to take informed decisions.





Mr Kandala Sridher

AGE:
40 Years

VILLAGE:
Machilipatnam

DISTRICT:
Krishna

Mr Kandala Sridher

55

I am Kandala Srinivas and hail from YSR Nagar, a fishing village near Machilipatnam in Andhra Pradesh. I am 40 years old and have done my intermediate course. I do not own a fishing boat but work as a labourer for boat owners. Most of the households in our village go for near-shore fishing. Most of them use small boats.

Fishing involves lot of uncertainties, causing anxiety often. This used to be mainly because earlier we did not have access to real-time information on weather and ocean conditions such as wind speed, wind direction, wave height, water current and so on. Based on our traditional knowledge, we carried out our work. The change in climatic conditions is posing challenges;

we are unable to rely on traditional knowledge.

The situation, however, has changed with MSSRF-INCOISE intervention in the last 15 years. We are getting regularly text and voice messages on Potential Fishing Zone (PFZ) and Ocean State Forecast (OSF). Wind speed and wind direction are very important information in our occupation. This information enables us to take informed decisions. We can also call the concerned staff and get clarification regarding weather forecast.



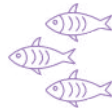
We have also been introduced to the Fisher Friendly Mobile App (FFMA). A few of us with Android phones were given training on this App. I am a trainer of FFMA. I have helped many to upload the App. Earlier, our community used button phones. After realising the utility of FFMA in our day-to-day fishing activities, many were encouraged to buy smart phones and have downloaded the FFMA.

Access to up-dated information plays a vital role in our day-to-day fishing operations. We are save on our energy, time and fuel. Less fuel consumption in a way helps to reduce pollution also. We are getting better earnings.

It would be good for fishers if hook-and-line fishing is promoted. This will prevent over-exploitation of the fish population. We request MSSRF-INCOIS to provide PFZ information to small-scale fishers. PFZ generally

helps big boat owners doing deep-sea fishing. Our fishing women need training in dry-fish processing in a hygienic manner. This will help fisherwomen to increase their income.

Through MSSRF, we have got awareness about the importance of maintaining ocean health. This is for our own good by helping to improve the livelihood of fishers and promoting marine biodiversity.



Access to up-dated information plays a vital role in our day-to-day fishing operations. We are save on our energy, time and fuel. Less fuel consumption in a way helps to reduce pollution also. We are getting better earnings.





VOICES





Mr Motibhai Patel

AGE:
52 Years

VILLAGE:
Kimbuva

DISTRICT:
Patan

STATE:
Gujarat

Mr Motibhai Patel

56

I am Motibhai Patel aged 52 years. I hail from Kimbuva village of Patan district, Gujarat. I am a farmer. I cultivate cotton and maize. I am doing farming using eco-friendly farming methods. I also encourage others to adopt sustainable agricultural practices.

Farmers in our village largely used chemical fertilisers and pesticides, which affected the soil health. I suffered crop losses because of excessive use of chemical inputs. Bio-inputs such as *panchakavya* or bio-compost were not commonly used. We were not aware of efficient water management practices. Mono cropping was largely adopted. Weather fluctuations added to the woes of farmers. There was little awareness or

collective effort towards sustainable agricultural practices.

The Better Cotton intervention in association with MSSRF and a local NGO is gradually changing the situation in our village. MSSRF provides technical inputs/guidance to the farmers. Mixed cropping and the use of bio-inputs are promoted. Micro-irrigation methods like drip irrigation are promoted, ensuring efficient water use. These improved agricultural practices help in enhancing productivity while conserving precious natural resources.

I cultivate nutrient-rich crops such as Jowar and Bajra to improve food security and nutritional quality of the household. I am also growing medicinal plants for market and also for household use.

MSSRF has set up Bio-Inputs



Production Resource Centres in Gujarat. These centres focus on biological solutions, helping us to reduce dependence on chemical fertilisers and pesticides. Training on bio-input preparation and scientific application of the same is provided for pest and disease prevention and management. There has been a gradual increase in the awareness level among farmers about the importance of various efforts of the project initiatives through MSSRF. Knowledge empowerment and capacity-building programmes help us to make farming sustainable and climate-resilient.

I have been motivated to adopt several sustainable agricultural practices. I am adopting mixed farming. I use panchakavya, bio-fertilisers and bio-pesticides; I follow the drip irrigation method.

I take efforts to motivate my villagers

to adopt the same. I also tell them community participation is important to enhance production without harming the natural resources and with minimum expenditure.

It was thoughtful of MSSRF to invite farm women and men to participate in the Birth Centenary Conference (MSS@100) organised in New Delhi. It was a memorable experience. The focus was on food security and nutritional security. I was reassured that both food security and nutritional security can be achieved by adopting mixed cropping methods by cultivating pulses, vegetables and cereals using sustainable practices.

Interacting with farmers from states like Odisha and Tamil Nadu gave me confidence that millet farming and value addition can help us enhance our income.

We got the opportunity of visit the IARI research plot. It was educative and informative. Field demonstrations of inter-cropping and integrated farming systems encouraged me to adopt them in my field. Interaction with IARI scientists confirmed the benefits of using bio-inputs and soil management practices.

Government can help farmers in adopting sustainable agricultural practices by providing more help and support in the form of providing bio-inputs, regular training and awareness programmes.

We wish that the efforts taken by MSSRF through Better Cotton would bring the lands in our village under sustainable crop cultivation and enhance farmers' income.



Ms Neelam Tyagi

EDUCATION:
MA

DISTRICT:
Ghaziabad

STATE:
Uttara Pradesh

Ms Neelam Tyagi

57

My name is Neelam Tyagi- a farmer from Ghaziabad in Uttar Pradesh. From a young age, I recognised the untapped potential of agriculture in my community. After completing my M.A. in Sociology, I decided to channel my knowledge and passion toward the development of innovative farming techniques and community initiatives. Beginning with just one acre of leased land, I embarked on cultivating sugarcane and turmeric using mixed-crop farming methods. This decision marked a turning point, not only for my own economic empowerment but for the women and farmers of my region who saw my success and drew inspiration from it.

Farmers often prioritise production

over marketing, which can lead to financial losses due to limited market access. Middlemen often control agricultural markets, further limiting farmer income. However, establishing direct market linkages can significantly benefit farmers, improving their income and financial stability. To maximize productivity and profits, I tried several innovative agricultural practices, including the conservation and propagation of local varieties, crop diversification, and value addition through food processing units. I set up my own flour mill, supplying five tons of flour daily under the Neel Raj name, and launched the Nitara brand—a food processing unit specialising in turmeric, coriander, chilli, multigrain flour, millets, gram flour, oil, pickles, and vinegar. By purchasing raw materials directly from local farmers, I not only assured quality but also increased incomes for farmers by up to 20%.



One of my proudest achievements has been empowering rural women through self-help groups and federations. With the support of NABARD, I formed over 300 self-help groups encompassing more than 4,500 women. In the Hapur district alone, I registered the Mahila Kisan Vikas Federation, integrating 1,500 women farmers who collectively supplied 10 tonnes of vegetables daily to Bharti Walmart. Through group enterprises, we launched retail shops under the Sunehra Fresh brand, allowing women to bring their produce directly to market and enhance their economic self-reliance.

Cluster and collective farming became central to our approach. Through Copas Agro—a registered Farmers Producer Organization (FPO) where I serve as director—we have integrated over 500 farmers, ensuring they receive fair prices and additional value for

their crops. Establishing small units for spices, flour, pickles, and porridge further multiplied local employment opportunities. My innovative approaches have been adopted by more than 300 farmers, doubling their incomes and inspiring others to follow this model.

Recognising the importance of skill development, I have collaborated with MANAGE Hyderabad and other national institutions to organize training programs in mushroom production, goat farming, food processing, and poultry. These initiatives have helped local youth and women realise their entrepreneurial potential, secure jobs, and even obtain loans to start their own agricultural businesses. Educating farmers and their children in areas like packaging, branding, and modern cultivation practices (including using bio-inputs like Jeevamrut) is crucial for enhancing

marketability and adopting sustainable techniques.



To maximize productivity and profits, I tried several innovative agricultural practices, including the conservation and propagation of local varieties, crop diversification, and value addition through food processing units.

Mr Paramvir Singh Karanpur

DISTRICT:
Aligarh

STATE:
Uttara Pradesh

Paramvir Singh Karanpur 58

My name is Paramvir Singh, a farmer from Aligarh, Uttara Pradesh. I cultivate mainly wheat, rice and maize. I feel very encouraged by the new agricultural technologies. Seeds provided by the government are of good quality. I think farmers' seeds are also useful option; we can have access to seeds immediately

With regard to chemical fertilisers, they are expensive and also not very good for the crops in the long run. Organic manure is helpful, especially if we have livestock.

While inputs provided are definitely useful, we would also like to receive some training on fish farming and mushroom cultivation. This would diversify our incomes. I am particularly

interested in mushroom cultivation. I would like more training to be imparted on that.

I am so happy to have been invited to participate in this event. I would have never dreamt of visiting a place like this on my own. Thanks to MSSRF that farmers like me are getting an opportunity to participate in events like this and air our views.



It is important that farmers get fair price for their produce including vegetables. It is only when their efforts are recognised monetarily that more people will enter and success in agriculture.





Mr Kanwal Singh Chouhan
Padma Shri Awardee

STATE:
Haryana

Mr Kanwal Singh Chouhan 59

I, Kanwal Singh began farming at an early age. I started cultivating baby corn since 1997. But, at some time the demand for baby corn declined which is when I diversified into other crops like mushroom. Farmers during those days lacked access to proper market and the major reason for this is that farmers do not have the access to right knowledge or technology necessary to add value to their produce and make them more marketable. This motivated me to set up a canning unit to process baby corn and guaranteed market linkages to the farmers. Our processing unit produces a variety of export-quality products like strawberry puree, button mushrooms, sweet corn to name a few. Today our unit supports the livelihood of around 500 women

farmers, and overall 10,000 farmers saw an increase in their income by four times. In 2019, I received the prestigious Padma Shri Award for my work in agriculture.

It is important that farmers get fair price for their produce including vegetables. It is only when their efforts are recognised monetarily that more people will enter and succeed in agriculture. I urge the concerned government officials to take note of this and design relevant schemes to strengthen farmer producer organisations (FPOs). Food Processing Centres must be started in each and every district.

Professor Swaminathan worked to bring self-sufficiency in food production which has been possible through Green Revolution. In the present context, there is an urgent need for organic inputs utilisation (for

example via biogas plants). Excessive use of chemical fertilisers is impacting people's health and the health of the soil. We urge scientists to come up with ways to maintain soil health and protect the organisms that thrive on the surface and beneath the soil.

Government gives lots of subsidies on chemical fertilisers. Farmers do not use the organic manure that they can get from their cattle. In a recent meeting farmers told me that 90 per cent of the inputs they use is procured from abroad. I request the government to come up with a project so that the slurry from biogas plants, and the cow dung and urine from livestock could be used by farmers.



Professor Swaminathan worked to bring self-sufficiency in food production which has been possible through Green Revolution. In the present context, there is an urgent need for organic inputs utilisation (for example via biogas plants).



HR



Mr Sukhjeet Singh

STATE:
Punjab

Mr Sukhjeet Singh

60

I am Sukhjeet Singh, a paddy farmer from the state of Punjab. Despite having a stable career in academics my heart always leaned towards agriculture. Eventually, I decided to leave my teaching career and decided to farm on my 20 acres of ancestral land. Though I faced numerous challenges like low productivity, poor crop performance and lack of information about technologies, I stayed persistent and used every opportunity to engage with agricultural scientists, especially the IARI scientists, and learn from them. They introduced me to high-yielding varieties of rice and also to modern agronomic practices that were not just 40 percent more productive but also resistant to pests and diseases.

It was Dr Swaminathan's dream to connect the next generation of farmers with new farming techniques. In 2014, with some accumulated knowledge and practical experience in farming, I established a seed processing unit called "A-One Seeds" in my village with the mission to provide high quality, certified seeds to farmers at affordable prices and proper guidance. I began collecting breeder seeds of wheat and paddy from agriculture universities. Today our seed processing unit has become a space for exchange of ideas and agricultural insights attracting around 40-50 farmers every single day, purchasing seeds, seeking advice and sharing their knowledge with us.

But there are some challenges that continue to bother farmers, like poor access to credit.

We plant seeds for 6 months, and then use the stock of the seeds for the

remaining months. This impacts the cash flow of the farmer. We request the government to come up with a scheme to address this issue.

Good varieties of seeds are purchased by large companies. The government should come up with a mechanism for medium size companies to get access to good quality breeder seeds as well, so that they can be accessed by more farmers

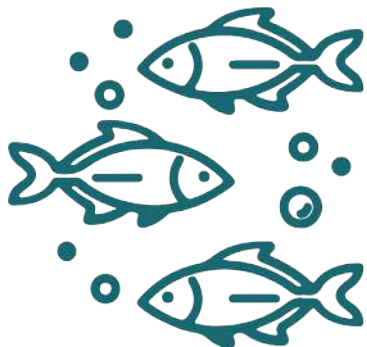
For bio-happiness amongst farmers, producer organisations should be linked with universities and research institutes, so that they have access to good quality seeds.



Good varieties of seeds are purchased by large companies. The government should come up with a mechanism for medium size companies to get access to good quality breeder seeds as well, so that they can be accessed by more farmers



PB



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