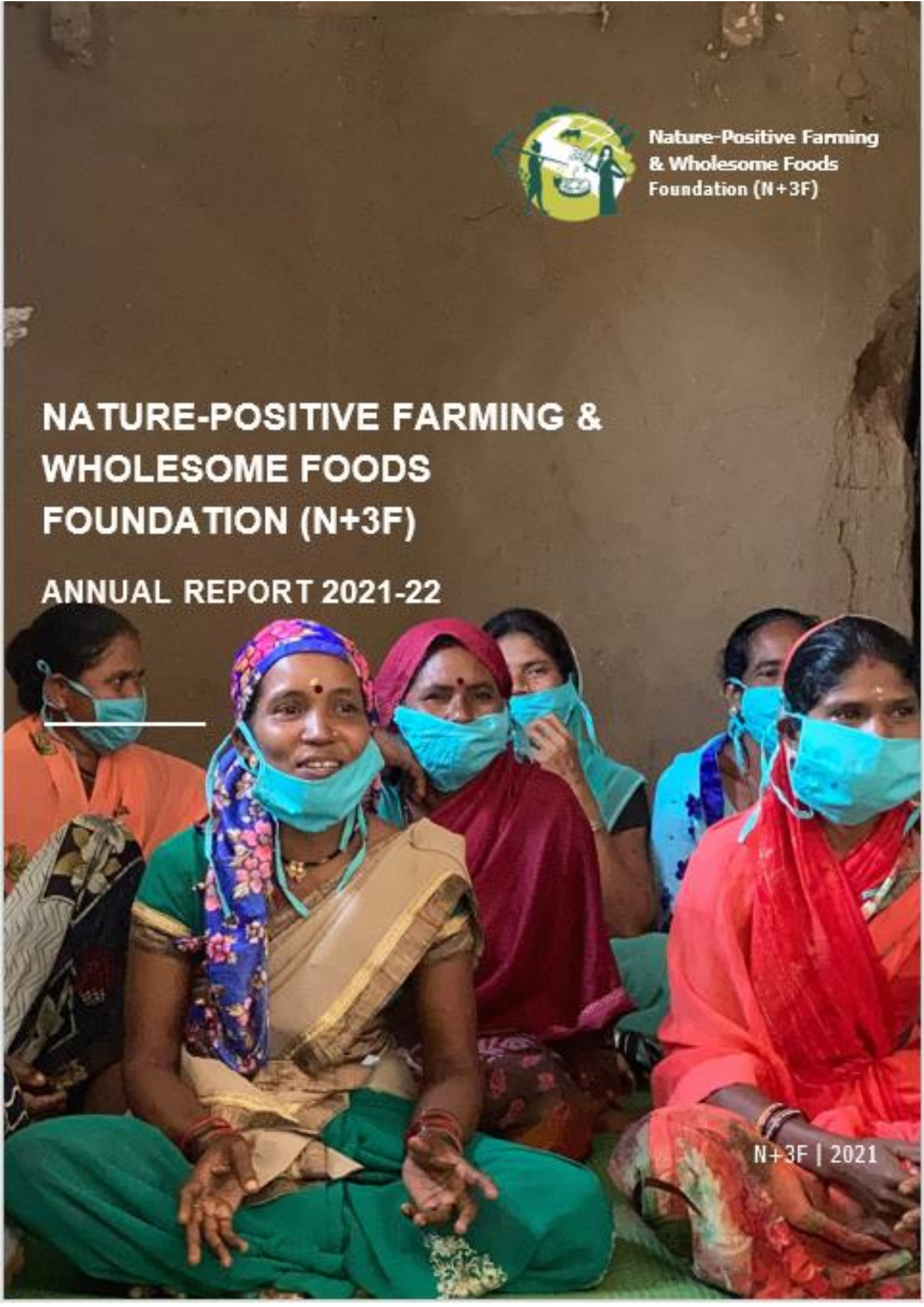
Nature-Positive Farming
& Wholesome Foods
Foundation (N+3F)

NATURE-POSITIVE FARMING & WHOLESOME FOODS FOUNDATION (N+3F)

ANNUAL REPORT 2021-22



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Introduction

About N+3F

The Nature-Positive Farming & Wholesome Foods Foundation (N+3F) is a Section-8 non-profit organization promoting Nature-Positive Farming and Food Systems (N+FFS) at scale across India. The N+3F builds on the mandate of the NPM (Non- Pesticidal Management of agriculture) Network to promote pesticide-free sustainable agriculture and food systems. The N+3F collaborates with 25 organizations comprising NGOs, FPOs and market players in Central, Southern and Eastern India. The specific objectives of N+3F are:

- To support farming communities, CSOs, and other agencies to evolve, establish, and scale-up context-based N+FFS, leading to an elimination of the use of synthetic chemical pesticides.
- To facilitate the development of regional/territorial and national value/supply chains for safe, pesticide-free wholesome foods.
- To build a knowledge base, serve as a resource organization, and create an enabling environment for nature-positive farming and wholesome food systems.
- To promote equality and social inclusion in N+FFS by engaging with vulnerable sections like small farmers, Dalits, tribals, women, youth, and consumers with low purchasing power.

Focus Areas for the Year 2021-22

In the first year, the focus was on establishing N+3F as an organization, creating an identity, building a team, building partnerships and mobilizing resources. The following are the four specific components which we worked on this year:

1. Setting up of N+3F
2. Identifying and engaging with partners
3. Establishing Program Components
4. Mobilising resources

Progress during 2021-22

1. Setting up of N+3F

1.1 Registration and compliance related activities

With support from our Board Of Directors and our Auditors, we were able to successfully complete the following activities associated with registration and compliance:

- Enrolling under Karnataka Tax on Professions, Trades, Callings andEmployments Act, 1976.
- Mobilising share capital.
- Amending the MoA and AoA to ease the 12 AA and 80G registration process.
- Submitting applications for 12AA and 80G registration- *N+3F has been provisionally approved for 12 AA and 80 G registration for three years*.

1.2 Building a team and their capacities

We were able to place staff for various positions at the central and regional levels and develop a team of qualified professionals for the organization. Furthermore, we also invested in building the capacities of these team members through multiple exposure visits, by providing suitable guidance to implement various tasks and by facilitating them to participate in workshops/webinars relevant to their respective thematic areas.

1.3 Developing identifiers and setting up an office

A crucial component that we worked on this year was to start working on building an identity for N+3F. We undertook the following tasks:

- Developed a logo for N+3F.
- Developed a brochure and letterhead for N+3F.
- Designed and made available a website for N+3F. The website can be accessed at: www.np3f.in.

Further, we have set up an office at Bangalore.

2. Identifying and engaging with Partners

Our scope of work entails interventions covering different aspects of the supply chain ranging from farm management to post-harvest processes such as cleaning, packing, etc. Therefore it becomes central to build fruitful relationships with various actors across the supply chain with relevant sets of expertise. Over the course of the last year, we have identified and built working relationships with the following partners listed under different heads below:

2.1. Implementation Partners

- We partnered with fourteen civil society organisations in Odisha, two in Madhya Pradesh and six in Chhattisgarh as part of 'Improving market Readiness of Smallholder Farmers Practising Non-Pesticide Management of Agriculture Project' funded by the BRLF (Bharat Rural Livelihoods Foundation). These ties were strengthened by helping them develop Annual Working Plans, facilitating two online review meetings, an exposure visit, visit to their field sites and by exploring joint interventions.
- We explored the possibility of building a partnership with like-minded organisations, including an FPO in Warangal, Prem Samriddhi Foundation and the mustard value chain initiative of Buddha Fellowship Program.

2.2 Knowledge Partners

- We strengthened our ties with SAMUHA and Samaj Pragati Sahayog (SPS), longstanding pioneers in NPM agriculture. With their support we organised multiple field visits and training sessions for our partners on various topics such as Production Cluster model, developing Package of Practices (PoPs), maintaining an Internal Control System (ICS), etc.
- We were able to initiate a relationship with Food Safety Works, an active player in the safe food legislation space. We reached out to them to develop a comprehensive document/guidance manual on procedures and protocols to test the produce suitable for farmers organisations, CSO and other food chain actors sourcing from small and marginal scale farmers.

2.3 Technology Partners

Over the course of the year we have been able to develop working relationships with players at the forefront of various technologies in the safe food space, a few of who are listed below:

- **GrainPro:** Safe storage without the use of synthetic pesticides is a critical component of the safe food supply chain. GrainPro is a leader in this space and wehave been able to build a successful working relationship with them. They now supply our partners with different safe storage solutions such as hermetic bags and hermetic cocoons. Furthermore, they also conduct frequent training sessions to equip our partners with the wherewithal to manage these storage technologies.

- **Expert/s on Storage Pest Management**: We have developed a working relationship with Dr. Mohan, a retired professor from the Tamil Nadu AgriculturalUniversity (TNAU). Dr. Mohan is an expert ondevising simple, cost-efficient solutions to tackle the problem of pests during storage.

- **Fabricators & Manufacturers of Equipment**: Over the last year, we have developed relationships with different manufacturers and suppliers of post-harvest equipment such as decorticators, graders, solar dryers, cleaners, etc. A significant number of our implementation partners have received not only the equipment but also the training to handle and efficiently use the equipment.

- **Trace-X:** Trace-X is an agri-tech startup specialising in the use of Block-chain technology to bring traceability to agricultural value chains. They engage in documenting end-to-end processes of the value-chain right from geo-mapping offarm lands, tracking crop activity and post-harvest processing, and generating relevant reports for the same to ensure the traceability of a crop/product. We partnered with Trace-X last year to launch a traceability pilot along with Samaj Pragati Sahayog, and Ram Rahim Pragati Producer Company Limited (RRPPCL).

2.4 Strategic and Institutional Partners

We have been able to deepen our ties with existing strategic partners and have also explored the possibility of connecting and cementing our relationships with new strategic and institutional partners who share similar visions and who can assist us to expand the scope, the reach, and the quality of our interventions. A few of these strategic and institutional partners include the BRLF (Bharat Rural Livelihoods Foundation), FWWB (Friends Of Women's World Banking) and ALC (Access Livelihoods Consulting).

3. Establishing Program Components

3.1 Facilitating Adoption of N+FFS by a Large Number Of Farmers

3.1.1 Development of Resources on Nature-Positive Farming

a) Collated resources on nature-positive farming systems:

Different resources pertaining to the various aspects of Nature-Positive production - maintaining and improving soil health, non-pesticidal management of crops, building the resilience of the crop ecosystem, etc. - were gleaned from pertinent sources, sifted through, and pooled. Pooled resources included academic papers and reports, journals, videos, webinars, and newspaper/magazine articles and cover the latest advances in this space regionally, nationally, and internationally. These curated resources will be put up in an organised manner according to the relevant heads on the Nature-Positive Farming & Wholesome Foods Foundation (N+3F) website for stakeholders to go through and put to use in their respective contexts.

b) Own publications:

In addition to pooling resources from other websites, journals, and publications, we have also worked to produce our own set of resources with regards to Nature-Positive Production, based on our work with our partners and learnings from the ground. The following documents were produced:

- **An introductory note on Nature-Positive Farming and Food Systems (N+FFS)**: This note introduces the partners/stakeholders to the concept of N+FFS, the need for them to switch to Nature-Positive Farming and Food Systems, the benefits of N+FFS, and the various components of N+FFS, starting from production and ending in consumption. Importantly, the note highlights how N+FFS espouses a farm-to-plate integrated value chain approach to work closely with the organisations of smallholder farmers, food processors and other value chain actors in a region/territory to develop organised markets and deliver pesticide-free wholesome foods to a large number of consumers, thereby becoming a 'total systems intervention'. Furthermore, this note has been translated into Hindi for better ease of understanding.
- **A note on NPM Package of Practices:** One of the important instruments for implementing Nature-Positive Farming Practices is the Package of Practices (PoPs) document. Developing suitable NPM PoPs for focus crops is considered an important step in establishing location-specific N+FS (Nature-Positive FarmingSystems). PoPs of a crop need to reflect 'total system interventions'

attempted and specificities of the local farming ecosystem. This note developed by N+3F guides the practitioner how to develop location specific PoPs for their location.

- **Production cluster workflow:** During the year, we worked with a Civil Society Organisation to delineate their production cluster workflow aimed at supporting the farmers in a timely manner to adopt NPM PoPs for a better crop performance and Internal NPM Standards to significantly reduce chances of contamination from pesticides and other prohibited materials. This workflow detailed the different tasks carried out by them, the time frame of these tasks and the roles and responsibilities of personnel assigned to carry out these tasks. We hope that this document will serve as a guiding document to other organisations intent on implementing a cluster-based approach in their respective command areas.

- **Booklet on setting up small and medium scale bio-input production units:** Drawing upon our experiences and the experiences of other practitioners, we have been able to compose a booklet that details the steps to set up small and medium scale bio-production units which may be of help to other organisations wanting to set up similar units in their respective areas of work.

- **Training module on i) Improving diversity in cropping systems and ii) Enhancing soil health:** Given the importance of improving the diversity in cropping systems and enhancing soil health for Nature-Positive Farming, training modules on each of these two topics were developed to build the capacity of staff of farmers organisations and CSOs.

- **Booklet on bioformulations in agriculture:** While bio-formulations including bio-repellents (that help ward off harmful pests), and plant growth promoters are widely promoted by CSOs, there is limited understanding and dissemination of scientific research on these bio-formulations. This booklet attempts to fill this gap by pooling research results available on various bio-formulations and presenting them to the readers. Reading this booklet will help the practitioners to understand the salient features of each bio- formulation and how it can be effectively used for improving crop performance.

3.1.2 Capacity Building of Partners

One of our major interventions is to build the capacities of our partners so they are able to adopt Nature-Positive Farming Systems in their respective areas. During the course of our engagement, we noticed that a large number of partners were in need of capacity building on how Nature-Positive farming is designed and implemented specific to the production cluster and how collective interventions are undertaken.

We also understood that there is rich tacit knowledge on practicing pesticide-free farming among some of the partners, which can be capitalised by others. So, we organised the following exposure visits, experience sharing sessions and training sessions to our partners, with the hope of these training sessions translating to results on the ground:

a) Exposure visit to SAMUHA

We organised an exposure visit for nine partners to SAMUHA, an organisation with longstanding experience in implementing Non- Pesticidal Management (NPM) of agriculture in their command area in the Devadurga Taluk of Raichur, Karnataka. SAMUHA implements their interventions in a very systematic way following a cluster-based approach and the partners benefited from being exposed to their program.

Figure 1: Visit to FFS plot in SAMUHA site

The partners came to know about how location-specific PoPs were evolved for paddy grown in a command area, how interventions are organised in a crop season in a production cluster from sowing to marketing of crop produce and how part of the cost of operations are covered through service charges paid by the participating farmers. The partners were also introduced to their Modified Farmer Field School (FFS) approach and Crop Ecosystem Analysis, where farmers belonging to a particular village are facilitated to undergo a self-learning process to understand the production ecosystem of a particular crop and suitable crop management practices.

b) Exposure visit to Samaj Pragati Sahayog

We also arranged an exposure visit for nine partners to Samaj Pragati Sahayog

(SPS), another long-standing pioneer of NPM agriculture, based in the Dewas district of Madhya Pradesh. SPS works with over 4,000 smallholder farmers, a significant number of whom are women, and helps them switch to NPM agriculture. The purpose of the visit was to help our partners understand SPS' NPM production interventions. Another motive for the visit was also to help partners understand SPS' operational model to implement NPM interventions in a production cluster.

c) Experience sharing session:

From field visits we came to understand that there are individual farmers and field staff in some of the partner locations who have rich experience of practicing NPM methods for vegetable crops. We have organised a session to share their experiences as we believed that it could immensely benefit other partners owing to similar linguistic and agroecological backgrounds.

Resource persons by name Bhisham Pradhan from JMA, Gananath Nial from Adhikar and Santhosh Bhoi and Durga Charanchaulia from YCDA shared their experiences of detailing the challenges they were facing during the cultivation crops like brinjal, tomato, chilli and paddy and practices they have adopted to resolve them. Ten partners benefited from this session.

d) Helping partners develop Package of Practices (PoPs):

Having a definitive crop specific Package of Practices (PoPs) is extremely crucial to the success of the Nature-Positive interventions by the partner organisations. We held one on one sessions with an agricultural expert for six of our partners to develop crop specific Package of Practices that they are now implementing in their respective locations. On-field training was organized for SEWA for developing PoPs.

e) Training session to set up small scale bio-input production units:

We organised a training session for our partners with SEWA, an organisation in Odisha experienced and adept at setting up these small-scale production units. The partners learned about the infrastructure needed for setting up a small-scale bio- input production unit, bio-inputs that can be produced on a scale, do's and don'ts to be observed and marketing of bio-inputs produced.

f) Capacity building on setting up medium scale bio-input production units:

Apart from small scale bio-input production units, we are also encouraging and helping partner organisations set up medium scale bio- input units so they may conduct these operations at scale and reach out to a larger number of farmers.

In this respect, we have arranged an experience sharing session for all the partners where in Shroffs Foundation Trust (SFT) from Gujarat shared its rich experience of setting up medium scale bio-input units by engaging local entrepreneurs. As a follow-up of this session an exposure visit was organised to two of our partners (GSS, and SEWA) to bio-input unit promoted by SFT.

Figure 2: Exposure visit to Bio-Resource Centre of SFT

GSS and SEWA, through these sessions were able to grasp the modalities and intricacies of running these medium scale bio- input production units.

g) Training on waste decomposer:

Waste decomposer, a technology developed by National Centre of Organic Farming, is a broad-spectrum bio-input which is found to be useful for faster production of compost, soil fertility improvement, seed treatment and to address certain diseases. A training session was organised for introduction of waste decomposer technology to the partners. Two partners who are already promoting waste decomposer shared their experience.

3.1.3 Implementation Support

As a follow up of capacity building, we supported our partner organisations to carry out the following activities in their locations:

a) Small scale bio-input units:

One of the important interventions in promoting Nature-Positive farming is to encourage and help farmers use inputs made from locally available materials to improve crop performance. While these bio-inputs are inexpensive, they may be labour intensive. To get around this issue, we helped organisations set up small scale production units managed by the community.

These units can encourage and help farmers associated with our partners switch to nature-positive farming practices. Over the last few months, we have been able to help 20 of our partners in Central India and Eastern India set up 43 small scale bio- input production units in their working areas. We supplied the partners with relevant infrastructure such as drums, mortars, pestles, and bottles so they are able to easily manufacture and sell different bio-inputs such as soil health enhancers and bio-repellents. Most of these units were run by women SHGs.

b) Medium scale bio-input units:

Two partners in Central India and Eastern India were supported to set up medium scale bio-input production units that would motivate and help a significant number of smallholder farmers switch to nature-positive farming practices.

These 45 small and medium scale units produced 24 different kinds of products which were supplied to 4406 farmers.

3.2 Supporting development of N+FFS Regional/Territorial Value Chains

3.2.1 Development of Resources on Nature-Positive Value Chain Development

a) Collated resources on nature-positive value chains:

Different resources pertaining to the various aspects of developing pertinent Nature-Positive value chains were gleaned from pertinent sources, sifted through, and pooled. These resources contain information on aggregation, storage, primary processing, and accessing organised markets. The pooled resources will be put up in an organised manner according to the relevant heads on the Nature-Positive Farming & Wholesome Foods Foundation (N+3F) website for stakeholders to go through and put to use in their respective contexts.

b) Own publications:

In addition to pooling resources from other websites, journals, and publications, we have also worked to produce our own set of resources with regards to Nature-Positive Value Chains based on our work with our partners and learnings from the

ground. The following documents were produced:

- **Manual for improving quality of grains during harvest, storage and handling:** This manual equips organisations with the wherewithal to implement practices and techniques that ensure the quality of the produce whilst avoiding contamination due to synthetic pesticides and other deleterious substances. The manual covers the methods and precautions to be followed during crop harvest, aggregation and storage, till the product is dispatched for further processing, packaging and distribution. This manual can be accessed in the N+3F website.

- **Guidance manual on non-chemical management of pests in storage, processing and handling of foods:** The manual offers non-chemical pest management measures that can be adopted at three levels viz. a) Farm and household level, b) Storage godown/warehouse level and c) Food enterprises level for food grains and seeds. Information for each technology or practice is organised in such a way that the reader can understand its relevance, how it operates/works and the do's and don'ts associated with the particular technology/practice. Wherever possible videos are also shared to better aid the reader comprehend the practices/technologies. The document shares the resources that can be referred to for further understanding. Lastly, the document also shares the list of suppliers of technologies or services, so that interested food chain actors may reach out to them. This manual can be accessed in the N+3F website.

- **Booklet on legal compliances of FPOs:** This booklet has been prepared to give a basic idea on the regular compliance requirements for Producer Companies/FPOs. The manual covers i) Post-incorporation compliance checklist, ii) Annual compliance calendar and iii) Business-related Legal licenses/ permits (seed, fertiliser and pesticide licence, FSSAI licence, GST, AGMARK, and MSME licence). Following these compliances is the first step for Producer Companies to become equipped and authorised to perform their different operations.

- **Guidance manual on financial linkages to FPOs:** The objective of this manual is to provide a detailed know-how on the different sources of finance available for FPOs, the agencies involved, terms and conditions, and how to avail the financial support from various agencies. The target group for this manual is the key staff of FPOs and promoting CSOs who are engaged in the business operations of the FPOs.

3.2.2 Support extended to form and strengthen FPOs:

One of the major program components of the N+3F is to assist partners to form and strengthen their Farmer Producer Organisations (FPOs) to market their pesticide-free produce and enable farmers to get higher returns. To this end, we have been able to organise trainings on various aspects of related to FPOs, a few of which are listed below:

a) Training on FPO formation and strengthening:

Six partners each in Odisha and Chhattisgarh were oriented on the basic aspects of FPO formation and strengthening.

b) Exposure visit to experienced FPO/s:

An exposure visit was organised for nine partners from Central and Eastern India to Ram Rahim Pragati Producer Company Limited (RRPPCL), a well performing FPO. During the visit, the partners were exposed to the processes of aggregation, storage, processing, packaging and marketing of non-perishable commodities like gram and wheat.

Figure 3: Interaction with community served by RRPPCL

c) Training on FPO compliances:

A majority of our partner FPOs are either in the incorporation stage or in a nascent stage of getting comprehensively established. It therefore becomes crucial for the FPOs to be trained on various compliance related aspects such as getting different licences, etc. We therefore organised an online training to get these FPOs introduced to these aspects.

d) Training on financial linkages to FPOs:

A crucial challenge that most nascent FPOs face is the availability and efficient utilisation of working capital. There are a few programs that take care of this aspect such as SFAC's matching equity grant scheme and NABARD's support program to promote budding FPOs. An online training was therefore organised to train our FPOs on developing financial linkages that will improve their ability to carry out transactions at scale.

e) Counselling to FPOs:

Apart from the group level trainings, five of our partners were provided with one-on-one sessions. In these sessions, the FPOs were assessed (by an expert on FPO

incorporation and building) based on their current standing and suggestions were provided on the ways to strengthen them.

A majority (18) of the partners have formed Farmer Producer Organizations (FPOs). About 9,100 farmers associated with the CSO partners are now members of FPOs.

3.2.3 Capacity building on Value-Chain Development:

Over the last few months, we took various steps to introduce the partners to the various ways in which they could move up the value chain. To this end, we organised a host of trainings and exposure visits, a few of which are described below:

a) Exposure visit to the manufacturing hub of a market player:

We organised an exposure visit to nine partners to a market player's hub in Hyderabad. This market player exclusively deals in pesticide-free agri-commodities and is fairly acquainted with the demands of consumer markets. Different topics were covered during the visit such as the assessment of the quality of the raw material, carrying out cleaning and grading of the produce, value addition, and manual and mechanised packing, etc. This training session helped partners understand the intricacies of the supply chain for pesticide-free produce and the various protocols and practices that need to be put in place to get the pesticide-free produce to organised consumer markets.

b) Training on hermetic storage technologies:

Safe storage practices are absolutely critical to maintaining the integrity of the pesticide-free produce. One of the important advances in this direction is hermetic storage technologies. We therefore trained select partners on the relevance of and the methods to successfully deploy and use these hermetic technologies.

c) Training on TNAU insect traps:

It is essential to monitor pest infestation in the stored foods so that timely action can be taken to preserve the foods. Tamil Nadu Agricultural University has developed low-cost insect traps to aid the same. We were able to organise a training session for our partners with the support of fabricator of insect traps, in which the need for insect traps to monitor storage pests and the relevant procedures to utilise the same were discussed and demonstrated in detail.

Figure 4: One of the TNAU model insect trap

d) An orientation on processing of pulses:

A training session covering pre-cleaning, primary processing and secondary

processing of pulses was organised to build the capacity of partners engaged in aggregation, processing and collective marketing of pulses.

3.2.4 Implementation support on Value-Chain Development:

a) Introduction of hermetic storage technology:

We introduced hermetic bags to seven partners and hermetic cocoons to three partners after orienting on the protocols to use them. These partners are now familiar with an easy to adopt technology to safely store the produce they helped their member farmers cultivate without the use of synthetic pesticides and other forbidden inputs.

Figure 5: Hermetic cocoon use in SEWA site

b) Introduction of Tamil Nadu Agricultural University insect traps:

Different insect traps that perform different functions were explored through the course of the year and were introduced to different partners based on the crops that they produce and want to market. In total, 15 partners were introduced to different kinds of insect traps through which they are now able to monitor and manage pests/insects without resorting to the use of chemicals and other prohibited substances.

c) Supplying equipment on quality checking:

An extremely important step that FPOs have to undertake in marketing their pesticide-free produce is to carry out quality checking of the produce before procurement. One of the important parameters to be considered in quality checking is moisture content. We have supplied 12 FPOs with digital moisture meters. So now they are in a much better position to evaluate and judge the quality of their produce before carrying out procurement.

d) Introduction of pre-cleaning equipment:

To enable our partner FPOs move up the value chain, we have supplied nine partners in Odisha and Madhya Pradesh with spiral graders. The spiral grader functions based on the difference in shape or the degree the ability to roll by the grains and other food grains and materials other than grains. It effectively separates damaged/flat and wrinkled seeds from smooth seeds. It also helps to

separate different types of grains whose shapes considerably vary. The grader also helps in getting different grades of the same grain. It is quite suitable for pulses and can be used in the first Collection Point and also at village level farm service centres.

e) Setting up of model small scale primary processing units:

Over the last few months, we have supported four of our partners on setting up primary processing unit for different agri-commodities such as pulses, groundnut, millets, and spices. We also have assisted one of our partners in Odisha to set up a solar-dryer unit to dry vegetables before they market them. Another partner was supported for a packaging machine. Using these equipment, the partners will be able to move up the value chain and command a higher price for their processed produce in organised markets.

Figure 6: Pulveriser unit set up in MJVS site

Figure 7: Solar dryer set up in FES site

3.3 Developing and promoting N+FFS Guarantee Systems (NGS)

NPM (Non-Pesticidal Management) agriculture interventions follow NPM Standards. Given that NPM agriculture is practised by a limited number of farmers, it is necessary to differentiate them from others so they are recognised and are able to realise higher prices for their produce. For this purpose, we have been able to devise and establish an Internal Control System (ICS), known as the NGS (N+FFS Guarantee Systems).

NGS improves the quality of the organisations' NPM programs by helping them keep a rigorous tab over the extent and quality of their interventions. Adopting this system validates that the food supplied by the farmers is of 'NPM Quality' i.e., it is pesticide- free, GMO free, safe and is not contaminated by any unwanted chemicals.

3.3.1 Development of Resources on Guarantee Systems for Pesticide-Free Foods:

- **N+FFS standards on Zero Pesticide Use Agriculture and Food:** N+FFS Standards for Zero Pesticide Use Agriculture and Food are a broad set of

protocols to be followed by different actors involved in Nature-Positive production and value chain development, so that the resulting output is ensured of its 'pesticide-free quality' and that the public at large and the consumers in specific are assured of the same. Its main purpose is to guide different actors involved in N+FFS. These standards were developed based on the experience of practitioners and by referring to similar standards for crop production in India.

- **Manual on group certification for Non-Pesticidal Management (NPM) agriculture:** The manual has been written to help Farmers Organisations (FOs; include Farmer Producer Organisations, Farmers Co-operatives, SHG federations of women farmers and other forms of farmers associations) and their promoters like CSOs/NGOs that are engaged in or are planning to engage in safe, pesticide-free farming and wholesome food systems to set up Internal Control Systems (ICS) based NPM Guarantee System (NGS) and to obtain NPM Group Certification. The manual is inspired by the experience of pioneering organisations like SAMUHA and Samaj Pragati Sahayog, which have developed ICS based participatory guarantee systems for NPM agriculture over the years. The manual has been composed in a Do-It-Yourself (DIY) style and explains the why and what of the NPM Guarantee System and how it can be set up in a location. This manual is translated in Hindi for ease of use by large number of actors. This manual can be accessed in the N+3F website.
- **A film on the protocols for supply chain of pesticide-free agri commodities:** Apart from producing relevant documents on the different aspects of NPM agriculture, we also developed a film on the procurement and marketing of pesticide-free agri commodities by Ram Rahim Pragati Producer Company Limited, one of the well performing Farmer Producer Organisations. The film contains the various processes and protocols (to ensure quality and avoid contamination) that RRPPCL follows while procuring, processing and marketing agri commodities. The film was launched and disseminated widely so our partners could learn and benefit from the film. The video can be accessed here: https://www.youtube.com/watch?v=4nKl-K9_TX0
- **Short films on documenting farming practices through Group-level Farm Diary:** A critical component of the Nature+ farming is the participatory and self-monitoring approach of the farmers' groups and here is where the Group-level Farm Diary (GFD) plays a crucial role. GFD is a corner-stone/backbone document of the Non-Pesticidal Management Guarantee System in that it ensures farmers' adherence to POPs and the NPM standards essential for certification. Furthermore, the process of filling up the GFD itself may result in greater social cohesion leading to better implementation of the NPM program. We therefore worked on a series of films that document and demonstrate the method of filling different sections of GFD. A total of 11 films were produced.

3.3.2 Capacity Building of Partners

a) Online training sessions on NGS:

The NPM Guarantee System, as detailed above, was introduced to 12 partners from Odisha and Madhya Pradesh during the Kharif season with support from SAMUHA, Karnataka. SAMUHA is a longstanding practitioner of pesticide-free agriculture and has a robust Internal Control System (ICS). Building on this, an orientation on NGS was offered by N+3F team to six Chhattisgarh partners during the rabi season.

b) Exposure visits to partner/s:

In order to better our partners' understanding of the basics of and the implementation of NGS, we organised a training cum exposure visit for nine partners to the ICS followed by SAMUHA for NPM agriculture.

Figure 6: Exposure visit to ICS followed by SAMUHA

The partners were exposed to the Internal NPM Standards, different documents used, steps to be followed in a season, role of groups and staff in NGS implementation, organisational structure and ways to handle non-compliances.

c) Training cum launching of NGS:

We organised training cum launch of NGS in five partner locations namely Lokadrushti, Adhikar, YCDA, GSS and MJVS. These events saw participation from farmers, Community Resource Persons (CRPs) and NGO staff. The topics that were covered during this launch included the need for NGS, the importance of Package of Practices (PoPs), the crucial nature of the Internal N+ Standards (INS), and documentation procedures including Group-level Farm Diaries.

Figure 7: NGS launched by YCDA, Odisha

d) Trainings on internal auditing:

We conducted online training for six partners on internal auditing. Internal auditing helps the partner organisations keep a tab over their NGS interventions and if they

are being followed correctly. Internal auditing is important to help organisations maintain the quality of their produce and prevent any possibility of contamination. A demonstration cum training was organised at the SEWA field site for internal auditing.

3.3.3 Groundwork for setting up a Certification System

Consultations were done with an expert on certification systems which helped in understanding the steps to be taken for setting up a certification system. Efforts were taken to refine the Zero-pesticide use agriculture standards by vetting with experts. Further exploration is being done to collaborate with a certification agency to develop a quality management manual and other necessary documents needed for setting up a certification system for pesticide-free foods.

Due to all of the interventions, all our partners have learnt about the NGS. Six partners initiated NGS in their respective locations. By implementing NGS, these partners have taken the first step towards ensuring that their produce is pesticide-free. This puts them in better stead to leverage the demand for residue-free food in organised markets.

3.4 Promoting household consumption of Pesticide-Free Wholesome Foods

3.4.1 Development of Resources on Consumption Promotion

a) Collated resources on promotion of pesticide-free foods:

Different resources pertaining to the various aspects of consumption promotion were gleaned from pertinent sources and pooled. These resources contain information on negative effects of pesticides, growing food on our own, choosing pesticide-free foods, protecting from pesticides, innovative initiatives, etc. These resources include academic papers and reports, journals, videos, webinars, and newspaper/magazine articles. These pooled resources will be put up in an organised manner according to the relevant heads on the Nature-Positive Farming & Wholesome Foods Foundation (N+3F) website for stakeholders to go through and put to use in their respective contexts.

b) The launch and dissemination of the film 'Choose Safe Choose Right':

To spur the demand for pesticide-free food among urban consumers, we developed an animated film titled ‘Choose Safe Choose Right’. The film highlights the damage done by synthetic pesticides to the health of the environment, the farmer, and the consumer and the ways in which farmers may switch to pesticide-free sustainable agriculture and how consumers may be able to purchase these agri commodities. The film was made in both Hindi and English in order to reach a wider audience. The film was launched and disseminated widely through our website and Youtube. The movie can be accessed here: https://www.youtube.com/watch?v=o-5XK_4XcrE

3.5 Carrying Out User-Friendly Research & Policy Advocacy

3.5.1 User Focused Research

a) A pilot on traceability of N+ foods using blockchain technology:

This pilot was initiated with SPS, RRPPCL, SHPL and TraceX to learn how blockchain technology can aid in strengthening the legitimacy of nature-positive foods in consumer markets and in improving the efficiency of operations of CSOs, Farmers Organisations and MSMEs engaged in N+FFS. This pilot covers 252 redgram and wheat farmers engaged in pesticide-free agriculture. This pilot involves the development of immutable data base of all the transactions from sowing to product delivery to the consumers.

The process steps of capturing the adherence to Package of Practices (PoPs),

Internal N+ Standards (INS) and the expected workflow of the agricultural program have been laid out and integrated into the Foodsign App to make it customized to the pesticide-free farming and food production. This will help in achieving the twin functions of traceability and agriculture program management. A similar process was undertaken for identifying and integrating the protocols and operational procedures followed from farm gate procurement until the NPM foods leave the custody of RRPPCL. Many training sessions were organized for Mitaans (Field Level Officers) and FPO staff to make them more familiar with using the App.

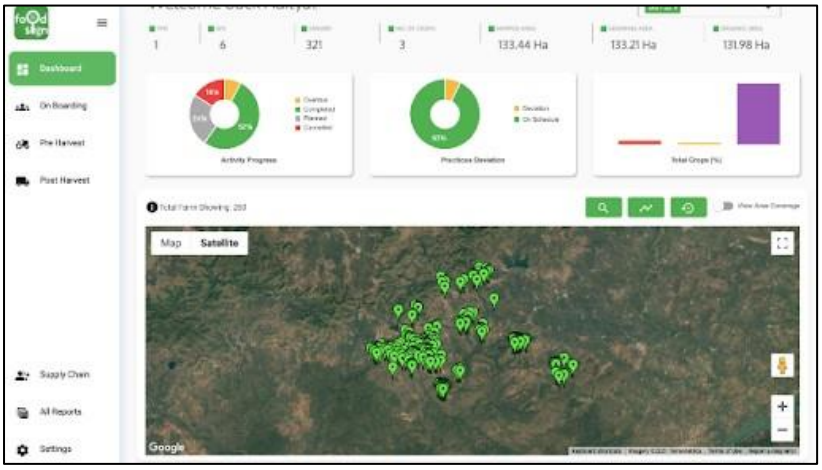

Figure 8: The web application interface showing the locations of the farmers' fields

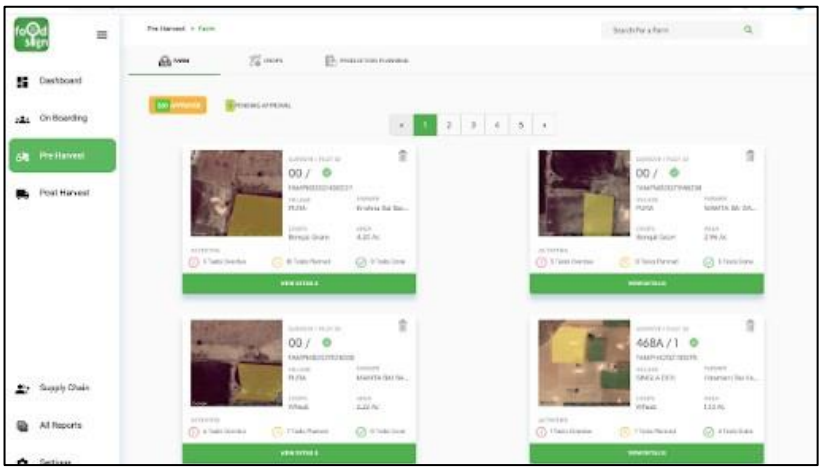

Figure 9: The web application interface showing the details of the farmers

Acknowledgement

We are deeply thankful to Caring Friends for their support for the current year, which was very helpful in setting up the organization, building the team, strengthening the partnership and initiating the program interventions. We also appreciate the active collaboration and engagement of our partners in our joint initiatives on promoting nature-positive farming and food systems on a scale.

Nature-Positive Farming &
Wholesome Foods
Foundation (N+3F)

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Nature-Positive Farming And Wholesome Foods Foundation (N+3F) is a Section-8 non-profit organisation with the mandate to promote N+FFS at scale across India. N+3F builds on the initiatives of NPM Network and focus on a broad spectrum of interventions which includes, i) facilitating adoption of nature-positive farming by a large number of farmers, ii) supporting adoption of post-harvest technologies and practices, iii) market development, iv) supporting adoption of guarantee systems and certification, v) promoting consumption of pesticide-free wholesome foods and vi) policy advocacy. N+3F collaborates with 25 organisations comprising NGOs, FPOs and market players in Central, Southern and Eastern India.

To know more about us, visit: www.np3f.in.