

EVALUACIÓN FINAL PROYECTO NAVDANYA – AVCD “Empoderamiento de mujeres desde una perspectiva ecofeminista para su participación en la elaboración de políticas públicas que fortalezcan la soberanía alimentaria y de semillas de las mujeres Fase II”

ÍNDICE

Páginas	
2 – 45	Informe final Evaluación
46 - 53	Anexo 1. Matriz de Marco Lógico de la Intervención
54 - 63	Anexo 2. Mapeo de Resultados
64 - 64	Anexo 3. Itinerario de viajes a terreno
65 - 79	Anexo 4. Historias de terreno

EXTERNAL EVALUATION OF NAVDANYA'S AVCD PROJECT
EMPOWERING WOMEN TO PARTICIPATE IN SHAPING POLICY TO STRENGTHEN
WOMEN'S FOOD AND SEED SOVEREIGNTY
PHASE II JUNE 2021– JUNE2023

FINALREPORT
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CONTENTS

ACKNOWLEDGEMENT
ABBREVIATIONS
EXECUTIVE SUMMARY

CHAPTER 1: INTRODUCTION
CHAPTER 2: EVALUATION CONTEXT
CHAPTER 3: PROJECT CONTEXTS
CHAPTER 4: KEY FINDINGS
4.1 RELEVANCE
4.2 EFFICIENCY
4.3 EFFECTIVENESS
4.4 IMPACT
4.5 SUSTAINABILITY
CHAPTER 5: CONCLUSION&RECOMMENDATIONS

TABLES

Table 1 Reduction in crop production due late flowering and less fruiting in Pratap Nagar area of district Tehri, Uttarakhand
Table 2: Profile of Mahila Anna Swaraj Collectives Across 5 States of Shakti Project
Table 3: Technologies, Seed Banks, and Organic Techniques
Table 4:Table 4: Increase in Food Plants and Biodiverse Acres
Table 5: Festivals Across the Five States of Shakti Project Phase II.
Table 6: Table: SalientBase Line Indicators for Phase III

ANNEXURES

1. Intervention Logic – Logical Framework Matrix
2. Outcome Mapping by PME Team
3. Field Narratives
4. Field Itinerary

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Dr. Indu Prakash Singh brought back from field visits memories of people's palpable optimism and spirit of celebration – to protect nature and celebrate, sharing with each other even at times of crises and building trust.

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ACRONYMS AND ABBREVIATIONS

Acharya: Teacher
 Anna Swaraj: Food Sovereignty
 Arthik Swaraj: Economic/Monetary Freedom
 Atmanirbharta: Self-Reliance
 Beej: Seed
 Bija Swaraj: Seed Sovereignty
 CBR: Community Biodiversity Register
 Dasparni: Organic manure made out 10 leaves.
 Desi Dhan: Native Paddy
 GoH: Gardens of Hope
 GMO: Genetically Modified Organisms
 Ghagra-Choli: Special dress worn by women in Uttarakhand
 Ghanamrit: Organic Technique
 Ghoonghat: Women's Head Cover
 Gobar: Cow Dung
 Gomutra: Cow Urine
 Guru: Teacher
 Gyan Swaraj: Knowledge Sovereignty
 HIV Seeds: High Yielding Variety Seeds
 Jaibakeet: Organic technique
 Jai Panchayat: Living Democracy
 Jeevamrut: Organic technique
 MAS: Mahila Anna Swaraj
 Mela: Fair
 Matkakhad: Organic Technique
 Panchayat: Village Council
 Panchparni: Organic technique with five leaves
 Parni/s: Leaves
 PDS: Public Distribution System
 Samuh: Group/Collective
 Sarpanch: Village Head
 PME: Planning, Monitoring and Evaluation
 Raksha: Protection
 RFSTE: Research Foundation for Science, Technology and Ecology
 Ritu Parivartan: Climate Change
 Sagvadi: Vegetable Gardens (GoH)
 Shakti: Power
 Teen Parni: Organic technique with three leaves
 TRIPS: Trade Related Aspects of Intellectual Property Rights
 Vatika: Vegetable Gardens (Goth)
 WTO: World Trade Organization

EXECUTIVE SUMMARY

1) NAVDANYA CONTEXT

Founded in 1987 and ably led by globally known Dr. Vandana Shiva, Navdanya, located at Dehradun in the state of Uttarakhand has positioned a powerful ecofeminist-biodiverse ecological model that is firmly anchored in seed sovereignty, food sovereignty, circular economies, living cultures and indigenous knowledge systems for earth democracy.

The biodiverse organic Farm at Ramgarh in Dehradun backs the work of Navdanya with 159 community seed banks, 5000 diverse varieties of climate-resilient seeds and demonstration farms. Meticulously maintained, the Navdanya Farm provides spaces for experiments, demonstration and validates the relevance of seed revival, multiplication, breeding, and production. This farm symbolizes the climate-healing and climate justice approach of Navdanya.

Many times, awarded, Dr. Shiva has taken her advocacy engagement to various global platforms – sharing and influencing global thinking. Most importantly, Dr. Vandana Shiva and Navdanya have impacted on policies that include Indian Patent Act (1970); Protection of Plant Varieties and Farmers Rights Act (2001) and organic policies of states of Kerala, (2008), Uttarakhand (2013), Bhutan (2013) Sikkim (2017) and Leh (2018).

2) SHAKTI PROJECT PHASE I & II

Under the partnership of Navdanya and Calcutta Ondaon, the Shakti Project Phases I and II have established an ecofeminist-biodiverse ecological model that places women as protectors of nature and earth – giving a call to women to unshackle from subordinate states and get empowered.

The Shakti Project has mobilized women through Gardens of Hope (GoH) and organized them under Mahila Anna Swaraj (MAS) Collectives in five states of Uttarakhand, Maharashtra, West Bengal, Odisha, and Madhya Pradesh where Navdanya has a historical presence. The Shakti Project makes women aware of their essential role and contribution to their local agricultural economies and socio-cultural contexts. The Project brings to policy debate the urgency of reversing policies that have adversely impacted biodiverse agroecology and the imperative of women's signal role in policy making.

In concept and practice, the Shakti Project underpins nine principles of agrobiodiverse ecology and Mahila Anna Swaraj (MAS) members abide by them: 1. Regenerating the Earth, 2. Regenerating Seed and Biodiversity; 3. Regenerating Agriculture and Regenerative Agriculture; 4. Regenerating Food and Food Rights; 5. Regenerating Health, and Nutrition 6. Regenerating Self Confidence, Self-Organization, Self-Reliance; 7. Regenerating Living Knowledge; 8. Regenerating Living Economies and 9. Regenerating Living Democracy.

3. EVALUTION CONTEXT

The AVCD Shakti project is completing two phases under the partnership of Navdanya and Calcutta Ondaon. The First Phase commenced on 31.12.2018 and extended to 31st March 2021 due to COVID-19 Lockdown. The Second Phase commenced in June 2020.

The Phase II builds on the learnings of Phase I. Several initiatives of Phase I, especially those relating to leadership and policy are carried into Phase II. The present assessment will, therefore, draw upon the analysis of evaluation of Shakti Project Phase I.

3.1 GENERAL OBJECTIVE(Annexure 1: Intervention Logic: Logical Framework Matrix)

Bring women to the center of Living Democracies and improve the quality of life, well-being, security, and food sovereignty of women farmers in India through regional and national policies on women and agriculture.

3.2 SPECIFIC GOAL OF THE PROJECT

Improving food security and sovereignty in the hands of empowered women through the implementation of biodiversity conservation, seed sovereignty based on agroecological and organic production, facilitating their critical analysis and their participation in the local, national, and international political arena.

3.3 RESULT 1

126 groups of women reinforce the process of individual, social and political empowerment while they are trained in eco-feminism and their knowledge and abilities are recovered.

3.4 OUTCOME 2

Enhanced role and value of women as agents sensitive to seed, health, agroecology, and the fight against climate change, from a participatory process from the local to the global for a critical and participatory analysis of regional agricultural policies and State.

3.5 METHODOLOGY

The parameters of present evaluation include relevance, efficiency, effectiveness, impact, and sustainability of the Shakti Project – Phase II with its overarching Objective, one Result area and one Outcome. The evaluation gives focus to critical analysis of Shakti Project's planning process, project interventions, transformational outcomes and challenges experienced by all stakeholders.

3.6 CONSTITUENCY OF SHAKTI PROJECT PHASE II

The Shakti Project Phase II includes five states: 1) Uttarakhand: Rudraprayag, Terhi Pratap Nagar and Doon Valley Districts; 2) West Bengal: Purba Medinipur District (Bhagawanpur 1 & 2, Chandipur Blocks) 3) Odisha: 5 Panchayats in the Districts of Balasore and Mayunbanj and 5) Madhya Pradesh: Niwari District, 6) Maharashtra: Yavatmal and Amravati Districts

The contexts of the project in the five states differ owing to varying ecosystems of each region: the biodiversity of crops and plants, sociocultural fabric, women's social status and political economy. Navdanya's historical presence in these five states, its paradigm of conserving biodiverse-agroecology and its model of ecofeminism have cohered women from marginal and small farmer households under Mahila Swaraj Collectives.

3.7 COVID-19 AND CLIMATE VULNERABILITIES

The end of Phase I and the first year of Phase II were under the shadow of the Pandemic. Markets were closed for weeks and months in some states, putting people in a huddle. In its wake, women of MAS Collectives were resilient to combat health and economic hardships posed by COVID-19 with their culture of caring and sharing. The GoH increased their diversity with revival of forgotten and uncultivated crops and medicinal plants to build natural immunities.

Climate change in all the five states of the Shakti Project have not been favorable to women and farming communities. Unseasonal rains, unexpected rains, flooding, and cyclones have destroyed several GoH, affecting soil conditions, crop cycles and dips in crop productivity. Special mention must be made of cyclones in West Bengal that recurred every four months, damaging the crops and trees. Women and farmers of Odisha too weathered severe rains and cyclonic storms. Rain and sudden

flooding affected Navdanya Farm, damaging the climate resilient crops. However, what helped the women farmers and Navdanya Farm were the climate-resilient crops that withstood several weather adversities, validating Shakti Project's biodiverse organic model.

4. RELEVANCE

The relevance of Shakti Project is very high in its concept and translation. The First Phase was knitted well and foundational - establishing gardens of hope (GoH), organizing women into MAS Collectives, and bringing out their voices. Unique to MAS Collectives is its socioeconomic diversity – women with marginal and small land holdings, landless women and women from different caste, tribal and religious background accepting each other that nurtured a culture of acceptance and equality. Women in ghonghat, women who were confined to their homesteads, farms and rarely visiting the markets were brought into a collective fold of solidarity. The Second Phase is witnessing a maturing process – increasing the numbers of GoH, enhancing the biodiverse cover, emergence of a cadre of leadership and growing policy discourse. Together, the First and Second Phases of the Shakti Project have been validating that the agenda of biodiversity-based agroecology in the hands of women works and matters and secondly the Navdanya's call that women's knowledge and contribution to policy dialogue is imperative.

The First and Second phases of Shakti Project were overshadowed by the pandemic and its aftermath. The women farmers have remained resilient despite the health vulnerabilities and physical restrictions imposed by COVID-19. Interestingly, the Pandemic heightened the relevance of GoH with well-stocked multi-vegetables in women's kitchens, women support to each other by sharing their produce and increasing medicinal plants in their GoH that help build their immunity systems. Several returning migrants to their villages did not go back and started GoH in their homesteads.

5. EFFICIENCY

The Second Phase of Shakti Project flows out of the learnings of the First Phase. The Overall Objective, Specific Goal, 1 Result Area and 1 Outcome of Phase II are in consonance with the First Phase and implemented as per the project proposal. The PME team kept to their mandates and played a critical role – staying connected with members, postponing, and later resuming a couple of project meetings due to Covid-19 and climatic adversities, and in continual touch with the Project Coordinators. Dr. Vandana Shiva has given close oversight to the progress of the Shakti Project.

The Local Coordinators and Coordinators of Shakti Project are an experienced lot and have journeyed with the women: overseeing monthly meetings of MAS Collectives, providing facilitative support to Cluster Level meetings, and be part of the festivals that women celebrate and most importantly on call when severe climatic conditions damaged and destroyed many GoH. Notably, a few of them graduated from being members of MAS Collectives to positions of Coordinators. The team spirit of the Project staff at national and local levels is commendable.

The Shakti Project now has the first layer of MAS Collectives from the First Phase and second layer from the Second Phase. Learnings and training manuals of the First Phase of the Shakti Project contributed to better designing of the objectives and thematic arenas of MAS Collectives' meetings. The Cluster Level meetings in the Second Phase of Shakti Project brought a meta space for second layer of knowledge building and deepened the dialogue on agrodiversity and ecofeminism.

The design of the Shakti Project effectively combines multi-level training and exposure to women farmers. Women welcome their visits to Navdanya Farm which they say give them great learning

opportunities. The Shakti Project has developed a 'Participatory Calculus for Biodiversity Based Living Economy & Biodiversity Based Productivity in Agriculture', that helps women to analyse what is being grown as biodiversity-based organic food, biodiversity-based economy and as happiness from the living Earth—Productivity in Agriculture'. This is an innovative and practical tool.

The Second Phase witnessed deeper thrust to revival of traditional and forgotten cuisine of mothers and grandmothers and local food systems, women's participation with their products in local Melas and celebration of local festivals with renewed vigour. This highlights the mutuality of biodiversity and cultural diversity. All this has added vastly to Navdanya as a movement – bringing into its fold wider fields of recognition.

Most importantly, the Second Phase has facilitated Jaiv Panchayats to provide democratic spaces and brought the participation of not only Shakti women but the larger public to reflect on growing importance of biodiverse organic ecology and policy imperatives.

6. EFFECTIVENESS

The Second Phase has increased the number of GoH and organized them under MAS Collectives, adding to women's solidarity. Most importantly, a sizeable number of women leaders and Acharyas (gurus/teachers) with certificates have emerged with mandates to spread the agenda of biodiverse ecofeminism, increase GoH and expand the base of MAS Collectives.

Women's field conversations resonate salutary impact of organic produce, their longer shelf life, economic gains and changing lifestyles. They are euphoric how their GoH kept their kitchens surfeit with vegetables even during the Pandemic. In their world view, women have begun to look at GoH in a broader context of not only monetary benefits but new paths they have created as seed savers, producers, getting connected to the wider world of women, changing their lifestyles and social identity. This is transformative.

Put together, the First and Second Phases have significantly improved biodiverse cover and soil fertility of GoH. The Shakti Project reports increase of biodiverse acres from 83 acres in the First Phase to a total of 105.12 acres in the Second Phase. Notably, a total of 107 climate resilient and nutritional seed varieties are now grown across the five states of Shakti Project. Given the limited space available in women's homesteads, this increase reflects the growing demand for organic vegetable cultivation.

The cultural dimension of the Shakti Project has opened new ways of strengthening women's identity. The Project has journeyed with local festivals and their traditions of special food systems, culture of music, dance, and celebration of women's finery. By this, the Project reinforces the intersectionality between biodiversity of nature, food, health, with women's pre-eminent position in agriculture and culture. Encouraging mothers and grandmothers to recollect and prepare forgotten foods and document them for future generations is a unique component of the Shakti Project. This underscores the ecofeminist dimension of food systems.

While Dr. Vandana Shiva has taken her battle to global platforms, the Shakti Project has taken the policy agenda of deepening people's thinking and discourse at local level. The Cluster Level meetings in the five states have created meta spaces to share experiences and deepen women's policy discourse. At another level, the Project gave deeper thrust to democratic thought and grassroots participation through Jaiv Panchayats that were held in the six states which included the state of Rajasthan. The outcomes

of Jaiv Panchats highlights the relevance of expanding these democratic platforms. Together, the festivals, Melas and Jaiv Panchayats reflect the mass-dimension of Shakti Project with large participation from wider public - local administrators, sarpanches, traders, principals, teachers, students, anganwadi workers, social workers, and activists.

The policy discourse has become integral to Shakti Project and what is notable are growing voices of women's advocacy for organic farming and call to ban of chemical pesticides. For women, who knew only their life in their homesteads and family farms –taking on vanguard roles in the policy arena is pathbreaking and a great achievement.

7. IMPACT

The impact of Shakti Project must be placed cumulatively from the First and Second Phases of the Project. While other forces of modernization might have impacted women's life situations, the Shakti Project provided planned opportunities and spaces for women to get empowered. The role models of these women will remain templates of inspiration for the younger generation.

Enhancing Biodiversity Cover

With multi-vegetables, spices, revival of forgotten vegetable crops and medicinal plants, the GoH are models in biodiversity. This is a significant outcome and impact.

Transformative Lives

Women lives have changed in several ways, and their narratives speak of personal transformations and changing family situations. Their new identities as seed-savers, producers, leaders and above all as self-earners have energized them.

The Shakti Project gives recognition to women's indigenous knowledge in traditional agriculture which is further enhanced by women's newfound learning in technicalities of biodiverse organic methods. By motivating mothers and grandmothers to revive forgotten foods and documenting, the Project acknowledges women's role and expertise in traditional food systems. This is the new face of Shakti women.

Changing Patriarchal Mindsets

In a more fundamental way, women have begun to change patriarchal mindsets and practices in their families and society around them. The diverse character of MAS Collectives has nurtured inclusive practices of accepting women from different caste, tribe, region, language, and class backgrounds.

Women have begun to look beyond their lives – bringing improvements in their localities, questioning, and protesting discriminatory practices. They have begun to question domestic violence, destroyed liquor shops, and are supportive of gender-equality practices. Looking at the empowered daughters and daughters-in law, mothers and mothers-in law are changing their gender perspectives – giving the younger generation greater freedom. Women aver that they do not give preferential treatment to boys. Child marriages have been eliminated and girls are married with their consent. These are gender transformative measures.

Politically Aware

Women have become politically aware – attending local Panchayat meetings, demanding the local administration to improve the amenities in their villages and at times even working with government

officials to bring improvements in their neighborhoods and villages. Women have begun to question, protest, demand and yet cooperate. This is the women's power that Dr. Vandana speaks about.

Grassroots Discourse

There is an uptake in women's informed interactions and discourse within meetings of MAS Collectives, Cluster Level meetings and in all the learning events of the Shakti Project. Better informed, far more vocal, women have left all the fear they once had - relating with government officials and the public with informed confidence.

8. SUSTAINABILITY

As a model, the Shakti Project embeds several sustainable components. Having gone through transformative processes, women will continue with their GoH, be seed savers, producers and will hold on to their culture of sharing. Leaders (Javik Acharya) are now a motivated lot and with project support can take on the agenda of spreading biodiverse organic agriculture.

By providing an organizational base, the MAS Collectives have cohered women and given them an institutional identity. The competency base of MAS Collectives must be assessed and strengthened.

The democratic platforms – Jaiv Panchayats, Policy Meets highlights the high relevance of democratic spaces and has scope to expand and diversify.

9. CONCLUSION

The Shakti Project is demonstrating a sustainable model in biodiverse organic farming at a time when Indian agricultural economy is fast declining with low productivity, indifferent policies for sustainable agriculture and serious shortage of labor. The variants of GoH across the five states have models for replication. More importantly, the Project has brought into its fold a wide stakeholder coverage.

CHAPTER 1 INTRODUCTION

1.1 NAVDANYA CONTEXT

Founded in 1987, and ably led by globally known Dr. Vandana Shiva, Navdanya, based in Dehradun in the state of Uttarakhand is a staunch advocate of a biodiverse agroecological model that is firmly anchored in seed sovereignty, food sovereignty, circular economies, living cultures and indigenous knowledge systems for earth democracy. Through her research and numerous publications, Dr. Vandana Shiva positions an ecofeminist philosophy that places women as protectors of nature and earth – giving a call to women to unshackle from subordinate states and get empowered. Navdanya-Ondaon Shakti Project Phase I and II demonstrates this ecofeminist model of women's empowered states through a biodiverse agroecological paradigm.

1.2 NAVDANYA FARM

Over the decades, Navdanya's biodiverse organic Farm at Ramgarh in Dehradun has evolved with 159 community seed banks, 5000 varieties of climate-resilient seeds and demonstration farms. Meticulously maintained, the Navdanya Farm provides spaces for experiments, demonstration and validates the relevance of seed revival, multiplication, breeding, and production. As a protective valve, Navdanya procures from farmers seeds, agricultural produce, process food and handicrafts – keeping farmers markets alive and stable, especially in times of crises. Women farmers who come on exposure visit to Navdanya Farm get back most motivated. Indeed, the Navdanya's Farm symbolizes a climate-justice model.

1.3 RESEARCH, KNOWLEDGE, AND POLICY

Navdanya occupies a special place in combining experiential biodiverse agroecology at the grassroots, research, knowledge, and policy advocacy at national and global platforms. Founded by Dr. Shiva, the Research Foundation for Science, Technology and Ecology (RFSTE) has provided platforms for research on women and ecology, green revolution, GM seeds and Trade Related Aspects of Intellectual Property Rights (TRIPS) and Dr. Vandana Shiva's influential research. Many times, awarded, Dr. Shiva has taken her advocacy engagement to various global platforms – sharing and influencing global thinking.¹

Most importantly, Dr. Vandana Shiva and Navdanya have impacted on policies that include Indian Patent Act (1970); Protection of Plant Varieties and Farmers Rights Act (2001) and organic policies of states of Kerala, (2008), Uttarakhand (2013), Bhutan (2013) Sikkim (2017) and Leh (2018).²

¹Navdanya set up Bija Vidyapeeth in 1983 to promote and provide a platform for research, knowledge building and dissemination. Dr. Shiva has been recipient of several awards that include Right Livelihood Award (1993), Golden Award (1996), Sydney Peace Prize (2010), MIDORI prize for biodiversity (2016), to mention the salient. Presently, Dr. Vandana Shiva is on the Jury of World Future Council. Dr. Vandana Shiva received the Alternative Nobel Prize in 1993 for 'placing women and ecology at the heart of the debate on modern development'.

²Dr. Vandana Shiva was Adviser to the government on biodiverse organic farming. At the behest of 2005 the National Commission of Women in 2005, the RFSTE prepared a report on the impact of WTO Agreements on women in agriculture.

1.4 COLLABORATION WITH CALCUTTA ONDAON

The Shakti Project is a collaborative project of Navdanya and Calcutta Ondovan. Founded in 1999, Calcutta Ondoan, has worked with several feminist organisations in India and has technical competency in project management. In their strategic plans, the Calcutta Ondoan places care for environment as a priority and integrates transversality of environment and eco-feminism. Since 2010, Calcutta Ondoan has collaborated with Navdanya on different dimensions of agroecology and biodiverse farming systems.³

1.5 CONTRIBUTING TO POLICY DIALOGUE

A major contribution of the Shakti Project are MAS-DWD publications: a) Women Feed the World Through Earth; b) Earth Rising, Women Rising: Regenerating Earth and Seeding the Future.⁴

1.6 A GLOBAL ALLIANCE

The Diverse Women for Diversity (DWD). an international network was founded in 1997 following the Conference on Plant Genetic Resources in Leipzig in June 1996 with its mission to conserve biological and cultural diversity across the globe. Over the decades, this self-organising volunteering network meets once in two years and has brought well-known scientists, educationists, and activists across the world to share their experiences and connect to grassroots movements. The latest DWD conference held from 2nd to 8th March 2023 brought a gathering of over fifty global women from more than 20 countries and over hundred women representatives from 21 states in India to connect and build coordinated actions in defense of the Earth, biodiversity, and food.⁵

1.7 SHAKTI PROJECT POSTULATES

In its praxis, the Shakti Project has mobilized women farmers through Gardens of Hope and motivated them to get organized under Mahila Anna Swaraj (MAS) Collectives in five states of India where Navdanya has a historical presence. The Shakti Project makes women aware of their pivotal role and contribution to their local agricultural economy and socio-cultural contexts. Most significantly, the Project brings to policy debate the urgency of reversing policies that have adversely impacted biodiverse agroecology and the imperative of women's signal role in policy making. The Shakti Project underpins the following nine principles and MAS women pledge by them.⁶

1. Regenerating the Earth

Earth care is restoring our relationship with diversity of all life as a sacred family. Earth care is climate action. Earthcare is food justice.

2. Regenerating Seed and Biodiversity

We are the custodians, breeders, and producers of seed. Living seed is our living heritage which we have received in diversity and integrity from our ancestors, and which we have a duty to safeguard and pass on to future generations.

3. Regenerating Agriculture, Regenerative Agriculture

³Technical Proposal for Project Aid

⁴ Diverse Women for Diversity, Mahila Anna Swaraj, February 2021, Earth Rising, Women Rising, Women Rising: Regenerating Earth and Seeding the Future, Navdanya-RFSTE.

⁵ Navdanya International.org and Navdanya Report on DWD – March 2nd to 8th, 2023

⁶Ibid. For brevity, the principles are abridged.

Our indigenous knowledge and practice of agriculture are based on principles of agroecology, working with the laws of nature and the Earth. Seed sovereignty and land sovereignty are the foundation for Food. Agriculture of Earth Care cultivates our local community and rejuvenates the Earth.

4. Regenerating Food and Food Rights

Food Sovereignty is our Birth Right (Anna Swaraj). Growing our food through our self-reliance (Atmanirbharta) is the basis of our ecological civilization. The National Food Sovereignty system should be strengthened through decentralization as per our food culture.

5. Regenerating Health and Nutrition

Food is our medicine. When we grow healthy organic food, we grow health. We need to decolonize our agriculture through indigenous seeds, chemical free biodiverse Organic Farming and our Food and nutrition through culturally appropriate and artisanal processing.

6. Regenerating Self Confidence, Self-Organization, Self-Reliance

Self-Organization and Atmanirbharta is the foundation of food democracy.

7. Regenerating Living Knowledge

We embody the multidimensional knowledge and practice of biodiversity in all spheres of life. Biodiversity can be regenerated by regenerating our living knowledges of life, for life. Biodiverse, local, organic, artisanal food systems hold the answers to the multiple emergencies created by the corporate industrial globalized food and agriculture.

8. Regenerating Living Economies

Circular local Economies is the art of living, giving to and caring for Mother Earth and our community. Circular economies intensify livelihoods and wellbeing, thus regenerating nature and local economies. A capitalist patriarchal definition of productivity makes women farmers and their work invisible, ignoring the fact that most women are farmers, and they produce most of the food that nourishes communities. We are creating ever expanding circles of food sovereignty (Anna Swaraj) beginning with ourselves and our households and reaching out to our communities, our regions, our country.

9. Regenerating Living Democracy

We are members of the Earth family. Living democracy is participatory and grows from the ground up, from the inside out, respecting the freedom of all beings, including humans. Women's Bija Swaraj, Women's Anna Swaraj, Women's Gyan Swaraj Women's Arthik Swaraj are elements of Earth-Centered and Women-Centred Swaraj.

CHAPTER 2 EVALUATION CONTEXT

2.1 CONTEXT

The AVCD Shakthi project is completing two phases under the partnership of Navdanya and Calcutta Onoan. The First Phase commenced on 31.12.2018 and was extended to 31st March 2021 due to Covid-19 Lockdown. The present project is the Second Phase, commencing from June 2020.

The Shakti Project Phase II builds on the learnings of Phase I. Several initiatives of Phase I, especially those relating to policy and leadership are carried into Phase II. The present assessment will, therefore, draw upon the analysis of Shakti Project Phase I.

2.2 OVERALL OBJECTIVE

Bring women to the center of Living Democracies and improve the quality of life, well-being, security, and food sovereignty of women farmers in India through regional and national policies on women and agriculture.

2.3 SPECIFIC GOAL

Improvement of food security and sovereignty in the hands of empowered women through the implementation of biodiversity conservation, seed sovereignty based on agroecological and organic production, facilitating their critical analysis and their participation in the local, national, and international political arena.

2.4 RESULT 1

126 groups of women reinforce the process of individual, social and political empowerment while they are trained in eco-feminism and their knowledge and abilities are recovered.

2.4 OUTCOME 2

Enhanced the role and value of women as agents sensitive to seed, health, agroecology, and the fight against climate change, from a participatory process from the local to the global for a critical and participatory analysis of regional agricultural policies and State.

2.5 CONTEXT OF SHAKTI PROJECT PHASE II

The Shakti Project Phase II includes five states: 1) Uttarakhand: Rudraprayag, Tehri Pratap Nagar and Doon Valley Districts; 2) West Bengal: Purba Medinipur District (Bhagawanpur 1 & 2, Chandipur Blocks 3) Odisha: 5 Panchayats, in the districts of Balasore and Mayurbhanj and 5) Madhya Pradesh: Niwari District, 6) Maharashtra: Yavatmal and Amravati districts.

2.6 EVALUATORS

Dr. Uma Ramaswamy and Dr. Indu Prakash Singh are commissioned to undertake the present evaluation.

2.7 METHODOLOGY

The present evaluation follows the criteria of the CAD (Development Assistance Committee) recommended by the Spanish and Basque Cooperation. The parameters of assessment include relevance, efficiency, effectiveness, impact, and sustainability of the Shakti Project – Phase II with its Overarching Objective, one Result area and one Outcome. The assessment gives focus to critical analysis

of Shakti Project's planning process, interventions, transformational outcomes, and challenges experienced by all stakeholders.

The evaluation was conducted in two modes. Dr. Uma Ramaswamy undertook the assessment online through collection of data and with focussed conversations, dialogues with significant stakeholders, as mentioned under. Dr. Indu Prakash Singh ably complemented the evaluation process through field visits to Uttarakhand, Maharashtra, West Bengal, and Odisha. The evaluation followed the methods given below to capture outcomes and impact of the Shakti Project, Phase II. Given below are the methods adopted to capture quantitative outcomes and most importantly qualitative change in the lives of women.

1. Study of AVCD Phase II Period Narrative up to January 2023
2. Study of DWD-MAS publications: Study of DWD-MAS publication: 1. Women Feed the World Through Earth Care and, 2) Earth Rising, Women Rising: Regenerating the Earth, Seeding the Future released on 5th of March 2021. Although published during the end of the first phase, these publications have been effectively used for training and discourse.
3. Short Notes on climate change by Mr. Drona Chetri (Programme Head), Mr. Ahammad Uddin, Local Coordinator, West Bengal, and Ms. Bhuvaneshwari Semval, Coordinator, Uttarakhand.
4. Focussed interviews/dialogues with Dr. Vandana Shiva
5. Focussed interview with Dr. Mira Shiva, Member, Expert Committee
5. Outcome mapping by PME Team
9. Focussed Interviews with the following
 - PME Team by Dr. Uma Ramaswamy (online) and Dr. Indu Prakash in the field.
 - Drona Chetri
 - Preeti Virkar
 - Anugrah Bhatt
 - Bhuvaneshwari Semval
 - Local Coordinators by Dr. Uma Ramaswamy (online) and Indu Prakash (in the field)
 - Savita A. Raut (Maharashtra)
 - Dr. Ashok Kumar Panigrahi, Ms. Kusum Mishra Panigrahi (Odisha)
 - Ahammad Uddin (West Bengal)
 - Ajay Namdev (Madhya Pradesh)
 - Bhuvaneshwari Semval (Uttarakhand)
 - Visits to Uttarakhand, Maharashtra, Odisha, and West Bengal by Dr. Indu Prakash Singh and focussed group interactions with women and leaders of Mahila Anna Swaraj and other stakeholders. (Annexure 4: Field Itinerary)
 - We have consciously brought voices, case studies and narratives from the field to capture specificities of women's experiences.

CHAPTER 3 PROJECT CONTEXTS

3.1 SHAKTI PROJECT

The Shakti Project Phase II is being implemented in five states of India: 1) Uttarakhand: Rudraprayag, Tehri Pratap Nagar and Doon Valley Districts; 2) West Bengal: Purba Medinipur District (Bhagawanpur 1 & 2, Chandipur Blocks 3) Odisha: 5 Panchayats in the Districts of Balasore and Mayunbanj and 4) Madhya Pradesh: Niwari District, 5) Maharashtra: Avatmal and Amravati Districts. The present Phase II is a continuation of Phase I of Shakti Project. The Shakti Project held one Jaiv Panchayat in Rajasthan.

The contexts of the project in the five states differ owing to the varying ecosystems of each region: the biodiversity of crops and plants, sociocultural fabric, women's social status and political economy. Navdanya's historical presence in these five states and its paradigm of conserving biodiversity, underpinned by ecofeminism has cohered women from marginal and small farmer households with multiple benefits coming their way and transforming their lives with new identities and social recognition.

COVID -19

The end of Shakti Project Phase I and the first year of Phase II was under the shadow of the Pandemic. In its wake, women of MAS Collectives in the Project areas have demonstrated their resilience to combat health and economic hardships posed by COVID-19 with their culture of caring and sharing. The GoH increased their diversity with revival of forgotten and uncultivated crops and medicinal plants – increasing the health awareness of farmer families to hone themselves to build natural immunities.

3.2 UTTARAKHAND

The Shakti Project in Uttarakhand draws its identity from Navdanya's three-decadal association with women farmers from the Districts of Tehri Pratap Nagar, Rudra Prayag, and Doon Valley. The Project coverage Includes: 1) Rudraprayag - 168 GoH, 14 MAS Collectives in 14 Villages; 2) Tehri Pratap Nagar: 168 GoH, 14 MAS Collectives in 10 Villages and Doon Valley: 252 GoH, 21 MAS Collectives in 20 Villages.

▪ Effects of Climate Variabilities⁷

It is pertinent to juxtapose Phase II of the Project against the continuing impact of climate variabilities to the abundance of biodiverse ecosystem of natural forests, rivers, fauna, flora, and wildlife.⁸ People's narratives recall of how twenty-five years ago, jungles were getting destroyed due to illegal felling and the development of the largest manmade Tehri Lake, an artificial dam reservoir that came into existence with the establishment of Tehri dam. Both the Tehri dam and Tehri Lake submerged large tracts of

⁷Climate variabilities include variations in the climate that last longer than individual weather events, whereas the term climate change only refers to those variations that persist for a longer period.

⁸The geological vulnerability of Uttarakhand was seen when the district of Chamoli experienced serious flooding which is said to have been caused by a portion of the Nanda Devi glacier breaking off early on 7 February, 2021 - releasing the water trapped behind the ice, and causing a glacial lake outburst flood. Again in 2023, the occurrence of land subsistence in the famous pilgrim town of Joshi Math in Chamoli district of Uttarakhand has resulted in many families being evacuated.

agricultural land and altered the locations of villages. In its wake, Tehri Lake also brought wild animals (wild bears and monkeys) from other regions, posing a threat to crops and even human lives.

During the Second Phase, women farmers had to weather erratic rainfall and snow fall without crops completing their cycles – resulting in wild plants and fruits flowing early, fruiting less, getting destroyed with fungus and dips in productivity. Productivity dips have made conservation of seeds difficult. The following table reflects declining productivity of crops and vegetables in Pratapnagar area of Tehri District.⁹

Paddy	Millets	Rajma	Lobia	Urad	Bhat	Nourangi	Vegetables
10%	20%	20%	40-50%	40%	40-50%	50%	40% Cucumber, bottle guar, snack guard, bitter guar, pumpkin, beans etc.

Navdanya Farm

Closer home, Navdanya Farm too had to withstand heavy rains. During 17th to 24th October 2021; July and August 2022, 12th to 21st September, heavy rains and sudden flooding caused havoc: damaged sixteen varieties of paddy, navrang dal, soyabean and rajma varieties. While climate resilient crops too suffered, they came back to life. The long paddy plants that were fallen were secured by making a bunch so that the seeds can be kept safe till they ripen.¹⁰

Altogether, high rains caused heavy rushing of water, water logging in the fields and destroyed the summer/ monsoon crops by 75%. The untimely heavy rain fall destroyed pulses (52 varieties Rajma 52 and 15 gourd varieties, 20% of the 750 paddy varieties, 30% of the 50 millets varieties, 36% of the 39 spice varieties.¹¹

Shifting Cropping Patterns and Revival of Uncultivated Varieties

From its inception, the Shakti Project has systematically introduced climate resilient crops. The first Phase encouraged women in Rudra Prayag to grow forest species such as wild buck wheat, lengda, chandra, kuntra and spices such as bada elaichi (black cardamom), cinnamon and turmeric that are climate-friendly and ward off wild animals.

In continuation, Phase II brought into cultivation uncultivated edible as also non-edible plants that have medical value. These include: giloy, dhatoora, brahmi, pattharchatta, akarkara, mugwort, cassava, asthma plant, beauti berri, agerettum, aerva and others. All this has increased biodiversity.

⁹AVCD Narrative Report, January 2023

¹⁰ Navdanya, Report of Impact of Heavy Rain at Navdanya Farm

¹¹Ibid

From their side, Navdanya has been reviving the multi-millet: finger millet, pearl millet, jowar (jowar), and bhajra (bhangjeer) in the Project area, preserving their seeds. Navdanya farm has as many as 100 varieties of gourds and beans.

Sociocultural Fabric

The women farmers of Uttarakhand are known for their tenacity in the pursuit of rainfed arduous agriculture, especially in forested uplands and weathering uncertain climatic changes. With large numbers of men migrating, women are central to the rural economy – working hard with their bent backs in the hilly terrain, tending to their cattle and animals and protecting the forests.

With beautiful and mighty Himalayas in the background, the state of Uttarakhand is multi-ethnic with their dialects and distinct traditions rooted in their culture. Folk dance and distinct dress styles (especially, women's long skirted ghagra-choli), music, festivals and cuisine set Uttarakhand apart. The Shakti Project captures the centrality of women's place in their culture.

3.3 MAHARASHTRA

Making History

The significance of Shakti Project in Maharashtra must be seen against Navdanya's activism in the drought-prone and rain-fed Vidarbha region since 1999. In the wake of deaths of Bt. Cotton farmers, Dr. Vandana Shiva's made bold with her frontal attack on invasion of carcinogenic glyphosate pesticide and genetically modified crops by Monsanto and presently known as Bayer.¹² Navdanya launched a program called 'Fibras de la Libertad' to help Vidarbha farmers grow organic chemical-free natural fibers, as well as promote indigenous skills and knowledge of people engaged in agriculture. Starting with its Beej (Seed) Yatra during Bt. Cotton debacle, Navdanya has made sustained efforts to shift farmers from Bt. Cotton to traditional native cotton crops; reviving millets, traditional crops of sesame and peanut and strengthening traditional oils of sesame and peanut.

Rich Agribase in Cotton, Pulses and Oils

Thirty-five per cent of India's cotton is grown in Maharashtra. It is also the second largest producer of traditional pulses and is popular for ground nut and sesame oils. With the entry of soya oil, sesame and ground nut oils now competes with the former.

Shakti Project

The Shakti Project has promoted 216 GoH, 18 MAS Collectives in 15 Villages. The MAS Collectives have set up two seed banks with 200 varieties of seeds. These seed banks have emerged as models and are visited by farmers and officials from the government departments. During the First Phase of the Shakti Project, a women-managed Ghani was set up. The Ghani has reached out to 30 villages and farmers come to get their produce milled because of its higher outputs of oil and translucent color. The entrepreneurship culture of MAS Collectives is high.

¹²Navdanya – DWD, *Participatory working draft on seed, agriculture and nutrition manual, Part 1 Seed*. Bayer-Monsanto triggered a major agrarian, ecological and regulatory crises in Maharashtra through sale of genetically modified Bt cotton seeds with the false claim that it will control pests, and now are illegally spreading "Roundup" Ready Flex Bt Cotton Seeds and the herbicide Roundup without approval in Maharashtra. In the last few decades Maharashtra has witnessed 84,700 farmers suicides. 11, 995 farmers' suicides have taken place in the last three years. In the last two decades more than 300,000 farmers have committed

Climatic Vulnerabilities

After the heavy rainfall in 1994, Vidarbha region (Wardha, Yavatmal and Amravati) experienced highest rainfall in 2022. Many mud houses were destroyed. In Amravati 3 talukas received very heavy rainfall which lasted till 28th July 2022. It is reported that 80 % of cotton and tur dal was damaged. And 20% of standing crops was destroyed. Farmers bemoan that their moong, urad and soybean will only produce 35% of crops grown.

Rainfall in Yavatmal region resulted in high humidity and rise in temperatures. In their effort to revive crops, farmers were sowing their fields twice and several who saw no results left the lands fallow. Seed varieties such as Rani, Vikrant, 9035 sprouted, but developed fungus due to continued rainfall. Only thirty per cent of the standing crops survived. 70 per cent of the farmers lost their soya crops. Rains and floods resulted in shortage of water, rise in cold and viral fevers. Farmers mobility got seriously curtailed until 28th, July.¹³

During evaluation field visits, the temperatures were high and vegetables in GoH went dry. The last harvest of the season from GoH were carried out until mid to end of March. The seeds for the food plants will be sown again after 15th June when monsoon arrives.

3.4 WEST BENGAL

The Shakti Project Phase II is operational in Purba Medinipur District (Bhagawanpur 1 & 2, Chandlure Blocks) with 480 GoH, 40 MAS Collectives in 32 Villages. Two models stand out: 1) Organising 42 Muslim women into three MAS of which one is mixed with Muslims and Non-Muslims and 2) 61 landless women leasing out lands for GOH.

Effects of Climate Change

Proximate to cyclone-prone Bay of Bengal, the farmers of West Bengal have been battered by frequent cyclonic storms. Mr. Ahmmad Uddin, the Local Coordinator of West Bengal reports, ' During the present phase we experienced the adversity of five cyclones: 1) Cyclone YAS (23rd May to 28th May, 2021); 2) Cyclone Gulab (24th September to 28th Sep 2021; 3)Cyclone Jawad (2nd December to 6th December 2021; 4) Cyclone Asani (22nd may 2022) and 5) Cyclone Citrang (23rd October, 2022). In addition, during October 2021, we had a big flood from Kalighai river and another in 2022. Cyclones came every four months. The big flood caused much destruction in our project areas of Bhagwanpur 1. The Vatikas (GoH) of 383 members lost their vegetables. In Bhagwanpur 2 and Chandipore Block, the loss was less severe.'

The less severe cyclones of Gulab, Jawad, Citrang affected the GoH. But bigger cyclones of Yaas and Asani brought much ruin to domestic poultry, ducks, and small birds. The farming communities lost a lot of big trees. Many fruiting trees of mango, Banana, guava, papaya, moringo died. Our greatest loss was in fishery. Household and village ponds were filled with water and fishes disappeared.'- Ahammad Uddin, Local Coordinator.

What is merit worthy is that women restarted their Vatikas (GoH), helping each other in many ways during these climatic calamities.

3.5 ODISHA

13 AVCD Phase II Period 4 Narrative up to January 2023 and Mr. Drona Chetri's Notes.

Navdanya's connection with farmers of Odisha goes back to the Super Cyclone (29th October 1999) that brought about vast devastation to the lands, water bodies and livelihoods of farming communities. Along with Dr. Ashok Kumar Panigrahi, a reputed teacher and researcher in environmental science, Navdanya set up a temporary seed bank in Jagjit Singh Puri District.¹⁴ Later, Navdanya was to give 100 quintals of seeds to the farmers that resulted in high diversity. Dr. Ashok Kumar Panigrahi went on to set up a rich seed bank at Balasore with 1072 rice varieties.¹⁵ Drought-prone and flood resistant rice varieties along with aromatic, medicinal rice seeds brought much diversity to the seed bank. Over the last 20 years, 150 varieties of rice seeds were sent to Dehradun.¹⁶

'The Navdanya community seed banks have created and rescued 870 rice varieties from the brink of extinction. The rice diversity has helped many farmers break free of chemical addiction. The salt tolerant rices have helped farmers in rejuvenation of agriculture in Odisha after the 1999 Super Cyclone and in Tamil Nadu after the Indian Ocean tsunami of 2004... After the 1999 Orissa Super Cyclone, Navdanya could distribute 2 trucks of salt tolerant rice to farmers because we had conserved them... Along coastal areas, farmers have evolved flood tolerant and salt tolerant varieties of rice – such as are bhundi, kalambank, lunabakada, sankarchin, nalidhulia, ravana, seula-puni and dhosarakhuda. - Dr. Shiva'¹⁷

The Shakti Project II Phase in Odisha must be placed against these historical cycles of agrodiversity and introduction of climate and flood resilient varieties that gained popularity.

Climatic conditions during the Shakti Project Phase II have been unfavourable. As against the normal averages of rainfall that stands between 1500 to 2000mm and at times falling below 1000 mm, the Shakti Project area of Balasore received as much as 2967 mms during the month of August 2022; 3400 mms in the month of August and 2146 mms in October 2021. With heavy rains, paddy, the kharif crops took serious toll.

'...long-term paddy in highlands, medium and short duration paddy crops in lowlands were damaged. Excessive precipitation promoted the growth of pests of paddy such as brown plant hoppers, locally known as "chakada poka", who feasted on long duration paddy and damaged the crops. This was intense in chemical-based rice fields. Notably, organically managed rice ecosystems escaped the damaging impacts of brown plants hoppers.'¹⁸

Vegetables suffered with low outputs resulting in rising prices – impacting the wage work. A positive fallout is the growing popularity of climate resilient rice varieties for their high yields. In the salt- flood area- Srikona (Balasore) –Niranjan, Parbati, Agnijhal, Kunti, Moti, Bhundi and Kakudimanji varieties gained in demand as opposed to government supplied HYVs like Pratikshya, Swarna and Ran. Again, in the flood area of Odisha paddy varieties Parbati, Moti, Kalachampa, Agnihal, Kathia, Baliadadha, Khejurmundi, Gudamathia, and Pahadia Sworna in Kaharakul-Kajibag-totasahi villages of Balasore and

¹⁵Dr. Ashok Kumar Panigrahi has given extensive training to women farmers in Dehradun and in major training events of the Shakti Project.

¹⁶ The well-known climate tolerant rice varieties are bhundi, kalambank, lunabakada, sankarchin, nalidhulia, ravana, seula-puni and dhosarakhuda.

¹⁷ Quoted in Dr Ashok K.P and Ms. Kusum Panigrahi, *Biodiversity, Agroecology And Indigenous Knowledge in Odisha*.

¹⁸AVCD Narrative Report, January 2023

Kalachampa, Khejurmundi & Agnijhal in Chengua, Mangalpur & Gadi Sahi villages of Mayurbhanj gained in demand.¹⁹

During the climatic adversities, the farming communities were protected by climate resilient crops and seed saving. 56 communities seed banks were promoted to stem climatic disasters. In the last year floods, 10 villages got impacted. But due to flood resilient and salt resilient seeds, they were able to retrieve and cultivate and make better of the lost crops, up to 60%. Dr. Ashok Kumar Panigrahi and Ms. Kusum Mishra Panigrahi and their staff have been protecting salt-tolerant mangroves (also known as tidal forests) in the coastal stretches. Navdanya has initiated 'Emergency Seed Bankin Odisha 'for distribution to affected farmers.

The Shakti Project has 144 GoH, 12 MAS Collectives in 12 Villages.

3.6 MADHYA PRADESH

Navdanya has been working in the state of Madhya Pradesh since 1984 and gained recognition for its Neem campaign during Bhopal tragedy that messaged - 'plant a neem tree and say no to chemicals'. Later it worked both directly and indirectly with other civil society organizations on issues of water and biodiversity.

The Shakti Project Phase II is now operational in Niwari District and has organized 84 GoH, 8 MAS Collectives in 8 villages. There are two seed banks that are conserving 28 lost seeds of Bundelkhand region. Significantly, the composition of MAS Collectives is diverse and includes adivasis (Savarias) who inhabit the hills, Scheduled Casters and Other Backward Classes. Once part of Bundelkhand region, the topography of Niwari combines forest areas and plains. The area is hilly and rocky and farmers weather erratic rainfalls and high rainfalls that result in runoffs, degrading the soil. The major crops include groundnuts, udath, moong dal, chana and wheat. The Shakti Project has revived a few old crops such as red wheat and old varieties of Bajra and Jowar.

There is high migration of adult male population and women have emerged central to the economy of this region. Women are ghonghat-bound and before the Shakti Project, they knew only their homes and their agricultural fields.

3.7 Climatic Changes: Going the Organic Way

There is no denying that climatic adversities have become far more pronounced during the Second Phase, posing a major challenge to Shakti women and farming communities. Having gone the organic way, women voices have become far more nuanced in their critique of inorganic farming. Women's voices given below reflect why women have gone the organic way.²⁰

Mr. Drona Chetri comments: In Uttarakhand, several forces are destroying nature. Water sources of rivers are continuously decreasing due to the many dams and development projects that continue to cut trees and forests. Climate change and reduced snow fall in winter are the main factors that are damaging agricultural crops. In recent times, we have been hearing voices of relocation, migration, and

¹⁹*Ibid, AVCD Narrative Report, 2023*

²⁰*Mr. Drona Chetri, Programme Head, took time to capture women's voices for the evaluation. Thank you, Drona. The voices from Maharashtra and Madhya Pradesh were from Savita Raut and Ajay Namdev – captured online.*

resettlement. More than 50 per cent of people have migrated in search of livelihood in the last ten years from the mountain districts of the state.

- Swani Devi, our MAS member explains this well: `Due to lack of snowfall, the forests have dried up. Due to the drying up of forests, the sources of traditional water (Dhare/ Gadere) have stopped.
- Talk to 89 years old Jay Devi who would tell you about the disappearance of paddy varieties such as Jhedu satti, Chawari Dhan, Ghaysu Dhan, Chena -4, Kilbali Dhan, Amranth Verities Hara Bhat and Bhangeera.
- Phool Dei, another Shakti woman, tells me that the famous mal Kauni millet of Uttarakhand is on the verge of extinction.
- Many women in Uttarakhand have gone the organic way completely with their integrated nutritional gardens. They no longer take medicines for fever and viral infections. Taking healthy food and herbal medicines have become routine in their lives. They are messaging everywhere the ecological wealth of organic produce. Leela Devi, our member observes, 'If we save nature, nature will nurture us.'

Our project in Niwari in Madhya Pradesh highlight how women are contending with adverse climatic conditions – Ajay Namdev, Local Coordinator²¹

- Heavy rains in the kharif season caused great loss of udath dal and ground nuts. There is high migration. Before Navdanya, there was no focus on women nor on organic farming. Our organic farming techniques have found high acceptance. Other women too come for monthly meetings of MAS Collectives which I think is the spread effect. During COVID-19 many men migrants returned, and some stayed back. They want to be part of our groups – want to set up men's group. Seeing our results, the government is favorably disposed towards us. During our famous Khajuraho festival, we set up a stall which was visited by government officials and other public. In the coming festival in Urcha temple, the government has asked us to once again put up Navdanya's stall. The state government organizes three events here. We will capture these opportunities.
- Draupadi Devi in Bundelkhand tells us: Rains did not come on time. The farmers sowed seeds, but they did not germinate on time. The possibility of drought is increasing. Farmers are promoting mixed cropping to overcome climate adversities.
- In the month of February, due to untimely heavy rain - green gram, black gram, pea, and mustard crop and wheat were damaged in several of the village in the Niwari district. `Due to untimely heavy rain, we lost green gram, black gram, pea, and mustard by 40% to 60%. We saved 50% of wheat in our village. We have saved indigenous seeds in our seed bank. Due to this, we were not worried about seeds for the next crop season''- Draupadi, Jikhan Goan.
- Mamta Kushwaha has gone completely organic in her vegetable and herbal gardens - preparing her own compost and vermi-compost and saving seeds. She has taken a resolve to make the entire district organic.

The Shakti Project area in Maharashtra has rich traditions in biodiversity.

- I brought seeds from Dehradun and gave them to women, and they have returned the seeds. I have 156 variety of seeds in my house which I share. I am proud that I have trained 15 women to become leaders and be part of our work. Men too have realized the relevance of organic agriculture and no

²¹Online interview by Uma Ramaswamy

longer conflict with women over their gardens. I have formed 3 men's groups. During heavy rains this year, we could not save seeds - Savita Raut, Local Coordinator, Yavatmal²²

- I am an organic farmer and trainer. During COVID-19, we grew multiple vegetables in our garden. Seeing my vegetables, the local schoolteacher brought all my vegetables. - Banno Durga
- We are growing an indigenous variety of cotton which is good for health. The soil of our farm is carbon rich. -Bhagyashri Ingle

The Shakti women of Odisha have weathered serious climatic conditions. COVID-19 took its toll.

- During the pandemic, our markets were closed for three months. Our gardens came to our help with green vegetables and organic produce. The popularity of our seeds is very high. We converted as many as 1000 farmers into organic farming. Our mangroves are protecting a vast stretch of coastal range and local communities especially during cyclones. - Dr. Ashok Kumar Panigrahi.²³
- In 2021, we had two cyclones. Our GOH (13) did not get affected and protected women farmers with vegetables from their GoH. These vegetables were also shared with neighborhood families. Women's awareness on organic techniques has increased vastly. We have now 13 Javik Acharyas. Other women have been attending MAS meetings – wanting to get information on diversity. – Kusum Mishra Panigrahi

²² Online interview of Savita Raut by Uma Ramaswamy

²³*Dr. Ashok Kumar Panigrahi, a storehouse of knowledge on agrodiversity and environment took us through Navdanya's historical journey in Odisha and his partnership with Navdanya. Special thanks to him for his online conversation with Uma Ramaswamy.*

CHAPTER 4 KEY FINDINGS

4.1 RELEVANCE

Foundational Phase

It must be said that the first Phase of Shakti project provided the much-needed opportunity for women farmers to establish GoH in their homesteads, wherever they could access land space of their family farms, leasing lands and get organized under Mahila Anna Swaraj (MAS) that gave the man institutional cover. Navdanya's paradigm of seed sovereignty, biodiversity and ecofeminism grew in concept and practice through the Shakti Project. The First Phase was knitted well with two Result Areas of: 1) promoting biodiverse organic GoH by women farmers, gaining new identities as seed savers and producers in the six states of the Shakti Project and, 2) organizing and empowering women to redefine an agricultural and food policy that connects local to global / from micro to macro. This Phase was foundational.

Growing in Strength and Validating that Women Matter

The Second Phase has one Result Area: 1) 126 groups of women reinforce their process of individual, social and political empowerment while they are trained in eco-feminism and recover their knowledge and abilities and one Outcome: Enhanced role and value of women as agents sensitive to seed, health, agroecology, and the fight against climate change, from a participatory process from the local to the global for a critical and participatory analysis of regional agricultural policies and State. With this, the Second Phase has increased the number of MAS Collectives and GoH (Table 2: Profile of Mahila Anna Swaraj Across 5 States) and is demonstrating the growth story of the Shakti Project. The 1512 GoH have given earnings in the hands of women, which is a big takeaway. Members from the newly formed MAS Collectives are walking the path of the earlier generation and cohering with the larger alliance of Shakti Project and Navdanya. For the women, the relevance of the Shakti Project is high.

The relevance of both the Phases must be seen at two levels: first, validating that the agenda of organic biodiversity in the hands of women works and matters and secondly the Navdanya's call that women's knowledge and contribution to policy dialogue is imperative.

Resilient and Coping with Covid-19

The First and Second phases of Shakti project were overshadowed by the pandemic and its aftermath. The women farmers have remained resilient despite the health vulnerabilities and physical restrictions imposed by COVID-19. Interestingly, the Pandemic heightened the relevance of GoH by keeping women's kitchens well-stocked; strengthened the culture of sharing and exchanging their produce and enhanced the biodiversity of GoH with varied medicinal plants and revival of uncultivated crops.²⁴ Several returning migrants to villages did not go back and started GoH in their homesteads. The PME Team played a critical role – staying connected with MAS members.

Climate Vulnerabilities

²⁴Several health measures that women practiced during the First Phase continued – regular use of herbs such as turmeric, jeera, ajwain, ginger, cinnamon, pepper, cloves, cardamom, garlic, coriander, aloe vera, giloy, and basil. Khadas (immunity boosting herbal drink) have gained popularity.

Across the five states of the Project, women farmers weathered adversities of climate change. While the impact of climate change varied across the projects, the states of West Bengal and Odisha bore the brunt of cyclones, unseasonal heavy rains, and flooding – damaging GoH and farm fields and loss in their earnings. `Many Gardens were completely washed away with no trace of plants. Both the new and old Gardens of Hope were destroyed.²⁵Odisha and West Bengal were in states of emergency.

What calls for record is that women whose GoH were wiped out, restarted their GoH all over again with the seeds they saved, seeds from the community seed banks and from Navdanya seedbank. The relevance of seed sovereignty got heightened.

Connecting Grassroots Experience, Experts Knowledge, Global Alliance and Wider Public.

Unique to Shakti Project and Navdanya is its sustained endeavor to bring intersectional (vertical and horizontal) weaves between members of MAS Collectives, experts, global women (DWD) and wider society. What is striking is that in all these meets, there is reiteration of biodiversity agenda with pledges, regional and national declarations. For Shakti women, these interfaces brought them into meta spaces of exposure and learning.

- The Expert Committee was closely involved in capacity building events, participating in melas, festivals, Jaiv Panchayats, policy dialogues and above all providing professional support to knowledge products.²⁶These training material and manuals have found acceptance with women as they have come out of their own contribution to their content. The PME Team has been using these manuals in all training events.

- Special mention must be made of the gathering of Diverse Women for Diversity, held on March 2023 that connected reputed global women with members of MAS Collectives. The DWD conference brought out four manifestos to affirm: 1) Act on behalf of life as an active part of life. Embodiment of these values and Nature's laws and ethic of care; 2) Biodiversity as Way of life, includes diversity of crops, plants, animals, all beings including human freedom; 3) Health as One Health, what we did today. Dancing, singing, eating, sharing seeds and 4) Real economy is Earth and Humanity as one community. Ways of caring, ecology and economy go together²⁷

- The Vasundhara conclave/gathering, entitled Biodiversity- the Hindustan Way, held on 4th& 5th of 2021 was attended by 190 participants that included 110 MAS and 80 representatives from women networks, grassroots farmers, political representatives from national and international quarters. The Vasundhara gathering concluded with a declaration on poison-free, hunger-free, disease-free India.²⁸

- The theme of the Earth Festival(Bhoomi), celebrated on 18th and 19th October 2021 was unique and aligned well with the Second Phase of Shakti Project: `Shakumbari - Rewilding food, celebrating the

²⁵AVCDNarrative Report, March 2023

²⁶ The Expert Committee members are Dr. Mira Shiva, expert in medicine, food, health and biosecurity; Ms. Maya Goburdhun, expert in nutritional literacy and founder of the Mahila Anna Swaraj Movement; Dr. Rama Jayasunder, Ayurveda expert and food and nutrition scientist; Ms. Sarita Kumari, expert in the empowerment of women through organic agriculture and seed conservation in Rajasthan, Ghanerao Foundation Foundation; Ms. Rashmi Sharma, a scientist who works extensively on refined foods - industrially processed - their impacts and effects on health, food safety; Ms. Mira Khanna, Expert in women's empowerment, Director of Guild for Service and Dr. Vandana Shiva, Scientist and advocate of ecofeminism.

²⁷DWD, 4th March, 2023, Sacred Mother Earth, the Law of Ecology and Regenerating the Earth Family: Planting Garden of Hope

²⁸Report of Meeting of the National Vasundhara, 4th and 5th September 2021 -Vasundhara - Biodiversity, The Hindustan Way. The national Vasundhara meets once in three years at Navdanya Farm.

biodiversity of uncultivated wild edibles.²⁹This festival concluded with Shakti women's declarations for integrating them into their national declaration: 1) The Earth and Us: Creative, Secure & Healthy in Our Oneness, 10 fundamental truths to follow to become One with the Earth, 2) Rewilding food, Rewilding Our Mind & Rewilding the Earth. Women regenerating Biodiversity and indigenous knowledge. Rewilding food is rewilding the Earth, 3) Biodiversity of Wild Uncultivated Edibles.

- Organic Policy 30th-31st March 2023: Attended by MAS members from Rudraprayag, Tehri, Doon valley of Uttarakhand, West Bengal, Maharashtra, and Madhya Pradesh, this Policy Meet brought new participants such as journalists, teachers, students of agriculture, employees of the departments of agriculture, leaders of Self Help Groups, sarpanches, and social workers/activists.

- National Policy Dialogue (Living Democracy/Jaiv Panchayat) from local to Global for an organic India (Javik Bharat) held on 7th - 9th April 2022, jointly organized by the Guild of Service: This meet had national presence with participants from Uttarakhand, West Bengal, Maharashtra, Kerala, and Madhya Pradesh and members of Expert Committee.

Recapitulating the totality of the Shakti Project and its relevance, Dr. Vandana observes.

- During the First Phase, we organized women around Mahila Anna Swaraj, and brought out their voices. The First Phase also took us to women's understanding of nature as a living system and led us to see different layers of nature and its biodiversity in different states. Our focus on forgotten cuisine and women's affinity to food traditions and regenerating cultures of food started in Phase I and deepened in Phase II. Mothers and grandmothers' recipes were remembered and revived. After this generation, this memory could well get lost. Alongside, we journeyed with women in their festivals, especially those around agro-economy and connected them to their food and agricultural practices. The third layer is revival of local economies where women brought their vegetables to be sold in local markets – establishing their presence as farmers. The relevance of GoH and the power of MAS Collectives got affirmed when Pandemic hit us.
- The Second Phase has deepened women's knowledge and given greater focus to women's leadership. In addition to leaders, we now have Javik Acharyas (teachers) with certificates and we are asking them to spread biodiversity agenda. We plan to strengthen our leadership further, bring more leaders to widen our women's constituency.
- The Second Phase has also brought Jaiv Panchayats (Living Democracy) to higher level of participation – questioning policy deficits and bringing more stakeholders for dialogue. In Rajasthan, which is a land of mustard, we held a conference with large participation from traders, bureaucrats, farmers to question the state approval of GM mustard. Jaiv Panchayats is now an effective platform for democracy.
- We will do a lot more participatory research on themes of organic biodiversity, climate change, food systems and circular economy.
- Overall, our government policies are quite indifferent. Our organic law is on paper. I ask our agricultural minister to listen to our women. We live through the cracks.

²⁹*Every year Navdanya organizes the Earth Festival, the Bhoomi; to celebrate the rights of Mother Earth, the power of women, the local cultures of the Earth and the Democracy of the Earth, AVCD Narrative Report, 2023*

4.2 EFFICIENCY

The Second Phase of Shakti project flows out of the learnings of the First Phase. The overall Objective, Specific Goal, Result area and Outcome of Phase II are in consonance with Phase I and implemented as per the project indicators.

The Shakti Project is efficiently managed by four-member Planning, Monitoring and Evaluation Team (PME); 1 Local Coordinator and 4 Coordinators in West Bengal; 1 Local Coordinator and 2 Coordinators in Madhya Pradesh; 3 Local Coordinators and 3 Coordinators in Uttarakhand and 1 Local Coordinator and 3 Coordinators in Odisha.

Dr. Vandana Shiva has taken time and given close oversight to the progress of the Shakti Project. Despite the restrictions and vulnerabilities of the Pandemic and climatic adversities, the PME Team completed their mandated visits to all the projects in the five states and worked toward the fulfillment of indicators of Phase II.³⁰

Local Coordinators and Staff of Shakti Project

The Local coordinators and Coordinators of Shakti Project are an experienced lot and have journeyed with MAS members: overseeing monthly meetings of MAS Collectives, providing facilitative support to Cluster Level meetings, providing onsite training in GoH, when required, be part of the festivals that women celebrate and most importantly on call when severe climatic conditions damaged and destroyed the GoH. Notably, a few graduated from being MAS members to position of Coordinators. Several have developed their own GoH that brought them closer to MAS members.

What must be recognised is that Local Coordinators and Coordinators are the strength of Shakti Project with sound experiential base, high levels of acceptance in the field and team spirit.

Thrust to Strengthening Mahila Anna Swaraj Collectives

- The Shakti Project now has two layers of MAS Collectives from Phase I and Phase II. Learnings and training manuals of Phase I have contributed to better designing of the objectives and thematic arenas of MAS meetings. The MAS meetings are purposeful with themes that strengthen the biodiverse-ecofeminist perspectives: 1. Women, Nature & Living Knowledge; 2. Women Nature & Climate Change and Resilience; 3. Women Nature & Living Economy and 4. Women Nature & Living Democracy.
- The Cluster Level meetings in each of the five states in the Second Phase provided a meta space of knowledge building and deepened the dialogue on agrodiverse ecofeminism.

Strengthening knowledge and competency of Shakti women.

- The design of the Shakti Project effectively combines multi-level training and exposure to women farmers. Women's visits to Navdanya Farm which women say gives them great learning spaces.
- Imparting technical knowledge on their GoH and easily understood lessons in the science of organic farming and agrobiodiversity is done with efficiency. The technical inputs relate to practices on

³⁰Due to floods and Pandemic a few meets were postponed and later completed.

organic farming based on biodiversity, seed conservation and multiplication, artisanal and local processing at the community level.

- The Project has developed a 'Participatory Calculus for Biodiversity Based Living Economy & Biodiversity Based Productivity in Agriculture', that helps women to analyse what is being grown as biodiversity-based organic food, biodiversity-based economy and as happiness from the living Earth –Productivity in Agriculture'. This is an effective training tool.
- The planned field visits of PME team to the five states added value in monitoring the health of GoH and connected them to women's achievements and challenges.

During Indu Prakash (Co-Evaluator) brief visit to the Organic Policy Meet in Dehradun, Dr. Vandana Shiva took the trainees through the Participatory Calculus handouts. The handouts are well illustrated and articulated in simple terms in Hindi, given to all the participants with a request that they be translated in their own vernaculars. Several participants said that they will reach out to all segments of their villages with these handouts. The teachers said that they shall talk about biodiversity and organic farming in their schools.

During the training, participants attended the soil testing lab at Navdanya Farm, where they were shown under the microscope how the soil of an organic farm showed microorganisms in plenty, while under the chemical farming these microorganisms got destroyed. Women said that they see and understand the harm caused by chemical farming. Rajendra Dhake from Yavatmal, Maharashtra said, 'We learnt so much in these two – three days. It's a great place to be. Yet there's so much to learn. These trainings should not be less than 4 days.'- Indu Prakash, Co-Evaluator

Creating a Larger Weave of Participation, Recognition and Celebration

The Phase II witnessed greater numbers in Shakti Project initiatives. Revival of traditional and forgotten cuisine brought mothers and grandmothers to build on food systems. Shakti women began to participate in local melas and festivals to share their produce and cuisine. With their beginnings in 1999, Jaiv Panchayatshave provided grassroots base for fostering democratic participation and representation of varied segments of society. Policy Meets and Vasundhara conference brought diverse segments of the public to share, brainstorm and join hands with biodiversity agenda. Arguably, all this has contributed to Navdanya as a movement – bringing into its fold wider field of interactions and recognition.

Dr. Vandana Shiva's has invested a lot with her active participation in the six-monthly and policy meets: reiterating the history of Navdanya and most importantly educating the participants with the fundamentals of biodiversity and ecofeminism. Her constant refrain in all these training events is her call to women farmers to continue their legacy of protecting their indigenous seeds, food culture and most importantly to fight against climate change and chemical-based inorganic agriculture through biodiversity, nutrition and SwaAsth (self-reliance). The Expert Committee was most active during the second phase, facilitating policy dialogues. Their presence and participation in celebration of local festivals strengthened the solidarity of Shakti women.

The efficiency quotient of the Shakti Project brings an amalgam of interfaces and interconnections creating expanding weaves of connectivity.

4.4 EFFECTIVENESS

A) INCREASED NUMBER OF GoH, MAS COLLECTIVES, GROWING LEADERSHIP

The Second Phase has increased the number of GoH and women members under the umbrella of MAS Collectives. Unique to MAS Collectives is its socioeconomic diversity – women with small parcels and marginal land holdings, women in ghonghat, confined to their homesteads, farms and rarely visiting the markets were brought into a collective fold of solidarity.

TABLE 2: PROFILE OF MAHILA ANNA SWARAJ ACROSS 5 STATES

The Second Phase has also witnessed the emergence of sizeable number of leaders. The Project gave special thrust to training of Acharyas (teachers) motivating them to bring more women into the MAS fold and spread the agenda of biodiversity and ecofeminism. (Table 2: Profile of Mahila Anna Swaraj Across Five States). Holding certificates in organic farming and as Javik Acharyas, the women are buoyant.

Total Number of MAS in Phase II: 126 Total Number of Women/GoH in Phase II: 1512 Number of Leaders and Acharyas in Phase II: 374 (Javik Acharyas MAS leaders) Certificates in Organic Farming: 248: 198 women and 50 Acharyas				
NUMBER OF GoH/WOMEN AND INCREASE IN BIODIVERSITY PHASE II				
Uttarakhand	Maharashtra	West Bengal	Odisha	Madhya Pradesh
588	216	480	144	84
NUMBER OF MAS by STATE in PHASE II				
Uttarakhand	Maharashtra	West Bengal	Odisha	Madhya Pradesh
36 Old 13 New	12 Old 6 New	27 old 13 new	6 old 6 new	4 old 3 new
NUMBER OF LEADERS PHASE II				
Uttarakhand	Maharashtra	West Bengal	Odisha	Madhya Pradesh
78	30	40	30	20

B) BEYOND MONETARY BENEFITS

Several benefits have come women's way. Two immediate benefits readily seen are earnings from the sale of vegetables and vegetable sufficiency in women's kitchens. Not all the produce of GoH go to the market. Often, women share and exchange their produce. Women also save and share their seeds from GoH. When asked, how much they earn from GoH, they calculate earnings per season as many vegetables are seasonal. Often, women exchange their vegetables with each other, and it is difficult to monetize these transactions. Again, the financial benefits of GoH vary on account of size of GoH, number of vegetables cultivated, seeds saved, sold and earnings from cattle that provide dung, urine for composts and others. The following cases, briefly stated reveals women's intertwined lives with GoH - changing their life situations and upturns in their social status.³¹

- Fifty-year-old Usha Devi, in village Sori, Rudraprayag District in (Uttarakhand) with 6 Nali (0.33 acre) is a successful organic farmer. She cultivates multi-millet, paddy, several vegetables, spices, and a few medicinal plants such as *basil*, *brahmi*, *pasanbhed* and aloe vera. She got Rs. 10000/- loan from her MAS Collective and purchased cows. Today she has 3 cows and 3 calves in her farm which provides milk for her family and compost for her farm. Usha has annual earnings of Rs. 100778/, which is significant.
- Poonam Devi and her husband, in village Bhoodpur, Doon Valley (Uttarakhand) have adopted organic farming in 5 acres of land and grow diverse crops of pulses and vegetables. They were spending as much as Rs. 70000 for purchase of inorganic seeds, chemical fertilizers, and pesticides from markets. With organic farming and despite climatic adversities, she is happy to report that her crop loss was 30% while

³¹The case studies have been prepared with guided questions by Ms. Preeti Virkar, Mr. Ahammad Uddin and Ms. Bhuvaneshwari Semval. Our special thanks to them.

those using chemical fertilizers, their crop loss was 60%. During 2021-22, earnings from their GoH was Rs. 90373/-. She saved seeds for the next season and says that she can never go back to hybrid and GM seeds. She is concerned about wild animals (Neel gai (wild cow), wild pig, deer, and other uncontrollable animals, destroying farmers' crops.

- Pranita Hendve, Lumbini MAS , Village Wagholi, Amravati District, Maharashtra, speaks about how she and women members of her MAS brought innovative way of producing onions. Onions were in high demand and women could not afford expensive onion seeds from the government Krishi Kendra. Men farmers had no seeds and could not help them. `It Is then I recalled how our elders would use onion bulbs to grow onions. I asked our MAS women to get the best onions from their homes for the next meeting. I showed them how to plant the bulbs of onions for growing more onions. We all grew the onions in our farms, waited for them to flower, seeds to develop which we sowed in our gardens. We distributed the seeds and sold them. Our innovative method in onion cultivation spread in our village and villages outside too. Demand came in for producing more seeds. Pranita has been saving 30 different varieties of seeds.
- Our family lost heirloom seeds that were traditionally grown in Vidarbha. To our dismay, when a hydroelectric project was being set up in our village, we were resettled with small patches of land in a new village (Barad). We went through many hardships, and I even worked as a manual labour in other farms. Thanks to Navdanya, I got seeds and set up my vegetable garden in our back yard and later in front of our house. I now grow many vegetables, save seeds, and sell them to other women. Our MAS members are symbols of what we can achieve - Priya Ingle, Chaitrapawli MAS Collective, Barad Village, Yavatmal, Maharashtra.
- Navodaya's training at Abasberia village motivated me to fight with my father-in-law to get just two decimals of land to cultivate vegetables - the organic way. Now I cultivate all 5 decimals of my family land. I used to collect seeds from others and Navdanya and today, I have 12 varieties of vegetables and saved 5 varieties of seeds. Most of the vegetables go to our kitchen and the rest I sell to local school for mid-day meals. On an average, I have an annual income of Rs.10000/ per year. Madhurita has motivated 20 women in her village to start vegetable gardens and has formed her own group `At first nobody supported me. Today I am respected, and my status has gone up.' Madhurita is now a trainer of Shakti Project. (West Bengal)
- Sajrun Bibi, a Muslim (Purba Medinipur, West Bengal) is a role model in her community. Unlike most women from her community who make money from human hair processing, Sarjun cultivates 18 varieties of organic vegetables in kharif and rabi seasons in 10 decimals of land. She has saved 7 varieties of vegetable seeds and 4 varieties of paddy. She has a cow and sells 8 liters of milk to the market. She uses cattle dung for compost and vermin compost. With a large family, she uses most of the vegetables for family consumption and the extra vegetables she sells to neighboring people and earns Rs. Fifteen thousand per year.
- With support from her husband, Soma Rani Ghorai (Purba Medinipur, West Bengal) shifted from chemical farming to growing organic vegetables in 50 decimals of land and gets plentiful water from her family ponds. Much of her vegetables are sold in Kalabari and Sarberia markets. She saves and sells seeds, especially Dasi Alu seed which her GoH is famous for - fetching Rs.60 per Kg as opposed to usual market price of Rs.30. With an average annual income of Rs. Forty thousand, she supports her family. Soma Ghorai's lifestyle has changed. Her child goes to a well-known school. Other family members have come to depend on her and respect her.

C) IMPROVED BIODIVERSITY AND PRODUCTIVITY

The Shakti women are proud owners of GoH; trained in 12 organic farming techniques; saved and produced seeds and in a few villages set up seed banks The diversity of seed banks in the five states is a major achievement: Navdanya:1500 Seeds; 2) Odisha, Balasore :1020 Seeds; 3) Odisha, Mayrubhanj-

100 Seeds; 4) Maharashtra: 65 Seeds; 5) West Bengal: 50 Seeds and 6) Madhya Pradesh: 28 lost seeds of Bundelkhand. The women are supported with agricultural tools and a few technologies – Ghanis, Solar Driers and Flour Mills. (Table 3: Technologies, Seeds, and Organic Techniques). This is the seed sovereignty of Shakti women.

Table 3: TECHNOLOGIES, SEED BANKS, AND ORGANIC TECHNIQUES									
West Bengal		Odisha		Maharashtra		Uttarakhand		Madhya Pradesh	
Ghanis	Solar drier	Ghanis	Flour Mills	Ghani	Flour Mills	Solar Driers	Flour Mills	Ghani	Flour Mills
1	1	0	1	1 (Phase 1)	0	3	1	0	1
Total Agricultural Tools Given: 1512 sickles, 1512 bush cutters, 126 drums, 126 spraying machines.									
Seed Banks and Community Registers									
Community Seed Banks									
A) Navdanya: 1500 Seeds; 2) Odisha, Balasore :1020 Seeds; 3) Odisha, Mayrubhanj- 100 Seeds; 4) Maharashtra: 65 Seeds; 5) West Bengal: 50 Seeds and 6) Madhya Pradesh: 28 lost seeds of Bundelkhand.									
B) Community Biodiversity Registers (CBR) at Local Level in the five states									
The Shakti Project has developed 6 Community Diversity Registers in all the five states to document indigenous knowledge. The CBRs include i) Kitchen Garden Register; ii) Community Biodiversity Register; iii) Seed collection and distribution register; iv) Seed keeper and seed producer register; v) MAS saving account register and vi) Indigenous knowledge on food and health. CBRs have been translated in Hindi, Marathi, Oriya, Bengali and English. The CBRs are updated from time to time.									
Organic Techniques									
Navdanya has developed 12 organic techniques. However, women have contextually adopted 5-7 techniques and in some states have improvised them. For example, in Maharashtra, women have moved from Teenparni, Panchparni to Dashparni for pest management (parni means-leaves – pest resistant leaves); In Uttarakhand compost matkakhad has different combinations - cow urine, jaggery and other inputs; In West Bengal fish tonic has gained popularity.									

Put together, the First and Second Phases have significantly improved the biodiverse cover of GoH. The Shakti Project reports increase of biodiverse acres from 83 acres in the First Phase to a total of 105.12 acres in the Second Phase.³² Women are continually making efforts to introduce new food plants in their GoH. Notably, a total of 107 climate resilient and nutritional seed varieties are now grown across the five states of the Project. Given the limited space available in women's homesteads, this increase is merit worthy, reflecting the growing demand for organic vegetable cultivation. (Table 4: Increase in Food Plants and Biodiverse Acres)

Table 4: Increase in Food Plants and Biodiverse Acres			
State	2021	2022	Increase in Biodiverse Acres

³²Intervention Logic: AVCD Logical Framework Matrix

Uttarakhand	13 Food Plants	21 Food Plants	4.68 acres
Maharashtra	8 Food Plants	18 Food Plants	50.8 acres
West Bengal	33 Food Plants	55 Food Plants	43.68 acres
Odisha	5 Food Plants	7 Food Plants	5.4 acres
Madhya Pradesh	37 Food Plants	49 Food Plants	0.96 acres
The Shakti Project Phase II reports of total record of 107 climate resilient and nutritional seed varieties across the regions.			

Several processes have contributed to enhance this biodiversity. The Second Phase brought into cultivation many forgotten traditional crops and uncultivated edibles. Interestingly, COVID-19 brought back non-edible plants that have medical value.³³ Seed saving at home and in seed banks have taken an upturn.

D) FIELD NARRATIVES³⁴

During evaluation field visits, women's conversations resonated with observations of health benefits of organic vegetables, their longer shelf life, the culture of caring and sharing that GoH nurtured and most of all how their GoH kept their kitchens surfeit with vegetables even during the Pandemic and adverse weather conditions. The practice of sharing seeds has become a standard practice. Women's voices that Dr. Indu Prakash Singh captured are placed in Annexure 3: Field Narratives.

- Until Navdanya told us, we did not know that flood and drought resistant seeds would help us cope with natural disasters. With these climate resistant seeds, our soil did not degrade, our health improved, and biodiversity increased. During COVID-19, we did not buy the vegetables from outside, shared our organic produce, even sold them in the market and used these earnings for children's education. - Vishnupriya Mandal, Chandipur, Odisha
- The desi dhan (native paddy) stays in flood and the yields are more. I have been saving organic seeds. I make savories of organic produce that I grow: potato chips, rice savories - loved by the kids... These are tasty and causes no illness. - Ahilya Mohanti, Odisha
- Due to rituparivartan (Climate Change) - excess rains and floods, devastated our crops. But we withstood them due to our resilient seeds. We sowed six to seven varieties of paddy, saved their seeds, and exchanged them with others. - Sanjulata Bhuiya, Kalidapuda Viillage, Odisha.
- When floods came, grains of champa, parvati survived. Despite our land being close to the sea, floods did not damage our crops. What we grew, we shared and sold. - Saraswati Samal, Saraswati MAS Collective, Odisha.
- Due to our use of vermi-compost, go-mutra (cow urine), and gobar (cow dung), our yields have increased. We saw that those who used HYV (High Yielding Variety) seeds, their crops got destroyed due to floods. 95 % of our desi dhan's (native paddy) yield got saved and our yields were higher than the HYV seeds.- Savita Kar, from Ma Van Durga MAS, Sinjiri village, Odisha

³³ These include: giloy, dhatoora, brahmi, pattharchatta, akarkara, mugwort, cassava, asthma plant, beauti berri, hagerettum, aerva and others.

³⁴ The narratives have been drawn from field visits of Dr. Indu Prakash and a few from AVCD Narrative Report, 2023. The narratives have been abridged for brevity.

- I am a landless farmer, who does group farming, and I am now an Acharya. -Asima, Trainer, West Bengal.
- I am a master trainer and a complete convert to organic. From my vermiculture unit, I get Rs.10 per kg. Last year I collected 8 kg of poi saag (a vegetable) seed which gave me good money. Who told farming is a loss making venture?. I can prove organic farming is profitable. Our duty is to give more training to the farmers. We need to spread information about organic farming, far and wide.- Kabita Kamakar, Mahamaya Nari Kalyan MAS, Chandipur Block , Purba Midnapur, West Bengal
- Aparna (West Bengal) has optimized the space of her GoH with a two-tier garden –growing vegetables such as bitter gourd, bottle gourd (creeper varieties) on a bamboo elevated structure (5-6 feet above ground) and the ground land used to cultivate other vegetables. Aparna grows 14 vegetables. This is a replicable model.
- We saw that the Desi Dhan (native paddy) had no pest attack. Parvati dhan was used for making sweet savories (like kheer). We profited from 17-18 varieties of vegetables which we cultivated in our gardens. Consumption of fast food has declined in our families and our villages. Our men are happy as their children are healthy and that their running errands have stopped. - Shankuntala Jena, Sindhuragaura MAS, Kalapuda Village, Odisha
- Our gardens are organic, not laced with chemicals. We have saved 14-15 vegetables and they are ours. We save money as we do not buy vegetables from the market. We also share our produce with our neighbors, MAS members, and sell in the market, too. - Amita Rani Panda, Sashyashamala MAS, Odisha
- We have boycotted external seeds and fertilizers. We have been spreading information about our work throughout our villages. Our natural resources were on the verge of extinction, but it got saved due to MAS Samuh (Collective). Women planted trees in the forests and on any empty patch of land they came across, reviving our natural resources. – Kushaliji, Pradhan, Uttarakhand
- In olden days people used to grow Mandua, Jhangora, and eat them. But after a while they forgot to cultivate these plants. Navdanya made us aware and we now cultivate these plants. After home use, we share and sell them. The middlemen pay Rs.30/ per Kg. But Navdanya gives us 10-12% more than the market. We now gift our traditional grains (Mandua, Jhangora, Paddy, Wheat, Kauni etc.) to the bride’s family, instead of dowry. -Katgi Devi, Uttarakhand
- From our elders we have learnt to collect fruits and vegetables from our forests. In between, we left this practice and were forgetting this knowledge. Navdanya made us aware. We have wild fruits such as kafal, bedu, hisar, kirmor, ghingarau etc. We are encouraging our schools to have Sagvadi (vegetable gardens) and telling them to increase the quantity of millets in their food and dissuade children from consumption of junk food. - Chanda Devi (Gunguti *Mahila Anna Swaraj*, Majaf Palla Village.
- We mostly cultivate green bhat and potato and exchange grains for grains with each other. We do not always look at our organic produce from a monetary point. We also sell our grains to Navdanya, which gives us 7-12 % more than the market price. Some of us do community-based farming. And if one of us gets ill, we collectively support them, in their agriculture fields and other works. In our gardens, we grow medicinal plants such as Giloy, Tulsi, Kalmegh and others. During COVID – 19, we used these herbs to make cough healing syrup (Kadha) and due to all this, not one casualty was reported from our villages. - Seema Devi, Maiti MAS, Uttarakhand.’

- We store, Tomadi Aloo (local variety of potato) for the entire year in pots made of wood, so that they do not get spoilt. We have cultivated 12 crops / grains (12 naja, during Kharif season. These include: Mandua, Mal Kauni, Chaulai, Urad Dal, Lobiya, Moong Dal, Gahat, Rajma, Til, Naurangi Dal, Jhangora, and Kauni. During Rabi season, we grow wheat, Va Jau (Barley), Jati Jau, Masoor Dal, Ghainda, Mustard, Peas, Todiya, and Sunchana). This maintains biodiversity, enriching the soil, and acts as a buffer against any climatic variations. -Seema Devi, Maiti MAS Collective.
- We dry bottle gourd (Lauki), sponge gourd (tori), bitter gourd (karela), which are called Suksa (dried vegetables) and store them for seasons. We make balls (vadi) of black gram (Urd dal). And we make chutney (spicy savory) of green bhat, filled roti (bread), tangy eatables from them. - Himani Devi, Ghuguti MAS.
- We sell wild mushroom (juy) in the market for Rs 20000 per kg. Wild fern, Lengada are also sold in the market. Buransh (a flower) and Malta juice made at homes are sold in the market. For minor injuries, we only use home remedies (potion of turmeric and mustard oil). - Meena Devi, Maiti MAS Collective.
- Talking about their experiences in growing desi cotton varieties locally, Ramesh Sarkar of Bhilli village commented: As we have family doctors, we now have family farmers. We supply organically grown vegetables to 25 families, for Rs. 2000/- per month. This is a gain for all parties.

E) BIODIVERSITY – THE HINDUSTAN WAY

Altogether, women are iterating and affirming the diversity of organic farming that they have embraced. Women's stories of revival of forgotten and uncultivated vegetables alongside existing traditional varieties, their farming practices and knowledge about the health benefits of organic vegetables bring out rich reflections. This got highlighted at the meet of National Policy Dialogue (Living Democracy/Jaiv Panchayat) from Local to Global for an Organic India (Javik Bharat).³⁵

- In Maharashtra particularly my region Vidarbha grows many biodiverse crops like wheat, chana, bajri, cotton etc. I have brought Bajra. We grow it as inter-crop between tur. So that birds can perch upon these and feed on the caterpillars that harm tur plants. We grow these as food, fodder and it is highly nutritious. I have grown Bajra and also given to many other farmers. We have our own seeds and do not have to buy from market.- Sushma Bawangale, Maharashtra.
- I have brought Malkauni seed, is very tasty, we can grow in water scarcity. It is highly medicinal. can be used in many fevers. People eat it regularly hence we do not have any Covid cases in our village.- Raji Devi, Tehri, Uttarakhand
- I have brought Kauni. We are protecting these seeds since they are being locally wiped out. It has properties to get rid of numerous diseases. Shakuntala Devi, Rudraprayag, Uttarakhand
- I have brought Basmati. Navdanya rejuvenated Basmati in Doon Valley and hence I am here today to present the Basmati seeds. Monika Devi, Doon Valley, Uttarakhand.
- I have brought 40-50 types of seeds. I have brought Kathiya wheat which is low in gluten and can be used to make ladoos and roti. When I joined Navdanya, I began saving seeds. - Rammurti Prajapati, Madhya Pradesh

³⁵Held on 7th - 9th April 2022, Jointly organised by Navdanya and the Guild of Service at Nehru Yuvak Kendra. Ibid, AVCD Phase II, Narrative Report, 2023

- We have brought Poi seeds. It is highly nutritious and resilient to floods. We used it during Covid-19 times. Sal kumdo Ash gourd is a type of gourd. It kills harmful microbes inside the body. It can be made into vegetable, sweets.- West Bengal- Samoli Mandal

F) JOURNEYING WITH LOCAL FESTIVALS, MELAS, AND CELEBRATING DIVERSITY OF FOOD SYSTEMS

Celebration of Festivals

Celebration of certain festivals, especially around Kharif and Rabi seasons are integral to farming communities. While several of these festivals are celebrated across the country, they take on local characters with different names and periodicity. These festivals are associated with special food preparations with their offerings to mother nature, ancestors and distributed to close kin, elderly, and children. For example, in Odisha, there are as many as 22 festivals where specific foods and delicacies are made and shared. By giving special importance to the celebration of festivals, the Shakti Project has leveraged them to recognize and make visible women's spaces and contribution to the food systems and culture of music, dance, and their finery. Far more aware, women say that they are giving more importance to these festivals.

By journeying with local festivals and their traditions of special food culture and celebrating women's cuisine, the Shakti Project reinforces the intersectionality's between biodiversity of nature, food, health, and women's preeminent position. For Navdanya, this is an important dimension of ecofeminism.

The linking of organic farming with food festivals and the local culture is an effective way to promote nutritious food and vegetables. In the five states of Shakti Project, several festivals and fairs are celebrated.

Table 5 highlights festivals that augur changing of seasons, special foods associated with them and role of women, elderly, and children.

Navratra: Maharashtra in the month of October	This festival begins with the harvesting of Kharif crops and the onset of Rabi Crop. Nine different fruits, seeds, vegetables etc. are offered to the goddess Kali.
Godhan Puja: in Maharashtra and Madhya Pradesh, Month of November	Worship of cattle, especially cows for their supply of abundant resources. Cowdung is used to make a rectangular shape on the ground and prayers are offered.
Nal Bhandra Sonkran: West Bengal in the month of November	During this festival, more than 7 different vegetables are made. Pitha called Poda pitha is also prepared from fermented rice and black gram with grated coconut, ginger, crushed green cardamom and black pepper.
Lohr, Makara Sankranti and Ghughutiya: Madhya Pradesh and Uttarakhand in the month of January	Passing of winter and beginning of spring. Worship of nature and farm produce - particularly fruits, vegetables, oil seeds and millets. Jaggery and Til are offered in prayers and distributed to family and friends. Ghughutiya is celebrated in the Himalayan region of Uttarakhand. Flour is mixed with jaggery, and water, deep fried and offered to crows who are

³⁶Ibid, AVCD Narrative Reports, 2023

	worshipped on this day. Children, in particular prepare a garland of the sweet fries and offer it to the crow who are said to symbolize their ancestors for blessings.
Basant Panchami: Uttarakhand, Madhya Pradesh, West Bengal, Odisha, Maharashtra in the month of February.	Celebration of Spring. Worship of plant diversity and their proliferation.
Phuldevi: Uttarakhand in the month of February	This Himalayan festival is the beginning of Spring in the month of Chaith as per the moon calendar. Children collect the biodiverse flowers and distribute to the households in their villages. The children also carry a small, decorated Doli of Ghoga Mata (the goddess of Puldei festival) in a procession around the village. The elders in return bless them with sweets such as Jaggery, roasted amaranth, roasted bhatt (type of pulse), vegetables, local cooking oil, and wheat flour. Together these are called Khuska. Children collect these food items, and the elders cook collectively and feed the kids lovingly.
Holi: Uttarakhand, Madhya Pradesh, West Bengal, Odisha, Maharashtra in the month of March	It is the festival of colors and the mark of beginning of summer season. Traditionally people prepare Holi colors from leaves and flowers that bloom during this time and apply as a symbol of celebrating the change of the season
Gudipadwa/Chaitra Navratri: Uttarakhand, Madhya Pradesh, West Bengal, Odisha, Maharashtra	It is celebrated to symbolize the arrival of spring and the reaping of the Rabi crops and worship the god of agriculture Baliram
Akdhaya Tritiya: Madhya Pradesh West Bengal, Uttarakhand, Odisha in the month of May	Change of season from spring to summer. Farmers begin the sowing of Kharif season crops. It is a day of donations and farmers pray to their ancestors for good crops and blessings.
Raksha Bandhan: Uttarakhand, Madhya Pradesh, West Bengal, Odisha, Maharashtra in the month of August	Celebration of strong bondage and kinship between siblings

Participating in Local Melas

Being part of local Melas (Fairs) is an important segment of Shakti Project. During the Agastyamuni Mela (13th to 15th April 2022), held every year during Baisakhi, Navdanya joined the Mela to highlight the relevance of seed sovereignty and indigenous food systems. As many as 120 farmers visited Navdanya stalls. For Navdanya, these Melas offer spaces to bring awareness, recover Indigenous knowledge on food systems and biodiversity. Through these Melas, the Shakti Project has expanded women's outreach.

I) POLICY ARENA

In the final analysis, Navdanya's agenda is its focus on global, national, and local policies that protect mother nature and agrobiodiversity and challenge those that have promoted GMOs and chemical fertilizers that are destroying the soil base and bringing environmental disasters. While Dr. Vandana Shive has taken her battle to global platforms, the Shakti Project has taken on the policy agenda of deepening people's thinking and discourse at local level. The Cluster Level meetings in the five states brought women to meta spaces for experience sharing and policy discourse. Dr. Vandana Shiva has been part of policy discussions at all levels of the Shakti Project. Special mention must be made of the Organic Policy meet held on the 30th-31st March 2023 that brought MAS women from all the states and wider public to co-share and reaffirm their biodiverse agenda.

At another level, the Shakti Project gave deeper thrust to democratic thought and grassroots participation through Jaiv Panchayats that were held in the six states.³⁷ Once again, these Jaiv Panchayats brought out the mass-dimension of Shakti Project with large representation from diverse stakeholders – local administrators, sarpanches, traders, principals, teachers, police, anganwadi workers, social workers, and activists. Noticeable is the large presence of students. The women of MAS Collectives and Javik Acharyas were central, sharing their perspectives on biodiversity and their empowering states.

The outcomes of Jaiv Panchayats are several.

1. Exposure and awareness to the philosophy of agrobiodiversity and its proven practice by women of MAS Collectives.
2. Highlighting the significance of climate resilient biodiverse seeds and health benefits of nutrition.
3. Pledges by women, reflecting their perspectives and deep commitment. A few pledges for wider readership.
 - We pledge that we will protect mother earth: Conserving the entire biodiversity; We will protect traditional and indigenous seeds and will never allow them to be patented; We will neither allow the water sources of bhoomi to dry up or be sold; We will follow the Chipko movement; We will strengthen the biodiversity based organic economy. We will promote development according to natures.- Uttarakhand.
 - I pledge to protect my indigenous farming, soil, water, indigenous seeds, farm trees, food systems, knowledge, local economy, and all biodiversity. I am aware that for thousands of years our ancestors have saved and conserved their seeds and farm tress through their indigenous knowledge which has passed down as a heritage to us.- Odisha
 - Tying the Rakchasutra on Mahuwa tree at Namapura village, MAS women pledged: We will conserve biodiversity; We will preserve our indigenous and traditional seeds; We will always fight for our community rights- Jal, Jangal and Jameen; We will plant and protect more and more Mahuwa plants to make our Jiavik Bundelkhand; By saving root vegetables, we will increase their diversity; We will promote diversity of Bundeli food by opposing junk food; We will protect the ponds, wells and water source by doing biodiversity based organic farming.- Madhya Pradesh

The policy discourse has become integral to Shakti Project: Women espousal of long-term benefits of seed saving (sovereignty) and the demonstrated relevance of climate resilient seeds; sharing wider platforms to question and call for ban of chemical pesticides. For women, who knew only their life in confined homesteads and family farms - taking on vanguard roles in the policy arena is a great achievement.

³⁷Dr Vandana Shiva launched the idea of the Javi Panchayat within the Living Democracy movement on June 5, 1999 (environmental day). More than 85 Jaiv Panchayat have been formed in the Garhwal district alone. In some of these Panchayats, villages have been declared zone-free of genetically modified (GM) crops.

4.5 IMPACT

Impact is long-term. The impact of Shakti Project must be placed cumulatively from the First and Second Phases.

ENHANCING BIODIVERSITY COVER

With multi-vegetables, spices, revival of forgotten vegetable crops and medicinal plants, the GoH are models in biodiversity. This is a significant outcome and impact. The GoH across the five states bring to light a kaleidoscope of diversity and women role in enriching this.

TRANSFORMATIVE LIVES

New Identity

Women lives have changed in several ways, and this resonates in their conversations and articulations. With GoH, women have gained new identity as seed-savers, producers. above all self-earners and leaders. This is the transformative power that women hold.

Repositories of Knowledge

Women are now a knowledgeable lot, conversant in technical knowhow of organic agriculture, abilities to assess the strength of their own GoH in terms of its biodiversity and health benefits. They can context the positives of biodiverse organic culture against the backdrop of commercial agriculture and the inroads made by chemical fertilizers, and pesticides. Women's vocabulary of biodiversity is quite impressive – catches the external eye.

Women have an Institutional Identity

Women farmers are now part of wider alliance of MAS Collectives, giving them an institutional identity. Exposure and sharing of experiences with the wider world of women from other states of Shakti Project and getting educated and being part of Navdanya's philosophy of agrobiodiversity have brought informed levels of awareness among women. Navdanya has made them aware of their vital contribution to bio-diverse- agro-economy and that they have a role in the policy arena to protect laws that promote agrobiodiversity – the organic way.

Changing Patriarchal Mindsets

In a more fundamental way, women have begun to change patriarchal mindsets and practices in their families and wider society around them. The diverse character of MAS Collectives has nurtured inclusive practices of accepting women from different caste, tribe, region, language, and class backgrounds.

Women have begun to look beyond their lives – bringing improvements in their localities, questioning, and protesting discriminatory practices. In Uttarakhand, for example, women have protested for the removal of waste dumps in their locality; destroyed liquor shops and helped returning migrants to resettle. Looking at the empowered states of daughters and daughters-in law, mothers and mothers-in law are changing their gender perspectives – giving the younger generation greater freedom. Women also aver that they do not give preferential treatment to boys. Child marriages have been eliminated and girls are married with their consent. These are gender transformative measures. A few voices. (Annexure 3 Field Narratives)

- Men would get drunk, beat their wives and create trouble during marriage ceremonies. Our MAS women got together and destroyed the country made liquor points in the village and got them

closed. Men would sell the grains and jewelry of women to purchase liquor bottles. We stopped this too. Men no longer drink openly. Women are not battered as before. Today, our men respect us, and we are happy that we could do this.

- After becoming members of MAS Collectives, women are openly moving out, fearlessly airing their views. Fifteen to twenty years ago, women feared men and would never assert. Women are now voicing their views and taking stands. Men are now sharing work with women – shoulder to shoulder. - Jasoda Devi
- We have done away with many discriminations against women. We have the traditional practice of widows removing their nose pin. We ensured that one of our members who is a widow does not remove her nose pin.

GRASSROOTS DISCOURSE AND POLICY DIALOGUE

A major gender change is women contesting for the 50 per cent quota in Panchayat Raj Institutions (PRI). A few members of MAS Collectives who contested and some getting elected are making a difference with their participation in matters of development in their constituency. Women have become politically aware – attending local panchayat meetings and informing them of important happenings that need to be investigated in their villages. This is the women's power that Dr. Vandana speaks about.

There is an uptake in women's informed dialogues meetings of MAS Collectives, Cluster Level meetings and in all the learning events of the Shakti Project. Far more vocal, women have left all the fear they once had - relating with government officials and the public with confidence.

'I have 7 women ward members and they are better than men. Men used to ask for liquor in the evenings to close the meetings. But the women used the entire budget for the welfare of the whole village. They seek no favors for it.- Kushal Ji, Pradhan, Uttarakhand.

4.6 SUSTAINABILITY

The GoH have benefited women in many ways – vegetables in their kitchens, spices for family health, and income in their hands. Women have saved seeds in their homes, set up seed banks and share their produce – reflecting movements in circular economy. What has gained popularity are the climate resilient organic seeds. Women and farming communities that have seen the long-term benefits of this will continue with their seed saving practices and biodiverse organic farming. Not only women farmers but also their menfolk and children have imbibed the value of these gardens. Women, especially from new MAS collectives would look for continued support in terms of training, exposure, and knowledge building.

With exposure and training, a segment of women are now leaders and Javik Acharyas. Altogether, women's status within their families, neighborhoods and villages have taken an upward turn. While other forces of modernization might have contributed to this, the Shakti Project provided planned opportunities and spaces for women to get empowered. The role models of these women will remain templates of inspiration for the younger generation. This process of empowering women must be sustained.

The Mahila Anna Swaraj Collectives have an institutional identity in their villages. The leaders and Javik Acharyas are the empowered faces of their villages. This segment of leadership must be valued, expanded to sustain the agenda of Shakti Project.

The Jaiv Panchayat as platforms for living democracy is an influential space to converge diverse segments of society to share, discourse and spread the biodiverse agenda and ecofeminist philosophy. Navdanya and the Shakti Project have opportunities to expand and diversify these democratic spaces.

Manuals, knowledge registers on biodiversity and food systems and organic techniques are the assets of Shakti Project. These products have wider value with scope for dissemination.

LOOKING AHEAD

As she looks ahead, Dr. Vandana Shiva reflects on monopolistic and extractive corporate power and posits that what works is the grassroots power that women, people and communities hold. It is this grassroots democracy that must play a critical role. Navdanya must do a lot more to sustain the gains the Shakti Project has made.

1. There is sizeable segment of women leaders who can be entrusted with the task increasing the biodiversity cover and bring more leaders to deepen the biodiversity agenda and grassroots democracy.
2. We have to do a lot more participatory research at the farm level. Together, the Shakti Team and women farmers, especially those that have proven interest in the agenda of biodiversity should be motivated to undertake participatory research on themes of organic biodiversity, climate change, food systems and circular economy.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

The Shakti Project is demonstrating a sustainable model in biodiverse organic farming at a time when Indian agricultural economy is fast declining with low productivity, indifferent policies for sustainable agriculture and serious shortage of labor. The Shakti Project has motivated women to grow GoH in small parcels of land, got them organized under MAS collectives and centre-staged a far-reaching model. Guided and educated in biodiverse organic farming, women have enhanced biodiversity cover in their GoH and emerged as role models. Going beyond, Navdanya and the Shakti Project have brought about a wide stakeholder coverage: women farmers, their families and community, panchayats, officialdom, teachers, student community of schools, colleges, universities within and outside India. Against this backdrop, Navdanya's critique of high use of non-organic fertilizers and pesticides and continual inroads by GMOs and affirmation of its biodiverse-agroeconomy paradigm must be commended.

In many ways, women farmers of the Shakti Project are an emboldened lot. Women were brought under the ecofeminist framework – made aware of their potential to be empower themselves and be leaders to play a greater role to critique policies and changing their discriminated status in their family and wider society. The Shakti Project now has a sizeable number of women who have experienced different states of empowerment and leaders ready to carry forward the agenda of biodiverse organic agriculture. As Dr. Vandana Shiva maintains, 'This is the only power – grassroots power that works. Shakti is India's civilizational power where every community as a swaraj becomes important in times of corporate rule. Women farmers have demonstrated this with their resilience amid Covid - 19 and weather adversities.'- Dr. Vandana Shiva.

To sustain its paradigm and change processes that are underway, the Shakti Project must go through future interventionist cycles to advance its overall objective.

5.2 RECOMMENDATIONS

The proposed Indicator Framework for Phase III aligns well with Phase II of the Shakti Project. From the evaluation side, we are placing the following recommendations to affirm and complement the proposed Indicator Framework of Phase III. Our recommendations are drawn from dialogues with Dr. Vandana Shiva, PME team and Local Coordinators.

- A. There is scope to increase the number of GoH and organize new members under MAS Collectives. Women and in particular Jaiv Acharyas must be given enabling mandates to be catalysts and spread biodiverse organic gardens. The Shakti Project must give requisite support for this.
- B. Training and exposure has been the strength of Shakti Project. This must be given continued thrust in Phase III to deepen the learning base of women and organizational capacities of MAS Collectives. The Project could consider assessment of the training needs of women, technological support required, and technologies and agricultural implements needed. Women must be continually reenergized.

- C. The MAS Collectives are the organizational backup for women. It is important to develop simple competency framework to assess their strengths and challenges to continually revitalize their functioning. Navdanya is working on a comprehensive integrated eco-feminist framework of MAS women responding to climate change, economic issues, issues of political power and issues of knowledge and epistemic power. (Table 6: Salient Baseline Indicators Phase III). We support this.
- D. The Shakti Project has promoted women leaders and their numbers must increase to a critical mass. These leaders must be supported with knowledge and deepened leadership competency.
- E. Dr. Vandana Shiva observes that the next Phase of Shakti Project must get into participatory research wherein women are given skills to research on themes of 1) Women, Nature and Climate Change; 2) Women, Nature and Living Economies; 3) Women, Nature and Living Democracy and 4) Women, Nature and Living Knowledge. Such participatory research will deepen indigenous knowledge and empower women further. Navdanya and Shakti Project must facilitate this participatory research, provide expert support, and hold this agenda. (Table 6: Salient Baseline Indicators Phase III)
- F. There is consensus that democratic platforms of Jaiv Panchayats, Policy Meets, Vasundhara have impacted the wider public with perspectives on biodiverse agroecology. These must continue.
- G. The PME Team and Local Coordinators and their staff in the five states must go through motivational retreats to sustain their team spirit and commitment.
- H. The work ethic and team spirit of Navdanya PME Team, Local Coordinators and Coordinators are merit worthy. There is a strong case to increase their salaries – to retain them and keep them motivated.

Table 6: Salient Base Line Indicators Phase III			
Total Number of MAS in the Second Phase	Total Number of MAS Women Empowered in the Second Phase	Total Number of MAS in the Third Phase	Total Number of MAS Women in the Third Phase
126 MAS Collectives	1512 MAS women empowered	516 (43 group @ 12 member per group)	2,028 women in MAS groups will be empowered – individually and collectively.
Leaders in the Second Phase		Leaders in the Third Phase	
198 leaders trained and active participants in the political dialogue.		169 MAS have 169 leaders, one in each MAS group. And 300 MAS Gurus will be trained. This makes it total of 469 leaders trained to advance integration of eco-feminism from a rights approach.	
Phase 3 – 300 MAS leaders trained as gurus and 169 as leaders			
198 women given certificates		300 women will obtain a certificate as Gurus in organic agriculture.	
Increase from 1 decimal to 9 or more and increase of 30% in biodiversity according to the final evaluation of Phase I		Increase of at least 10% of the current cultivation land in organic	
A comparative cost-benefit analysis of 5 biodiverse organic systems in the 5 agroclimatic regions			
Pilot study of 5 organic biodiverse systems from Phase II		Due to covid lock down a lot of time was lost for the pilot study. Hence, we increased the duration extending the	

	pilot study and will continue in the third phase.
Jaiv Panchayats in Phase II	Jaiv Panchayats in Phase III
6 regional and 1 national Jaiv Panchayats held in Phase II	At least 6 Jaiv Panchayat and at least 200 women have actively participated in the Jaiv Panchayats including those in elected positions
Vasundhara Festival in Phase II	Vasundhara Festival in Phase III
190 participants in Vasundhara 2021	At least 150 people from networks and MAS, grassroots farmers, political representatives, from different areas of India and other countries participate in the Vansundhara Meeting 2024.
Participatory research on biodiversity, agroecological production and nutritional value of indigenous seeds. Participatory research on themes of organic biodiversity, climate change, food systems, circular economy is being considered.	
The capacities of the MAS Organizations have increased, and the leaders affirm that their needs detected in the diagnosis have been partially or totally covered. Shakti Project is working on a comprehensive integrated eco-feminist framework of MAS women responding to climate change, economic issues, issues of political power and issues of knowledge and epistemic power.	
The knowledge, learning and contributions of local women reach National and International forums: International Biodiversity Congress; Web platform, social media (Instagram, Facebook, Twitter, YouTube) and thematic reports on based on participatory action research.	

8.- INTERVENTION LOGIC.

8.1.- Logical framework matrix.

OBJECTIVE	INDICATORS	Progress	LB	VERIFICATION SOURCES	EXTERNAL FACTORS / HYPOTHESIS
<p>OVERALL OBJECTIVE Bring women to the center of Living Democracies and improve the quality of life, well-being, security and food sovereignty of women farmers in India through regional and national policies on women and agriculture.</p>					
<p>Specific goal. Improving food security and sovereignty in the hands of empowered women through the</p>	<p>IOV1.OE. At the end of the project, 1512 women MAS groups (Mahila Anan Swaraj) have strengthened the process of individual and collective empowerment.</p>	<p>During the Phase 1 of the program, women outside the MAS showed interest in joining the initiative. The existing MAS groups discussed with Navdnaya team and through a participatory process they integrated the new women and formed a new group. A total of 85 existing MAS groups consisting of 1020 members, through participatory process integrated 41 new MAS groups consisting of 492 new members. In total 126 MAS groups consisting of 1512 MAS members were formed. The existing MAS members women</p>	<p>1,020 women from 85 MAS groups are already participating in phase 1 of the project, have started their empowerment process and are participating locally and regionally.</p>	<p><i>FVIOE1. Middle and final evaluations of the project.</i></p>	<p><i>H.1 .; There are no extreme natural phenomena that affect the development of Project activities.</i></p> <p><i>H.2. The authorities maintain the support and participation in the activities.</i></p> <p><i>H.3. The situation in the</i></p>

<p>implementation of biodiversity conservation, seed sovereignty based on agro-ecological and organic production, facilitating their critical analysis and participation in the local, national and international political arena.</p>		<p>who are already trained in biodiversity-based agroecology and seed conservation, along with the local facilitators train the new MAS members during their monthly meetings in different techniques on biodiversity-based agroecology and seed conservation</p>			<p><i>face of the COVID pandemic does not permit to mobilize people to carry out activities within the country and international travel.</i></p>
	<p>I.OV2.OE Attitude changes are observed in women from MAS, with a higher self-esteem and a greater participation in community life, and a greater awareness of biodiversity and nutritional literacy.</p>	<p>Surveys conducted for 206 (11.9% of 1735 MAS women in Phase 1) MAS women members (UK- 100, MP- 40, RJ-20, MH- 30, OD- 20, WB-50) using questionnaires. All MAS women interviewed (100%) had attitudinal changes with greater self-esteem and greater participation in community life, and higher awareness of biodiversity and nutritional literacy.</p>	<p>Report in the intermediate evaluation Phase I</p>	<p><i>FV.I.OE1. Middle and final evaluations of the project.</i></p>	
	<p>IOV3.OE Rural women's voices are heard and awareness and political participation are increasing.</p>	<p>Rural Women's voices were heard and awareness and political participation were seen increasing during the following:</p> <ol style="list-style-type: none"> 1. National Festival Bhoomi 2021 2. Cluster meetings at local level across 5 regions 3. Meeting of National Vasundhara 2022 4. Workshops at Navdanya farm on policies, improving the capacities of women to dialogue and negotiate spaces in environmental policy and share their achievements and experiences 5. Annapoorna 2022 - National Policy Dialogue (Living Democracy/Jai Panchayat) From local to global for an organic India (Jaivik Bharat) 6. Diverse Women for Diversity (DWD) 2023 – Women's voices of leadership were heard at a National 	<p>Report in the intermediate evaluation Phase I</p> <ul style="list-style-type: none"> - Questionnaires of PAR - Report of the Bhoomi festival 2021 - Report of the National Meeting of Vasundhara 2022 - Report of Workshops at Navdanya farm on policies, improving the capacities of women to dialogue and negotiate spaces in environmental 	<p><i>FV.I.OE.2a Research on agroecology PAR. FV.I.OE2b Bio vs. chemical comparative analysis FV.I.OE.2c Documentation of good practices.</i></p> <ul style="list-style-type: none"> - Report of the Bhoomi Festival 2021 - Photographs and registers of the of the cluster meetings - Report of Workshops at Navdanya farm on policies, improving the capacities of 	

		and International level where their voices became part of the international DWD movement	policy and share their achievements and experiences - Annapoorna 2022 report - Report of DWD 2023	women to dialogue and negotiate spaces in environmental policy and share their achievements and experiences - Report of Annapoorna - National Policy Dialogue (Living Democracy/Jai Panchayat) From local to global for an organic India (Jaivik Bharat) - Report of Diverse Women for Diversity (DWD) 2023	
	IOV4.OE The 4540 1512 women from the MAS groups, and especially the 252 women leaders, are advancing in their integration of eco-feminism from a rights perspective.	A total of 1512 MAS women and especially 374 leaders (198 + 50 MAS Acharyas, 126 MAS leaders) are advancing in their integration of eco-feminism from a rights perspective.	Report in the final evaluation phase I	<i>FVIOE1. Intermediate and final evaluations of the project</i>	
<i>RESULT 1 126 women's groups reinforce the process of individual, social and political empowerment at the time eco-feminism and their</i>	IOVR1 1. At the end of the project, 1512 women will be trained in different techniques on biodiversity-based agroecology and seed conservation.	During the Phase 1 of the program, women outside the MAS showed interest in joining the initiative. The existing MAS groups discussed with Navdnaya team and through a participatory process they integrated the new women and formed a new group. A total of 85 existing MAS groups consisting of 1020 members, through participatory process integrated 41 new MAS groups consisting of 492 new members. In total 126 MAS groups consisting of 1512 MAS members were formed. The existing MAS members women who are already trained in biodiversity-based	1,020 women from 85 MAS groups are already participating in phase 1 of the project, have started their empowerment process and are participating locally and regionally.	<i>FVR1.1 - Training records.</i> - <i>Photographic dossier.</i> - <i>Records of MAS meetings .</i> - training registers with lists of women being trained. - MAS meeting registers - Photo documentation	

<i>knowledge and abilities are recovered.</i>		agroecology and seed conservation, along with the local facilitators train the new MAS members during their monthly meetings in different techniques on biodiversity-based agroecology and seed conservation			
	IOVR1 2. Attitude changes are observed in women from MAS, with a higher self-esteem and a greater participation in community life, and a greater awareness of biodiversity and nutritional literacy.	Surveys conducted for 206 (11.9% of 1735 MAS women in Phase 1) MAS women members (UK- 100, MP- 40, RJ-20, MH- 30, OD- 20, WB-50) using questionnaires. All MAS women interviewed (100%) had attitudinal changes with greater self-esteem and greater participation in community life, and higher awareness of biodiversity and nutritional literacy	Report in the intermediate evaluation Phase I	<i>FVR1.2.- Intermediate and final evaluations of the project.</i> - Records of monthly MAS meetings. - Photographic dossier.	
	IOVR1 3. 198 women will obtain a certificate in organic agriculture.	Yes, 198 women have obtained a certificate in organic agriculture. This has encouraged them to become acharyas or teachers of organic agriculture to train others in their groups and communities. Some more women also were provided training total 248 women (198 + 50) have obtained a certificate in organic agricultura to become acharyas or teachers of organic agriculture to train others in their groups and communities	<i>Report of cetificate trainings of MAS women as Acharyaso train others in hteir community in organic agriculture</i>	<i>FVR1.3 - Training records.</i> - Photographic dossier. - Training materials	
	IOVR1 4. Increase of at least 10% of the current organic cultivation land.	Yes, a total of 105.12 acres have been the new addition across 5 region (Maharashtra = 50.8 acres, Odisha 5.4 acres, West Bengal 43.68 acres, Uttarakhand 4.68 acres, MP 0.96). It is important to note that climate change in 2021 most Gardens of Hope across different regions were completely destroyed due to heavy rainfall from late to post monsoon period. Hence, the MAS had to again grow their Gardens of Hope. Regrowing the Gardens of Hope happened under the leadership of MAS leaders and acharyas	83 acres according to the intermediate evaluation phase I	<i>FVR1.4- Records of Gardens of Hope.</i> - Details of destruction of GoH and their regrowing can be found in the Narrative	
	IOVR1 5. Women	Yes, women actively participated in the	- Questainnaires of	<i>FVR1.5 -</i>	

<p>actively participate in the Participatory Action Study share their knowledge about agroecology.</p>	<p>Participatory Action Study Questionnaires were prepared for women to participate actively and share their rich knowledge of agroecology. The MAS through the PAR shared their experiences and indigenous knowledge</p>	<p>PAR - PME Interactions with MAS women during field visits - 4 thematic reports</p>	<p><i>questionnaire on agroecology PAR.</i> - Survey records. - 4 thematic reports 1. Women, Nature and Climate Change 2. Women Nature and Living Economies 3. Women Nature and Living Democracy 4. Women, Nature and Living Knowledge</p>	
<p>IOVR1 6. A comparative cost-benefit analysis of 5 biodiverse organic systems will be carried out in the 5 agroclimatic regions</p>	<p>Yes, data has been collected and a comparative cost-benefit analysis of 5 biodiverse organic systems has been carried out in 5 agroclimatic regions through biodiversity based cost-benefit analysis questionnaires</p>	<p>- Report on the comparative study - Questionnaire for the survey Biodiversity based cost-benefit analysis questionnaire</p>	<p><i>FVR1.6 – Comparative report.</i> - Survey records</p>	
<p>IOVR1 7. Increase at the least 25 new varieties of resistant seeds climate, rich in nutrition and / or lower water requirement.</p>	<p>A total record of 107 climate resilient and nutritious seed varieties have been reported across the regions. It is important to note that besides understanding their rights women have developed the confidence of being leaders to others in their community to lead them to a climate resilient in times of rapid climate change. Due to the climate change in 2021, 2022 most Gardens of Hope across different regions were completely destroyed due to heavy rainfall from late to post monsoon period. Hence, the MAS had to regrow their Gardens of Hope. Regrowing the Gardens of</p>	<p>Odisha seed bank Balasore - 1020 seeds. Odisha seed bank Mayrubhanj - 100 seeds. Navdanya seed bank, Dehradun - 1500 seeds. Maharashtra seed bank - 65 seeds. West Bengal seed bank - 50 seeds.</p>	<p><i>FVR1.7 – Seed bank records.</i> List is provided in the Narrative <i>Climate change effects details given in Narrative</i></p>	

		Hope happened under the leadership of MAS leaders and acharyas			
<p>OUTCOME 2 Enhanced role and value of women as agents sensitive to seed, health, agroecology, and the fight against climate change, from a participatory process from the local to the global for a critical and participatory analysis of policies Regional and State farms .</p>	IOVR2 1,252 female leaders claim to have increased their capacities through leadership trainings and the political dialogue process.	<p>Yes, Leadership trainings of 374 MAS women leaders have been carried out. These trainings increased their leadership capacities and political dialogue process.</p> <p>It is important to note that climate change in 2021 most Gardens of Hope across different regions were completely destroyed due to heavy rainfall from late to post monsoon period. Hence, the MAS had to again grow their Gardens of Hope. Regrowing the Gardens of Hope happened under the leadership of MAS leaders and acharyas</p>	Final evaluation report Phase I	<p><i>FVR2.1</i> - Training records.</p> <ul style="list-style-type: none"> - Final evaluation report Phase II - Training material <i>Records of Gardens of Hope</i>. - Details of destruction of GoH and their regrowing can be found in the Narrative 	
	IOVR2 2. At least 4 Jaiv Panchayat (Viva local democracy meetings) have been held and at least 200 women have actively participated in front of elected officials.	Yes 6 Jaiv Panchayats were held across the 6 regions.	<p>Reports of Jaiv Panchayat held across the 6 regions</p> <p>Draft of Jaiv Panchayat declarations across different regions</p>	<p><i>FVR2.2</i> - Jaiv Panchayat meeting records.</p> <ul style="list-style-type: none"> - Photographic dossier. - Coordinator reports on the Jaiv Panchayat. 	
	IOVR2 3. 252 women leaders (multipliers) have been trained in rights and have shared it with the 1512 women of the MAS groups.	<p>Yes MAS women leaders have been trained in their rights. These women later reached out to the new MAS groups that were formed in the phase 2 which consists of 1512 MAS women (1020 old MAS women + 492 new MAS women) to understand their rights through trainings.</p> <p>It is important to note that besides understanding their rights women have developed the confidence of being leaders to others in their community to lead them to a climate resilient in times of rapid climate change. Due to the climate change in 2021, 2022 most Gardens of Hope across different regions were completely destroyed due to heavy rainfall from late to post monsoon period. Hence, the MAS had to again grow</p>	Final evaluation report Phase I	<p><i>FVR2.3</i> - Training records.</p> <ul style="list-style-type: none"> - Photographic dossier. - Final Evaluation Report Phase II. 	

		their Gardens of Hope. Regrowing the Gardens of Hope happened under the leadership of MAS leaders and acharyas			
	IOVR2 4. The capacities of the MAS Women's Organizations have increased and the leaders affirm that their needs detected in the diagnosis have been partially or totally covered.	Trainings have been conducted on monthly basis by the MAS group leaders. Besides the PME have also conducted trainings during their visits to the regions.	Diagnosis of local capacities	FVR2.4 - Training records. - Photographic dossier. - Final Evaluation Report Phase II.	
	IOVR2 5. Navdanya has different researches and reports based on the participation and knowledge of women that endorses Agroecology against the use of chemicals.	Yes PAR, cost-benefit analysis and documentation of good practices has been done across the 5 regions. As an outcome of these four thematic reports were prepared	4 thematic reports: 1. Women, Nature and Climate Change 2. Women, Nature and Living Economies 3. Women, Nature and Living Democracy 4. Women, Nature and Living Knowledge	FVR2.5.a Research on PAR agroecology. FVR2.5.b Bio vs. chemical comparative analysis FVR2.5.c Documentation of good practices. 4 thematic reports	
	IOVR2 6. The knowledge, learning and contributions of local women reach National and International forums.	The knowledge, learning and contributions have reached the National and International forums through 1. Jaiv Panchayats across the 6 regions. 2. Regional festivals were celebrated related to the seeds, food, agriculturr, soil, gifts of mother nature, spring festival, harvest festival across the 5 regions. 3. Vasundhara International meeting 2021 4. Diverse Women for diversity 2023, 5. Workshop on policies at Navdanya farm national, OD and UK 6. Bhoomi 2021 – Shakumbari Rewilding 7. Annapoorna - National Policy Dialogue	- Declarations drafted by MAS at Jaiv Panchayat, Vasundhara, Bhoomi. - Manifestó drafted at the DWD - Annapoorna – Women made their voices heard as custodians of nature and leaders of their community through the Shakti Manifesto on the	F.V.R2.6. – List of participation in the Jaiv Panchayats. - Report on Local festivals celebrated at local levels. List is available and Bhoomi National Festival, International Congress on Biodiversity. Vansundarha International Meeting 2021. Diverse Women for Diversity Festival 2	

		(Living Democracy/Jaiv Panchayat) from local to Global for an organic India (Javik Bharat)	Future of Seed, Food, Health and the Planet	022 - FAO Meetings,- NA - Photographic dossier. - Final Evaluation Report Phase	
	IOVR2 7. At least 150 people from networks and more , grassroo ts farmers, political representatives, from different áreas of India and from other countries participate in the Vansundarha 2021 Meeting	A total of 190 people attended Vasundhara meeting. These consisted of 110 MAS and 80 people consisting of women networks, grassroots farmers, political representatives from national and international levels.	Vasundhara Declaration	<i>F.V.R2.7.</i> Vasundarah Report Photographic dossier	

ANNEXURE 2: OUTCOME MAPPING II PHASE

Project interventions	Output & Outcomes	Influencing Factors	Strengths	Challenges
Uttarakhand: Rudraprayag, Tehri, Doon Valley (Mention Number of GoH, Number of MAS and How many villages) Rudraprayag = 168 GoH, 14 MAS, 14 villages; Tehri = 168 GoH, 14 MAS, 10 villages; Doon Valley = 252 GoH, 21 MAS, 20 villages				
MAS Meetings and Training (Six-monthly or any other) Number of GoH	<p>Output – A total of 168 women from 14 MAS from Rudraprayag, 168 women from 14 MAS in Tehri and 252 women from 21 MAS from Doon Valley have undergone trainings through monthly meetings as and when need arises and every 6 months when the PME visits the region.</p> <p>Outcome – These trainings have empowered the women in growing their 588 Garden of Hope using agroecological techniques, biodiversity base organic farming, seed conservation and multiplication of seeds, creating Gardens of Hope and artisanal local processing at the community level. The trainings also made the women revive their indigenous knowledge to pass it on to the future generations.</p>	<ul style="list-style-type: none"> • The Himalayan community culture is closely woven with nature and women in particular who are custodians of the commons which helps them hold community and the nature together. • MAS members, MAS leaders and Navdanya’s local team of facilitators are in constant interactions forming active networks 	<ul style="list-style-type: none"> • The MAS women are a strong collective with strength to mobilise their communities. 	<ul style="list-style-type: none"> • Close to the Tehri dam • Climate change • Constant haphazard developmental activities pressurises the already seismically fragile Himalayas
Biodiversity – Increase and diversity in crops/vegetable etc	<p>Output - The biodiversity in the GoH in Uttarakhand in 2021 = 13 food plants, in 2022 = 21 food plants.</p> <p>Outcomes = The biodiversity grown in Gardens of Hope increased significantly in Uttarakhand and the women and their communities are having better nutrition in their diets through increased biodiversity</p>			
Leadership Training (Acharyas – Number)	<p>In Uttarakhand 54 MAS women were trained to become Acharyas.</p> <p>The Acharyas are empowered to train others in the communities to create their Gardens of Hope and farm biodiversity of crops organically</p>			
Number of Festivals	7			
-Number of Jai Panchayats in	1			

Uttarakhand				
Food Festivals	<p>Every local festival has food preparations associated with it. The food is either artisanal processed or delicacy prepared for respective festival. A total of 7 local festivals were celebrated by the MAS women of Uttarakhand. These festivals are associated with seeds, food and agriculture and changing seasons.</p> <p>These festivals were slowly becoming locally extinct. Navdanya's initiative to celebrate the local festivals and their deeper meaning helped women revive the slowly vanishing cultures that support life and wellbeing.</p> <p>Ghughutiya for example celebrates the Northern oscillation of the sun, and remembering of our ancestors on this day and the knowledge they gave us that sustains us. On this day Sel is made from jiggery and wheat flour fried in oil and a garland is made from it. Crows are symbolize ancestors and are fed with Sel.</p> <p>On Phuldei spring festival is celebrated. Children collect flowers from the wilderness and offer it to the entire village. Elders offer rice, dal and other grains in return. After gathering all that children prepare and enjoy a community meal is prepared from these items and distribute equally to the children. Such festivals foster unity among the community members.</p>			
Any Other Initiatives	<p>A dialogues was carried out in the state of Uttarakhand to integrate participation and recommendations from the leaders as MAS in existing organizational policies.</p> <p>This session was based on regional policies and after the dialogues a collective regional commitment was made and signed to declare the Uttarakhand as jeivik kshetra.</p> <p>Details of common initiatives given as a common description for all the regions together at the end of the</p>			

	document			
Madhya Pradesh (Mention the district and number of villages) Newari = 84 GoH, 7 MAS, 6 villages				
MAS Monthly Meetings and Training (Six-monthly or any other)	<p>Output – A total of 84 women from 7 MAS from Madhya Pradesh have undergone trainings through monthly meetings as and when need arises and every 6 months when the PME visits the region.</p> <p>Outcome – These trainings have empowered the women in growing their 84 Garden of Hope using agroecological techniques, biodiversity base organic farming, seed conservation and multiplication of seeds, creating Gardens of Hope and artisanal local processing at the community level. The trainings also made the women revive their indigenous knowledge to pass it on to the future generations.</p>	<ul style="list-style-type: none"> • These dry areas where agriculture is completely monsoon dependent, women work closely understanding Nature’s patterns and associate with one another to help their communities to live in harmony with Nature • MAS members, MAS leaders and Navdanya’s local team of facilitators are in constant interactions forming active networks 	The MAS women are a strong collective with strength to mobilise their communities.	<ul style="list-style-type: none"> • Climate change is exposing these areas to extreme events of dry spells and untimely rainfall and hail storms • Loss of biodiversity and introduction of chemical monocultures are threats to this region
Biodiversity – Increase and diversity in crops/vegetable etc	<p>Output - The biodiversity in the GoH in Madhya Pradesh in 2021 = 37 food plants, in 2022 = 49 food plants.</p> <p>Outcomes = The biodiversity grown in Gardens of Hope increased significantly in Madhya Pradesh and the women and their communities are having better nutrition in their diets through increased biodiversity</p>			
Leadership Training (Acharyas – Number)	<p>20 MAS women were trained to become Acharyas.</p> <p>The Acharyas are empowered to train others in the communities to create their Gardens of Hope and farm biodiversity of crops organically</p>			
-Number of Festivals Held	7			
Number of Jai Panchayats	1			
Food Festivals	Every local festival has food preparations associated with			

	<p>it. The food is either artisanal processed or delicacy prepared for respective festival. A total of 7 local festivals were celebrated by the MAS women of MP. These festivals are associated with seeds, food and agriculture and changing seasons.</p> <p>These festivals were slowly becoming locally extinct. Navdanya's initiative to celebrate the local festivals and their deeper meaning helped women revive the slowly vanishing cultures that support life and wellbeing.</p> <p>Makar Sankranti is celebrated for the Northern oscillation of the sun. The bounties of Nature and farms are worshipped particularly the fruits, vegetables, oil seeds and millets. Jaggery and Til are offered in prayers and also distributed to family and friends wishing them a sweet and warm spring season ahead. This festival marks the passing of the cold winters and the welcoming of the warm fruitful spring season.</p> <p>Basant Panchami is celebrated to welcome the spring season. Khichadi a preparation made from Urad dal and rice are served on this day as an auspicious meal.</p>			
Any Other Initiatives	Details of common initiatives given as a common description for all the regions together at the end of the document			
West Bengal : Mention project districts, villages, Number of MAS: 480 GoH, 40 MAS, 32 villages				
MAS Meetings and Training (Six-monthly or any other) Number of GoH	<p>Output – A total of 480 women from 40 MAS from Madhya Pradesh have undergone trainings through monthly meetings as and when need arises and every 6 months when the PME visits the region.</p> <p>Outcome – These trainings have empowered the women in growing their 480 Garden of Hope using agroecological techniques, biodiversity base organic farming, seed conservation and multiplication of seeds, creating Gardens of Hope and artisanal local processing at the community</p>	<ul style="list-style-type: none"> • Women in the community celebrate their Shakti through the rich biodiversity this region supports and keep their communities knit together. • MAS members, MAS leaders and Navdanya's local team of facilitators are in constant 	The MAS women are a strong collective with strength to mobilise their communities.	<ul style="list-style-type: none"> • Climate change is creating havoc through the increasing numbers and intensities of cyclones and super cyclones, untimely heavy

	level. The trainings also made the women revive their indigenous knowledge to pass it on to the future generations.	interactions forming active networks		rainfall and floods every year. <ul style="list-style-type: none"> • Loss of biodiversity and introduction of chemical monocultures are threats to this region
Biodiversity – Increase and diversity in crops/vegetable etc	Output - The biodiversity in the GoH in West Bengal in 2021 = 33 food plants, in 2022 = 55 food plants. Outcomes = The biodiversity grown in Gardens of Hope increased significantly in West Bengal and the women and their communities are having better nutrition in their diets through increased biodiversity			
Leadership Training (Acharyas – Number)	40			
-Number of Festivals Held	5			
Number of Jai Panchayats	1			
Food Festivals	Every local festival has food preparations associated with it. The food is either artisanal processed or delicacy prepared for respective festival. A total of 5 local festivals were celebrated by the MAS women of West Bengal. These festivals are associated with seeds, food and agriculture and changing seasons. These festivals were slowly becoming locally extinct. Navdanya’s initiative to celebrate the local festivals and			

	<p>their deeper meaning helped women revive the slowly vanishing cultures that support life and wellbeing.</p> <p>Last Day of Ashon is called Nala Bhandra Sonkranti. This day Begali people eat more than 7 different vegetables. Pitha called Poda pitha is also prepared from fermented rice and black gram with grated coconut, ginger, crushed green cardamom and black pepper.</p> <p>It inculcates the value of biodiversity conservation Basant Panchami is celebrated to welcome the spring season. The communities pray that pollinators and insects keep buzzing among the flowers of mustard and plant diversity. Khichadi a preparation made from Urad dal and rice are served on this day as an auspicious meal.</p>			
Any Other Initiatives	Details of common initiatives given as a common description for all the regions together at the end of the document			
Total Participation of women in the above: Approximate numbers				
Odisha : Mention how many districts and number of villages: 144 GoH, 12 MAS, 12 villages				
MAS Meetings and Training (Six-monthly or any other)	<p>Output – A total of 144 women from 12 MAS from Odisha have undergone trainings through monthly meetings as and when need arises and every 6 months when the PME visits the region.</p> <p>Outcome – These trainings have empowered the women in growing their 144 Garden of Hope using agroecological techniques, biodiversity base organic farming, seed conservation and multiplication of seeds, creating Gardens of Hope and artisanal local processing at the community level. The trainings also made the women revive their indigenous knowledge to pass it on to the future</p>			

	generations.			
Biodiversity – Increase and diversity in crops/vegetable etc	<p>Output - The biodiversity in the GoH in West Bengal in 2021 = 5 food plants, in 2022 = 7 food plants.</p> <p>Outcomes = The biodiversity grown in Gardens of Hope increased significantly in Odisha and the women and their communities are having better nutrition in their diets through increased biodiversity</p>			
Leadership Training (Acharyas – Number)	30			
Number of Festivals Held	4			
Number of Jai Panchayats	1			
Food Festivals	<p>Every local festival has food preparations associated with it. The food is either artisanal processed or delicacy prepared for respective festival. A total of 4 local festivals were celebrated by the MAS women of Odisha. These festivals are associated with seeds, food and agriculture and changing seasons.</p> <p>These festivals were slowly becoming locally extinct. Navdanya’s initiative to celebrate the local festivals and their deeper meaning helped women revive the slowly vanishing cultures that support life and wellbeing.</p> <p>Basant Panchami is the celebration of the Spring season. The communities pray that pollinators and insects keep buzzing among the flowers of mustard and plant diversity. It inculcates the value of biodiversity conservation.</p> <p>Holi is the festival of colours and the mark of beginning of summer season as it is called as Doli Poornima in Odisha. It is a five day celebration. Traditionally people prepare Holi colours from leaves and flowers that bloom during this time and apply as a symbol of celebrating the change of the season. The celebrations are marked with festive treats like</p>			

	feni (sweet fried fritters), pethas (white pumpkin dipped in sugar), laddoos od puffed rice.			
Any Other Initiatives	<p>A dialogue was carried out in the state of Odisha to integrate participation and recommendations from the leaders as MAS in existing organizational policies.</p> <p>This session was based on regional policies and after the dialogues a collective regional commitment was made and signed to declare the Odisha as Jaivik kshetra.</p> <p>Details of common initiatives given as a common description for all the regions together at the end of the document</p>			
Maharashtra :Mention the districts, number of villages: 216 GoH, 18 MAS, 15 villages				
Monthly MAS Meetings and Training (Six-monthly or any other)	<p>Output – A total of 216 women from 18 MAS from Odisha have undergone trainings through monthly meetings as and when need arises and every 6 months when the PME visits the region.</p> <p>Outcome – These trainings have empowered the women in growing their 216 Garden of Hope using agroecological techniques, biodiversity base organic farming, seed conservation and multiplication of seeds, creating Gardens of Hope and artisanal local processing at the community level. The trainings also made the women revive their indigenous knowledge to pass it on to the future generations</p>			
Biodiversity – Increase and diversity in crops/vegetable etc	<p>Output - The biodiversity in the GoH in West Bengal in 2021 = 8 food plants, in 2022 = 18 food plants.</p> <p>Outcomes = The biodiversity grown in Gardens of Hope increased significantly in Maharashtra and the women and their communities are having better nutrition in their diets through increased biodiversity</p>			
Leadership Training (Acharyas –	30			

Number)				
-Number of Festivals Held	8			
Number of Jai Panchayats	1			
Food Festivals	<p>Every local festival has food preparations associated with it. The food is either artisanal processed or delicacy prepared for respective festival. A total of 4 local festivals were celebrated by the MAS women of Odisha. These festivals are associated with seeds, food and agriculture and changing seasons.</p> <p>These festivals were slowly becoming locally extinct. Navdanya's initiative to celebrate the local festivals and their deeper meaning helped women revive the slowly vanishing cultures that support life and wellbeing.</p> <p>Basant Panchami is the celebration of the Spring season. The communities pray that pollinators and insects keeping buzzing among the flowers of mustard and plant diversity. It inculcates the value of biodiversity conservation.</p> <p>On Bail Pola festival Pooranpoli is prepared from chick peas and jiggery stuffed in wheat flour dough. This is fed to the bulls as a gratitude for their contribution to farming. After this the family eats the pooranpoli in celebration of the occasion.</p>			
Any Other Initiatives	Given as a common description for all the regions together			
Initiatives (Common for all regions)	<p>Vasundhara 2021 – Biodiversity the Hindustan Way. The MAS celebrated biodiversity in all forms with the national and international women.</p> <p>Bhoomi 2021 - The MAS women from Uttarakhand participated in Bhoomi 2021 along with the other MAS from other regions. The theme of the Bhoomi 2021 was Shakumbari - Rewilding Food to celebrate the biodiversity of uncultivated wild edibles. Uncultivated wild edibles have</p>			

	<p>been part of our food cultures for ages. Through this festival the wild edible plants were celebrated by the MAS women and they pledged to conserve and pass on the knowledge about these to the coming generations.</p> <p>Diverse Women for Diversity 2023 – was celebrated on the 8th of March. The theme was Sacred Mother Earth, Law of Return of Ecology and Regenerating Earth Family: Planting Gardens of Hope. The women of Uttarakhand and other 4 regions met national and international women, their diverse cultures, and backgrounds, ethnicities, dedicated to various movements local and global focused on protecting cultural and biological diversity.</p> <p>National Policy Dialogue – 2022 – Annapoorna: MAS women participated in the policy dialogue with the other MAS women from other 4 regions. The focus area was Women and Nature.</p> <p>Workshop on policies, improving the capacities of women to dialogue and negotiate spaces in environmental policy and share their achievements and experiences on March 2023 – The MAS women and community members attended workshop at Bija Vidyapeeth Dehradun, Navdanya farm</p>			
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ANNEXURE3: Dr. INDU PRAKSH FIELD ITINERARY
Uttarakhand –Doon Valley 30 th and 31 st March 2023 (A total of 89 participants were present)
<ul style="list-style-type: none"> -Interactions with 20 MAS women, 22 teachers, 5 students, 7 Pradhans (Village Heads), 35 farmers outside of Navdanya’s farmer members: A total of 89 - Interactions and focussed discussions with Coordinators of 4 States. Perusal of their updated registers - Visit to Navdanya’s Seed Bank - Briefly attended Organic Policy Meet. Dr. Vandana talked about the organic policy, biodiverse organic farming, health per acre and wealth per acre. The MAS collectives share their experience and achievements. an
Visit Tehri , Uttarakhand for 2 days (A total of 116 participants were present)
<ul style="list-style-type: none"> - Visited 5 GoH - Meeting at Majaph to interact with 80 MAS women, 5 village elders and 1 Village Head - Meeting at Mishrawan to interact with 30 MAS women.
Field Visit to Maharashtra 12 th April 2023 at Sarul Village, Yavatmal (A total of 133 participants were present)
<ul style="list-style-type: none"> - Interactions with 95 MAS women, 4 teachers, 10 students, 3 village elders, 2 ASHA (Government Health Workers) workers who are also Navdanya’s MAS members, 19 Farmers. - Perusal of 6 Registers - Women spoke about their GoH, organic food, millets and biodiversity. Farmers spoke about their journey from Bt. Cotton to organic farming. Dr. Meera Shiva shared about the health dimensions of organic food. - During the field visit, the temperatures are very high, and soil is dry and hot in Vidarbha. Due to this the GoH food plants went dry. The last harvest of the season from GoH are carried out until mid to end of March. The seeds for the food plants will be sown again after 15th June when monsoon arrives. - The women displayed seeds from seed bank and seeds kept in their homes. Perusal of 6 Registers. - Focussed dialogues with the coordinator (Ms, Savita Raut) and Staff.
Visit to Odisha and meetings at seed bank, in Chandipur, in Balasoreon 19 th April 2023. A total of 125 participants were present
<ul style="list-style-type: none"> - Visited 2 GoH - Visit to 1 Seed Bank - Meeting and interactions with 102 MAS women - Interactions with 5 teachers, 5 students, 1 village head, 12 village elders. Meetings and Interactions with women - Perusal of 6 Registers - Focussed interactions with Dr. Ashok K.P (Regional Coordinator, Ms. Kusum and other Coodinators.
Visit to West Bengal on 21 st April 2023: Meetings at Kakra (A total of 375 were present of which 330 were women)
<ul style="list-style-type: none"> - Interactions with 312 MAS women; 16 teachers; 2 students; 4 media persons; 1 Block Head, 6 village elders; 10 farmers who outside of Navdanya’s farmer members - Perusal of 6 Registers - Discussions with Local Coodinators - 14 stalls were organised with seeds from 14 community seed Banks. - There was an ongoing festival during the field visit.

Annexure 4: Field Narratives by Dr. Indu Prakash

This report brings out highlights of field interactions of Dr. Indu Prakash during his visits to Shakti Projects in Uttarakhand, Maharashtra, Odisha and West Bengal.

1.UTTARAKHAND

Visit to Navdanya Biodiversity Conservation Farmin Dehradun and villages in Tehri Garhwal (March 30 – April 4 th)

- At Dehradun, Dr. M P Singh of Navdanya, was talking to a group of over 65 participants (which included teachers, farmers, activists and local journalists) from Maharashtra, Madhya Pradesh, Uttarakhand over the merits of organic farming and the bane of green revolution. He told everyone that due to excessive use of chemicals in agriculture in Punjab many people got cancer. And there was a train called cancer train which used to take many affected farmers by that to the hospitals in
- I asked some participants when they were visiting the soil testing lab (where they were shown how under microscope the soil of an organic farm showed the microorganisms, in plenty, while under the chemical farming these microorganisms got destroyed, showing the destruction of the soil) if what they learnt here will they be sharing with others, they all responded affirmatively. And told that they understood the harm caused by chemical farming. Rajendra Dhake from Yavatmal did say that they wanted their stay in the Farm to be for not less than eight days. As they were here for only two to three days. He told, 'we have learnt so much in these two – three days. It's a great place to be. Yet there's so much to learn. Had we been here for more days we would have been more knowledgeable and clarified our doubts.'
- For a brief while, I attended the parallel meeting with Local Coordinators and Coordinators (from Tehri Garhwal, Rudra Prayag: UK; West Bengal; Maharashtra; and Madhya Pradesh) with Drona.
- In the afternoon, I listened to the Dr. Vandana Shiva's presentation after the presentation of the plans of the participants from each state, for 6 months, 1 year, 2 years and 5 years, in the phase 3 of the programme; I did raise the point of Dhake ji with Vandana publicly that the participants wanted this training / orientation to be for not less than eight days. For the next phase they were keen to take the organic farming, biodiversity, festivals and the culture of sharing and celebrating to a scale at all the sites of their interventions. Dr. Vandana Shiva had taken the group through each of the 12 sheets (in all 10, the 1st one being the cover and the 12th being the summary of each sheet. Each of these sheets were well illustrated, and articulated in simple terms) handout, in Hindi given to all the participants, before the plans were shared. And she requested all the participants to further translate it in their own vernaculars and distribute it to as many as possible. Many of the participants told that they plan to involve all the segments of the society, beginning with children through their schools and mid-day meals. The teachers told that they shall talk about biodiversity and organic farming in their schools and their zone of influence.
- Dr. Vandana Shiva mentioned how biodiversity, which is the spine of organic farming, enriches soil. How it provides more health and wealth per acre. She spoke about how earth is our mother. And we all are part of Vasudaiva Kutumbakam (the whole world is God's Family – Earth Democracy). That we all need to save mother earth by saving its biodiversity, through the movements, based on Swa-astha (Self Reliance / Rule / Belief): like Bija Swaraj (Seed Self Governance / Rule), Anna Swaraj (Food Self Governance / Rule), Bhumi Swaraj (Land Self Governance / Rule), Swasthya Swaraj (Health Self Governance / Rule), Arthik Swaraj (Economic Self Governance / Rule), and Gyan Swaraj (Knowledge Self Governance / Rule). And how chemical farming uses water 10 times more than organic farming, besides the depletion of soil fertility and causing mental health issues and jeopardising the health for all, zinc causing dementia,

magnesium causing lack of concentration, etc. On 1 st April 2023, in the meeting to recognise the growers of the world renowned Dehraduni Basmati rice Dr. Vandana Shiva explained how did she go about getting the US patent on Basmati , by Texas Rice Tech , cancelled in 1997. She mentioned when nothing was working and also the Gol was limited in its response, how she went about calling the USPTO (United States Patents and Trade Organisation) as United States Piracy and Theft Organisation, and asking large numbers of US citizens to write to USPTO against the patent. And finally getting it renege. Which is captured in her book entitled, Origins (the relevant pages I took pic of it and sent you over WA). She made an important point that today's Charkha is Beej (Seed). And we need to save it, protect it, and share it with the farmers. That is part of our culture too. She also mentioned that we need to celebrate the Basmati festival next year and call all consumers from far and wide, to come and procure it directly from the farmers. Dr. M P Singh said the beauty of the Dehraduni Basmati rice is that it has length of 6.61 mm and thickness of 2 mm. This rice is being tried at many other places, Punjab , MP, etc but the quality of Basmati grown in Dehradun is unique to its soil. And when its cultivated the entire fields under basmati is fragrant with it. And from distance one can make out its cultivation.

2. FIELD MEETINGS

The MAS women displayed seeds: Ragi, Jhangora, Masoor Dal, Kali Dal, Lobiya, Hara Bhat, Chena Paddy, Red Paddy etc. Vegetation Display Bathua, Bichu-Buti, Tej Patta, Buransh, etc.

The display of food included: Arsha, Sag Kandali, Ragi Filled Roti (bread), Home Made Butter, Jhangora, Kheer, Kulath Dal, Kadi, Kaddu (Pumpkin), Rayta, Curd, Chatni, and Jhangora Bhat This festival also gave certificates to 50 women, leading in the organic cultivation, MAS, and seed conservation.

1. MAJAF Village

On 2 nd April 2023, we had the cluster level meeting in village Majaf, Tehri Garhwal District of Uttarakhand. I'm translating the report done by Bhuvaneshwari from the Navdanya Team. The participants responded to the questions raised by me.

In village, women from three groups had joined: Maiti Samuh, Ghuguti Samuh and Kisan Samuh. The names of women came are: Reena Devi, Raji Devi, Urmila, Vimla, Saroj, Sangeeta, Meena, Kabotri, Kavita, Pratima, Himani, Sita, Vikra, Sangeeta II, Vineeta, Mamta, Savitri, Jasoda, Muni, Prakasi, Meena, Seema, Chanda Devi, and Jamuna.

Describing about the work Chanda Devi (Gunguti Mahila Anna Swaraj – (MAS) Samuh, Majaf Palla Village) said, "We save our traditional seeds, like Mandua, Jhangora, Koni, Hara Bhat, vegetables etc. For Ragi and Jhangora we are making people aware. Ragi and Jhangora are good for health. We are not dependent on the outside food or vegetables. It's so because in the outside food chemicals are used, which is not good for our health. We use the fruits and vegetables from our forests, and we have got this traditional knowledge from our elders. In between we were forgetting this knowledge, but due to Navdanya, we were made aware of this knowledge. Our wild fruits were: kafal, Bedu, Hisar, Kirmor, Ghingarau etc. And vegetables, like Kandali, Lengada etc."

Chanda further elaborated, 'We share our seeds with each other. In our schools and at our homes we encourage sagvadi (Kitchen Gardens, Gardens of Hope – GoH). We increase the quantity of millets and dissuade them from the consumption of junk foods. We also inspire pregnant women to have millets.'

Seema Devi (Maiti MAS Samuh) added, 'We mostly cultivate green bhat and potato. And we exchange grains for grains with each other. It's not necessary that we will get money for the grains. We also sell our grains to Navdanya, which gives us 7-12 % more than the market price. We do community based farming. And if one of us gets ill, we collectively support them, in their agriculture and other works. In our kitchen garden (GoH) we grow many types of vegetables, like Rai, Spinach, Tori (Gourd), Lauki, Pumpkin, Coriander, Chillies, Aubergine / Brinjal / eggplant etc. We also have herbal garden, in which we have Giloy, Tulsi, kalmegh etc. During the times of COVID we used the herbs to make cough healing syrup (Kadha) and due to all this, not one casualty was reported from our villages.'

On the Gardens of Hope, which they call sagvadi (Kitchen garden), Seema shared that 'What we have gained from it is that the vegetables in the market are expensive and grown with chemicals: but we use manure from the cow dung for our sagvadi. There is also a lot of expense in going and coming from the market, which gets saved due to our sagvadi. We store, Tomadi Aloo (local variety of potato) for the entire year in pots made of wood, so that it doesn't get spoiled. We encourage the cultivation of 12 crops / grains (12 naja, during Kharif season – Monsoon time. The crops include: Mandua, Mal Kauni, Chaulai, Urad Dal, Lobiya, Moong Dal, Gahat, Rajma, Til, Naurangi Dal, Jhangora, and Kauni) and Nine crops / grains (9 naja, during Rabi season - Winter time. The crops include: Wheat, VaJau (Barley), Jati Jau, Masoor Dal, Ghainda, Mustard, Peas, Todiya, and Sunchana), in our fields.' That maintains the biodiversity, enriching the soil, and also acts as a buffer against any climatic variation. Himani Devi (Ghuguti MAS group), noted 'We dry Bottle Gourd (Lauki), Sponge Gourd (Tori), Bitter Gourd (Karela), which is called Suksa (dried vegetables), and use it in the off season. We make balls (vadi) of black gram (Urd dal). And we make chutney (spicy savoury) of green bhat, filled roti (bread), tangy eatables and lentils of it.'

Most of what they make is used for their own consumption and also for sharing with members of their groups, neighbours etc. All this is not for market only. The idea is that first they need to take care of their own nutrition and of their family members, of their friends, community, and thereafter it may be sold. But the major motive is not commercial. Another participant Meena Devi (Maiti MAS group) added, 'We sell wild mushroom (juj) in market for Rs 20000 per kg. Wild fern, Lengada too is sold in the market. Buransh (a flower) and Malta juice is made at homes and sold in the market. When we get minor injuries while doing the work, we use home remedies (a potion of turmeric and mustard oil). And we believe in Mandua, Jhangora, and Matha (Chaach – butter milk).'

Women's Empowerment

Many others shared: that they are propagating all their learning and knowledge that they have gained / garnered from Navdanya with everyone they come in contact with. The numbers of MAS samuh (groups) are increasing. By getting in touch with Navdanya every woman of the villages has got aware and self-reliant. Earlier times, pregnant women, used to commit suicides due to domestic problems. But due to Navdanya, women have got empowered and emboldened; and are able to deal with the issues rampant in the society, collectively and individually too. "We have revived our traditional songs. Navdanya has always been encouraging these developments and will continue doing it."

On the question to the elderly women if they see any difference between women of their generation and the younger women today, the elderly women told they were not allowed to move so freely as the women do nowadays. And they too allow their daughters – in-laws to move out and be part of Navdanya's work. They had lots of hesitation at their times, but it's not so for the younger women today. And they are happy with these developments and support it. Their own daughters and daughter-in-laws are in the forefront of transformation happening in their villages. Be it social

work, discussions, or cultural programmes. They all collectively solve the issues of their jungles and natural wealth, towards conserving it, for the larger good.

They also shared that they have been able to do away with many discriminations that women faced due to MAS. One case was of the treatment of widows in their villages. The practice was that a widow had to remove their nose pin on becoming a widow. But here one widow who was in the meeting, Meena Devi; her story was shared by many that how women of the village collectively sided with her and asked her to continue wearing the nose pin. And she was still wearing it, in this meeting too. They also shared how they went about destroying the local liquor making joints. And due to which the liquor consumption has reduced. At least men don't drink openly. Nor do they sell their house stuff or grains to buy liquor, which was common earlier. And also no wife battering cases are there as all the women MAS members, come to support the one facing it.

On Climate Change

Climate change is due to the illegal cutting of jungles, the making of Tehri Jheel (Lake - due to the Tehri Dam). And due to all this erratic rains the hills are badly buffeted affecting the fruits like, Plum, Peaches (Aadu), Malta, etc as their flowering has been impacted. Due to which the farmers have suffered a lot.

Around 25 years ago jungles were on the verge of getting eliminated, but gradually people got aware of its repercussions and collectively decided to protect it and did tree plantation. Due to the Tehri Lake (Jheel) coming up, the wild animals, like bears and all come into our fields and destroy our crops.

Festivals and Traditional Food Festival in Mishrawan Village

During the sowing of Paddy in July, the first sowing happens in the fields contiguous to Oneshwar Mahadev (the local deity), in his name. After that only they sow the paddy in their respective fields. And during the sowing lots of savouries (Puri, Pakodi, and Halwa) are made and shared with others too. Festivals: There are 15 festivals, like Aayar Kuttu, Ropani, Dhaneja, Havairh etc

On 3rd April 2023, a traditional food festival was organised in which 85 women participated. Women present there sang a welcome song and the a song on Mandua and Jhangora. Kushal ji, the pradhan of the village, shared, 'How due to Navdanya MAS members have been doing organic farming, been having and conserving traditional food, and celebrating traditional festivals. And spreading information on it, in the entire village. Our natural resources were on the verge of extinction, but it got saved due to MAS samuh women. They planted trees in the forests and any empty patch of land they came across. And due to this the natural resources revived. Also the MAS farmers are using organic manure and herbicides and boycotting external seeds and fertilisers. All this has contributed to the rich biodiversity in the village.' Ganaye Devi, stated "In the beginning when we joined MAS samuh we all contributed Rs 50 each. Then when we needed it for our use, we would take from our group. We use the grains that we produce (Paddy, Mandua, Jhangora, Kauni, etc.) for our consumption.'

Jamuna Devi added, 'We don't use the outside seeds and fertilisers. On vacant patches of land we plant trees. When a girl from our village gets married a sapling is planted, in her name by the women of the village. (It was elaborated by others that when the daughter, now bride goes to her spouse's village, the trees that she will see there will remind her of a similar tree planted in her name and she will not miss her natal family. The trees will be her friends. And also when she would go to the forest and sing while performing the work the trees will carry her songs to her village. Also the tree being her friend she could hold it, and share what she has in her heart.

In old days people used to grow Mandua, Jhangora, and also used to eat it. But after a while they forgot to cultivate and eat it. Navdanya gave us the information about it and now people have got aware of Mandua and Jhangora. Due to eating such food cooked at our own homes, our health too remains good.'

Munni Devi shared, 'Earlier we used chemical fertilisers for our agriculture, due to which neither the crops were in plenty or good, nor we got fodder for our animals. After getting the information from Navdanya on organic farming, and vermi compost and cow dung use for manures, our crops and fodder both have increased.'

Sunita Bhandari narrated, 'From Navdanya we have learnt a lot. The outside companies are exploiting the farmers. They are selling hybrid seeds to the farmers. Due to which our agriculture was on the verge of annihilation. Navdanya told us what to do and made us aware of it. We now are making everyone aware of the benefits of organic farming. By getting involved and associated with Navdanya women are empowered, in openly putting forth their views on organic farming, biodiversity, conservation of seeds, etc in front of everyone.'

Katgi Devi, told 'After having enough of Mandua and Jhangora for our families, we sell it. The middle men pay us Rs 30 per kg and sell it at Rs 40-60. But Navdanya gives us 10-12% more than the market. That's why it's in our interest that we sell it to Navdanya. We also store our grains at our end and in case of need we also share it with each other. Besides that we also gift our traditional grains (Mandua, Jhangora, Paddy, Wheat, Kauni etc.) to the bride's family of our village, instead of any dowry.'

Jasoda Devi asserted, 'Together with MAS group of ours we got all the country mad liquor points in the village, closed. After getting drunk the men used to beat their wives, and also create problems in the marriages in the village. The men would sell the grains and jewellery of women to purchase the liquor bottle. Women got together and stopped all this. And today all the men respect the women. The women are happy too, that the action they took against their spouse's liquor consumption bore fruits. After becoming the members of MAS, the women are openly moving out, fearlessly and airing their views. Fifteen to 20 years ago women were scared of men and would never assert. But now this discrimination between women and men has started declining. Every man, is working together with women, shoulder to shoulder. Child Marriage has been eliminated. Girls are getting good education. And also their marriages are happening with their consent.'

When I asked if they ask their sons to also support them in their work, fetching wood or whatever. The women did say that their sons get no preferential treatment at home. And they too equally contribute. The elderly women were also asked how they treat their daughters-in-law, and responded by saying that they fully support them in their work and treat them like their daughters.

Earlier, only men participated in any meeting in the village, but now even women are part of it. Whether women are sarpanch or any ward member they only do all the work and not their men folk, as is the practice in many other places in India. The women are not dependent on men.

Nowadays 50% seats are for women as pradhan and the women are doing well. We asked Kushal ji, the Pradhan of the village how does he find women in Panchayats. He said, "I've 7 women ward members and they are better than men. Men used to ask for liquor in the evenings to close the meetings. But the women used the entire budget for the welfare of the whole village. And they seek no favours for it."

Asked about caste discriminations, they denied having any. And that women from all

communities are part of the MAS. And caste matters not.

On Migration

We were informed that 10% men have gone to cities for work / education.

From my conversation with Rukmini of Navdanya

1. MAS (Mahila Anna Swaraj) training: Each group has two trainings each month for two days, and the 4 days training in Navdanya Farm, in Dehradun.
2. The training is done by the coordinators in each village.
3. This programme is running in 25 villages of Tehri Garhwal.
4. There are 25 MAS groups. And in each group there are 20 women.
5. 50 leaders have emerged from these groups.

PS: Field Meetings section was provided to be in Hindi by Bhuvaneshwari (Bhavna). It was an excellent reporting. I have translated that in English. Some more details added after seeking, and getting more information from Rukmini.

Navdanya team is requested to add to any gaps that might emerge from this reporting. Need to add that it's indeed inspiring to see such a fine work happening with so much optimism, great teamwork, clarity, dynamism and exemplary leadership, at all levels. Seeing is believing.

2. MAHARASHTRA

The programme began with lighting of the lamp following by introduction of the programme. Savita Raut (Sanjeevani MAS, Sarfali Village) introduced the different delegates. After that Preeti Virkar introduced the purpose of the programme. She said that the programme was for the revival and celebration of our climate resilient crops such as millets and our local desi cotton varieties. She pointed out that the United Nations have declared year 2022-2023 as the year of millets. Millets are medicinal, and rich in nutrients and can withstand climatic extremes of drought. We need to revive our indigenous methods of agriculture that supports growing millets and local desi cotton varieties, These local crops have been displaced and destroyed by the Bt cotton crops that industries forced farmers to grow. Thus, we lost our local seeds biodiversity, food biodiversity and became vulnerable to climate change.

Further, Dr. Mira Shiva spoke to the farmers how Green Revolution and genetic engineering brought chronic diseases and ill health conditions to the people in India. She recalled how our ancestors and elders had tried and tested methods to improve our nutrition through biodiversity in our food. She pointed out how monocultures have caused fortification of food and production of lab based food is being promoted which are causing diseases that cannot be cured such as cancers, heart diseases etc.

Later Mr. Pawan Mishra (Ladegaon village) pointed out how changing climate is affecting farming and how organic farming is the only sustainable solution to withstand the situation.

Indrayani Mahila Anna Swaraj (MAS) member Swati Shende, from Kotamba sang about the MAS formed by Navdanya and later concluded with a song on millets and their nutritional value as well as climate resilient characteristics. And also about how her MAS group works together to not only grow their own food crops, but also revive the local millet varieties.

This was followed by the distribution of certificate of appreciation to the organic desi cotton farmers of Navdanya in Vidarbha region. Farmers Vinay Chowdhary (Talegaon (Dashasar) village) shared his experience of how he began farming organic desi cotton and today he is a successful farmer who does new experiments for organic cotton as well as takes a decent profit from his desi cotton production. Later Mr. Ramesh Sakarkar (Bhilli village) organic farmer and seed saver spoke about their experiences growing desi cotton varieties locally. And mentioned "as we have family doctors, we now have family farmers. We supply organically grown vegetables to 25 families, for Rs. 2000/- pm." Concluding that "it's a gain for all."

Vidya Bhubde of Astha MAS, Asegaon Village, spoke about her experience of organic farming with the MAS women in her Gardens of Hope (GoH). She insisted "people save their own seeds and produce nutritious food and feed their children. MAS gave the women an identity since although women work hard in the fields they are not recognised for their work and the money goes to the male farmers. But MAS recognised their efforts and women too started to save their money through growing and selling vegetables, processing foods such as papads and chips etc. I thank Navdanya for the training in food processing and also guiding us in producing own organic compost."

The programme concluded with Induji interacting with the MAS women with specific questions.

ROBUST Voices of MAS

"MAS recognised the efforts of women in the farms. We were ignored until now and our efforts were taken for granted. But today, we have a collective voice through the MAS and are heard from local to global levels." – Vidya Bhubde (of Astha MAS, Asegaon Village), farmer and MAS member

Sushma Bawangale, farmer and MAS member (Village: Jalgaon, Member of Saraswati MAS) shared, "We had forgotten our festivals and how it was linked to different kinds of food. But now we are confident that we can teach the people about sustainable farming." "Our children eat the vegetables they grow in their own Gardens of Hope in the mid-day meal programme."

Questions:

1. Did the biodiversity increase in Gardens of Hope? Can you tell how the diversity was increased?

Vidya Bhubde noted, "Yes biodiversity increased in our Gardens of Hope. We had planted very few food plants previously. We started to grow numerous different vegetables such as lufa, pumpkin, ivy gourd, fruit plants and trees etc. We also increased the biodiversity of the soil microbes. Our group has provided these vegetables from the Gardens of Hope to many families during the Covid 19 lockdown.

2. Do you exchange seeds?

Sushma Bawangale added, "Yes we exchange seeds. That is the reason that our seed biodiversity has increased. We exchange seeds that others require and we also ask for seeds we need. These seeds are nutritious, require less water and are disease free. The vegetables do not get spoiled until 7-8 days."

3. Have you sold your vegetables and fruits?

Haseena Pathan (Giroli MAS Member) answered, "We used to sell our vegetables in the village itself. I do not have space for growing Gardens of Hope. I am an Asha worker. We grew vegetables in our small spaces where ever soil is available. We do not sell a lot of our produce. It is given to others based on genuine love and compassion to fellow community members."

4. If you exchanged produce with fellow neighbours. Do you think your money has been saved instead?

"Yes it has been a great learning experience. We exchange and produce seeds. This helps us save our money," confirmed Swati Shende (of Indrayani MAS, Kotamba Village).

5. Do you think Navdanya has helped in reviving festivals and their celebration after you joined MAS?

"Yes it has helped. We were celebrating festivals without understanding the essences of it. Festivals are important and MAS helped me understand the true meaning of these festivals.

We began celebrating the festivals with a deeper meaning. These are essential since we are able to adjust to the changing weather, regional changes etc" asserted Leena Vijay Thakre (of Chaitrapawali MAS, Barad Village)

6. How did MAS give you advantages?

"We were trained in different techniques and didn't need any external inputs."

What was emphasised by all was that due to Navdanya, "We have gained a lot. We support each other. We grow. We share. We don't sell in the market. Earlier we bought seeds at 3% interest from the market, but now we save money by saving the seeds and sharing with each other."

“Last year due to untimely torrential rains and the floods, the production of grains was less for us. But it still did suffice for the entire year. Yet we didn’t buy the seeds, fertilisers from the market and lose our saving. In a way, we got more than what we invested. For market was kept out for seeds and fertilisers.”

“Our Gardens of Hope, gave us lots of fruits and vegetables during the times and phases of COVID. We didn’t have to go to market to buy any of those. Rather we had plenty to share with everyone.”

3. ODISHA AND WEST BENGAL

The visit to Balasore for witnessing the Navdanya Odisha programme, was indeed a great learning about the work that has unfolded there. The event was organised at the Seed Bank, in Chandipur, in Balasore, Odisha, where 1072 varieties of rice are kept in the earthen pots, on the first floor of the seed bank building.

Dr. Ashok Kumar Panigrahi, the Regional Coordinator of Navdanya Odisha, who came in touch with Navdanya since 1996, is a store house of information on organic farming, biodiversity, soil types, drought resistant and flood resistant rice varieties, besides creating the seed bank from 2000, though the seed keepers, the community. The work started after the Super Cyclone on 29th Oct., 1999. Dr. Vandana Shiva came to assist the impacted communities. And since then the work of seed saving, sharing started. From 2002, rice seeds from Odisha were shared for other regions too. Over the last 20 years, 150 varieties of rice seeds were sent to Dehradun of which 50 did not germinate.

The book by Dr Ashok Kumar Panigrahi (Katiji) and Ms. Kusum Misra Panigrahi, “**Biodiversity, Agroecology And Indigenous Knowledge in Odisha**”, which he gifted to me on my arrival is indeed a store house of philosophy, research and its finding on the comparative analysis between the chemical and organic farming practices, and social action for change undertaken by Navdanya. The message by the Chief Minister of Odisha, Shri Naveen Patnaik is key to this book. He notes, “Odisha is the origin of traditional knowledge that has revolutionised the entire socio-economic portrait of the world. It is believed that the tribals of Koraput in Odisha has first used a wild crop as food which was later known as rice...the book endeavours to prove that organic farming is not only an ecological solution, it is also economically viable. It is also in sync with our social and cultural values...Published by Navdanya, ... the book offers a viable alternative that is supported by factual research data. I am sure the book will encourage the contemporary farmers to go for this option of ethical farming” (p vii).

Dr. Vandana Shiva, in this book observes “The Navdanya community seed banks have created and rescued 870 rice varieties from the brink of extinction. The rice diversity has helped many farmers break free of chemical addiction. The salt tolerant rices have helped farmers in rejuvenation of agriculture in Odisha after the 1999 super cyclone and in Tamil Nadu after the Indian Ocean tsunami of 2004” (p. ix). Dr. Shiva, amplifies, “Biodiversity based agroecology increases productivity, soil fertility, and soil health. It contributes to climate resilience in two ways. Firstly, the climate resilient crops bred by farmers help in dealing with droughts, floods, and cyclones. Secondly, soils rich in Organic matter are also more climate resilient because they enhance the water holding capacity of soil ... For thousands of years farmers, especially women, have evolved and bred seed – freely in partnership with each other and with the nature, to further increase the diversity of that which nature has given us and adapt it to the needs of different cultures. Biodiversity and cultural diversity have mutually shaped one another over time. Along coastal areas, farmers have evolved flood tolerant and salt tolerant varieties of rice – such as ‘Bhundi’, ‘Kalambank’, ‘Lunabakada’, ‘Sankarchin’, ‘Nalidhulia’, ‘Ravana’, ‘Seula-puni’, and ‘Dhosarakhuda’. After the 1999 Orissa Super Cyclone Navdanya could distribute 2 trucks of salt tolerant rice to farmers because we had conserved them as commons in our community seed bank run by Kusum Misra and Dr. Ashok Panigrahi in Balasore, Orissa.

Every seed is an embodiment of millennia of nature’s evolution and centuries of farmers breeding. It is the distilled expression of the intelligence of farming communities. Farmers have bred seeds of diversity,

resilience, taste, nutrition, health, and adaption to local agro-ecosystems... During the last half century agriculture and food systems lost their way, in the darkness and fog created by myths and propaganda created by the corporations that made chemical for the war, that poisons and synthetic chemicals are necessary to feed the world. For the industry it was a matter of extending their sources of profits long after the war was over. For the planet and people, the costs have been very high. 75% of the earth's biodiversity, soils, water, has been destroyed, the climate has been destabilized, farmers have been uprooted, and instead of nourishing us, industrial food has become the biggest case of disease and ill health ... Organic farming is the alternative that gets rid of poisons and pests. On our recent Soil Pilgrimage we saw fields of desi (native) organic cotton totally pest free." (p. ix - xiii).

The perspectives of Navdanya, stated above, has indeed percolated to the levels to the farmers, mainly the women, and each of the MAS members (at all the locations I went to, in Uttarkhand, Maharashtra, West Bengal and Odisha) shared the gains of following organic farming, seed saving, seed sharing, Gardens of Hope (GoH). All who spoke were clear about its benefits, and far reaching salutary impacts. Vishnupriya Mandal, from Chandipur stated, "Chemical farming destroys crops. Earlier, we had no idea about this and the gainful impact of organic farming. And that there were flood resistant and drought resistant grains which would help us cope with the natural disasters. After Navdanya told us of it, we started using organic forms of cultivation and due to that our production increased, biodiversity increased, soil didn't degrade, health improved, knowledge about the kitchen gardens / the Gardens of Hope (GoH) gains increased, self reliance of ours got stronger, and we shared our produce with others too, haemoglobin increased through consuming leafy vegetables, learnt about Iron in Mandya and thus we took to cultivating vegetables, millets and grains.

During COVID times we didn't buy the vegetables from outside and we also shared it with our neighbours. We were not afraid of it. The vegetables we grew in our GoH were tasty, lasted longer. We also sold some of these vegetables in the market, as well and used our earning for our children's education."

Amita Rani Panda, Sashyashamala MAS, noted, "Our GoH (Kitchen Gardens) are organic, than laced with chemicals. We have been saving seeds. 14-15 vegetable seeds are there with us. There are ours. We also sell them and earn some money. Due to the GoH our family running has become smooth. We save lots of money as we don't buy vegetables from the market. We also share our produce with our neighbours / MAS members, and sell too. "

Saraswati Samal, of Saraswati MAS, shared that "Due to the GoH we had a surfeit of fruits and vegetables. When floods came grains like Champa, Parvati didn't get destroyed. What we grew, we also shared and sold some too. Despite our land being close to the sea, floods didn't impact the crops we had as Champa sustained despite that. The field staff of Navdanya had taught us of these crops, like Dhulia, Bagada, which was not impacted."

Pratibha Mishra, from Ma Kitchenswari MAS, Kohrakul village described, "that before the GoH, our children ate food stuff produced through chemical farming. Due to that they used to often get ill and had to be taken to the doctors. But now being introduced by Navdanya to organic and biodiversity rich farming techniques, health has improved for all, use of the produce for the family and sharing it too has increased. Saving on income has got enhanced, life style has undergone great change, the well-being of the entire community has taken place. We sell flood resilient variety of paddy."

Ahilya Mohanti, from Ma Kitchenswari MAS, Kohrakul village narrated, "about the gains of the flood resilient paddy variety as opposed to the HYV variety. The Desi dhan (native paddy) stays in flood and the yield in organic farming is more gainful than the harmful chemical farming. I've been selling the seeds; potato chips, rice savouries, which is loved by the kids too. Organic farming produce is not bitter, but rather good in taste and quality, and causes no illness."

Sumati Dhinda, from Ma Dwarsuni MAS, Dollysur village, emphatically asserted that “Sine we took to organic farming, pest control has been natural, our production has increased, our GoH has allowed us to cultivate beans , lady finger (Bhindi) and many other vegetables round the year. Organic food is tasty, and long lasting. And we have been able to sell the seeds too.”

Sanjulata Bhuiya, from Sinduragaura MAS, Kaliapuda village, reiterated what others had said and added, “Due to rituparivartan (Climate Change), rains in excess and floods, devastated our crops. But we were able to withstand it, due to our resilient seeds. We still got the crops, despite it. Six to seven varieties of paddy we sowed, saved its seeds, and exchanged it with others. The native varieties are better, with no ill- effects and tasty too.”

She further added “We had lost the knowledge about our native bio-diverse organic agricultural practices. But Navdanya taught us all that we had lost, that organic is the best way to go about farming and the chemical fertilisers are fraught with illness and disease, for the child, old and everyone. Due to this organic farming practice, production of grains and vegetables increased, climate resilient seeds were saved and exchanged, our consuming our own grains and vegetables increased , our incomes increased. Also we noticed that through our GoH, our vegetables could stay for a week, compared to vegetables purchased from the market. We now use different varieties of rice for Lakshmi Puja, for preparing kheer (sweet dish with rice), rice flakes, rice rotis (bread) and so on. We surely are better-off, now than what we were in earlier years.”

Shankuntala Jena, Sindhuragaura MAS, Kalaipuda village, shared “Training that we got from Navdanya helped us a lot in understanding about biodiversity and organic farming. We exchanged seeds, our production of grains increased. We saw that the Desi Dhan (native paddy) had no pest attack. Parvati dhan was used for making sweet savouries (like kheer). We gained a lot by 17-18 varieties of vegetables which we cultivated in our GoH. Consumption of fast food has declined, in our families and our villages.”

On the question that how have the men in their families been impacted, due to all this changes in agriculture practices, Shakuntala added “Their running errands to the market has reduced and they are happy due to that. Women have money too, to purchase what’s required by them. Children get healthy and tasty, food to eat, so men are happy due to all this.”

Savita Kar, from Ma Van Durga MAS, Sinjiri village shared “As chemical farming led to lots of pest attacks and had serious negative impacts, and due to our training by Navdanya, we started to use vermi-compost, go-mutra (cow urine), and gobar (cow dung), and our yields increased. Due to that we had lots of paddy variety , no pest attacks, pesticide use declined, we interacted with other groups, we exchanged our vegetables seed varieties, neighbours stared asking us as what do we put that the vegetables are so tasty. We started using the spray made of neem oil and that worked very well. Nothing we purchased from market. Hence our money got saved. We also saw that those who used HYV (High Yielding Variety) seeds, their crops got destroyed due to floods. While, 95 % of our desi dhan’s (native paddy) yield got saved. And also the yield was much higher than the HYV seeds.”

Tuni Sing, a tribal widow MAS member from Kuanlahati village shared how earlier due to the use of HYV paddy her yield could stave- off from hunger, for only 10 months. For the next two months she had to purchase the grains from the market. But ever since she took to organic farming , the yield took care of the family for 12 months. The book by Dr Ashok Kumar Panigrahi (Katiji) and Ms. Kusum Misra Panigrahi, Biodiversity, Agroecology And Indigenous Knowledge in Odisha (Published through Navdanya in 2017, on page 64) shares the story of Tuni Sing thus, “A half literate widow served for several years in the Central Rice Research Institute at Cuttack and learnt the basics of chemical agriculture, returned to her native village to undertake farming of her own in an one acre patch of land owned by her late husband. Using the knowledge of farming learnt at CRRRI, she cultivated HYV rice Swarna in that one acre of land. After a few years of cultivation, the yield from the rice land diminished and she became unable to generate the required volume the staple

food to support her family of four including a child. She was compelled to purchase rice for two months in 2014.

She received the seeds of a native rice, Agnijhal from us under Navdanya's 'Seed of Hope', and distributed in her area to Phailin and Hudhud impacted farmers in 2015. She modified her cultivation method from chemical to organic that she learnt from Navdanya's field staff. She avoided using purchased inputs and instead generated internal on-farm inputs in cultivation of native rice variety. Her rice harvest in the first year of organic cultivation was nearly 20 quintals as against 16 quintals under chemical, over sufficient for her to meet the rice needs of the family. She had surplus rice for two months.

The important aspects she reported back were – the enhanced taste of organic rice and the minimised pest appearance. She has since been a profound preacher of organic farming in her area. Other farmers take notice of her words since she once worked for considerable period with the agricultural scientists in Cuttack.”

Tuni Sing also told that “HYV seeds are expensive and also its pesticides, whereas neem spray we used to tackle any pests, has no costs, compost is used by us, the 14-15 vegetable seeds that we have, we save and share it with others. We are confident about our seeds that we own, which belongs to us. We don't purchase market seeds as they are not resilient and also laced and suffused with chemicals.”

Junu Sing, from Moranguru MAS, Lenkashaahi village, Mayurbhanj shared, 'GoH has been a boon to us. Also the problem with the HYV variety of seeds were that if it rained, the crop which was ready in the field for the harvest, would immediately germinate, whereas with the native seeds it would never be so. The native seeds only germinate when its season comes for it.'

Kusum Misra Panigrahi told that they cultivate the 1072 varieties of paddy, which is there in their seed bank, in the villages, for it to be productive. Everywhere, I saw good teamwork in action.

The linking of organic farming with food festivals and the local culture is an amazing way to make it memorable and effective. Navdanya has been using it to the hilt, and it also helps in promoting nutritious food and vegetables to be consumed, by one and all, especially children and women. In their book on page 154-55, Dr. Ashok Kumar Panigrahi (Katiji) and Ms. Kusum Misra Panigrahi mention 22 festivals in Odisha and its specific food / delicacy eaten and shared with others too, at that point. It has truly enabled forgotten foods to be incorporated in the nutrition and healthy food paradigm of communities, Navdanya is active with.

In Balasore, there are 12 MAS (one in each village) with 147 members, of which, 120 members have been trained in Dehradun. In the last year floods, 10 villages got impacted. But due to flood resilient and salt resilient seeds, they were able to retrieve and cultivate and make better of the lost crops, up to 60%. That's the reason for the farmers resolute commitment to follow organic farming, which ensures least damage, maximum gain, holistic advantage, towards healing the nature, culture, health, and the environment at large.

West Bengal

We had a spectacular meeting of over 375 people (children, women and men), of which 330 were women, where the native foods were being prepared, an exhibition was also placed. There was one in which the consequence of chemical farming was shown, leading to Cancer Hospital. There were seeds displayed of millets and other crops.

The following MAS (Mahila Anna Swaraj) members came up and shared how their work on strengthening biodiversity through Batika - Gardens of Hope (GoH), Vermi-compost, seed saving and seed exchanging, using organic farming practices has helped them during the COVID time. It enabled them to sustain themselves during floods and also buttress their income levels. Sense of optimism and celebration, wafted throughout the meeting.



Kuhali Prodhan

Member: **Maa Basanti MAS Group**, Village – Kalaberia, PO. Charabarh, Purba Midnapur.

“I am in touch with Navdanya, from last 3 year. Before that I was doing chemical farming. Our family has a lot of agriculture land. After knowing about organic farming, I started to prepare vermi-compost & compost manure. Now I fully cultivate in organic way. I have one good fruit and vegetable Garden (GoH) also. With this compost I get more fruits in my garden. I believe only through this organic way of farming, we can save our family. I am against fast food.”



Tanushree Das Pahari

Member: **Maa Urmila MAS**, Village Kajlagarh, Purba Midnapur.

“Last three years I am in Navdanya as a farmer. I am learning lot of things from here. Especially in farming. I have a small kitchen garden (GoH) in front of my house. I can grow all types of vegetable, the organic way. I can fulfil my family needs. Through this I can earn money. I always try to save our child from consuming fast food. In this three years that I have been with Navdanya, through the MAS, I came to know about the harmful side of fast food. It is our duty to keep our kids away from fast food. Thanks to Navdanya that we have been able to do all this.

She also added that she learnt about organic farming from her father. And her coordinator also taught her about it.”



Sumita Rout

Member: **Srijan Sheel MAS**, Village: Garniya, Bhagwan pur 2 block, Purba Midnapur.

Last to year I came to know about Navdanya organization . I took Training from Navdanya. I realised that food is related with our health. If we eat fresh and organic food, we can have a good health. If our body is fit and mind is fresh, so we can earn more. I changed my mind to cultivate using the organic process, after coming in

touch with Navdanya. Organic farming saves our life and our money. I believe that women can change whole agriculture system. We need more training from Navdanya on how to save seed. Seeds can give us more income.



Yosada Maity

Member: **Annayapura MAS**, Vill: Boram, Block: Chindipur, Purba Midnapur.

“I am an organic farmer since last 4 years. I took training from Navdanya and made organic Batika (GoH) on my own land. Now I can produce my own vegetable. It is very simple and cost is low. Chemical farming pollutes our land, water and environment. Chemicals also affect our health, and mind. I am a good trainer and I am trying to give training to the other villagers. During Covid time we produced all vegetables in our garden. We saved our family through this garden. We collected seeds, saved seeds and thus saved money. This was possible due to the Navdanya training that we underwent. Covid 19 is infective in town, but not so big a problem in village.”



Kabita Das

Member: Mahamaya Nari Kalyan MAS, Vill: Gopinath Pur, Chandipur Block, Purba Midnapur.

“Last 4 years I am working with Navdanya. Before that I did chemical farming. I knew nothing about ORGANIC FARMING. It was difficult for me to believe that it is possible to cultivate the organic way. Then I took training from Navdanya. Now I am a organic farmer. I have one compost pit and vermi-compost pit. Through this I cultivate my batika (GoH). I also give training to other groups as a trainer. Due to organic farming, soil and life gets enriched and illnesses disappear. We have seen it happen in our lives and life time. I spread this message always about why we need to do organic farming and stay away from chemicals, in all its forms. ”



Susmita jana

Members: **Bhu Swaraj MAS**, Village: Bhagwan pur, Purba Midnapur

"I know Navdanya since last 4 years. They gave me training on organic farming . I am trying to avoid purchase from the market, through my batika (GoH). I can produce all seasonal vegetables. My family members are safe, and there is no big health problem in my family. I came to know from Navdanya that fast food is very much harmful for our kids health. So I am not given any fast food to my kids. I also save seed from my garden. I sell seed in the market and share it with other MAS Members too. To save our mother earth (Mitti Ma) we need to give up chemical farming. We all need to take a pledge that we will only do organic farming."



Khuku Rani Mandal

Member: **Santoshi MAS**, village: Paschim Abasberia, Bhagwnpur , Purba Midnapur.

"I have a small batika (GoH). I never use any chemical , pesticides in my garden. I came to know from Navdanya about organic farming . Organic farming saved my money and our health. Now I sell my vegetables in local school for mid-day meal. From there I earn for my family. I also came to know about fast food & company food. It's harmful for our health. So we avoid this food. I also save seed for my future cultivation. We share seed with each other too. This is our native culture. We follow it."



Mamata Maity

Member: **Seva MAS**, Village: Abasberia, Maity Para, Purba Midnapur

"Last five years I have been with Navdanya. I took training from this organisation about organic farming . I converted my batika (GoH) from chemical to organic farming. Now I produce all vegetables in my garden . Covid time I supplied vegetables to the other group members and schools, as well. That time there was no market, or any supply from other part of state. Only we women produced all food in our gardens . Our food is full of protein, fresh, and organic. However, village people were not affected more by Covid than town people . Our garden saved us. We save seed, and also earn from the market. Our income increased through this organic farming."



Kabita Kamakar

Member: **Mahamaya Nari Kalyan MAS**, Vill: Gopinath , Chandipur Block , Purba Midnapur.

"I am a master trainer in organic farming. For five years I've been in touch with Navdanya organization. I totally converted my garden in organic. I have a vermiculture unit where I produce vermi compost and sell it to the market. I earn money from here. Vermi-compost fetches me Rs. 10 per kg. It has a demand in market. Last year I collected 8 kg of poi saag (a vegetable) seed. It gave me lot of money. I am happy with this farming. My suggestion is that everybody should understand the value of organic farming and change from chemical to organic. Who told farming is a loss making venture? I can prove organic farming is profitable. Our duty is to give more training to the farmers. We need to spread information about organic farming, far and wide."

Many more spoke on the pros of organic farming. Kuheli Maity shared "I grow guava's organically. Organic farming is very profitable and we also get more produce."

Sandhya Das, firmly stated that "Organic farming, made me and my family healthy. We saved seeds and will use it for next year."

Jharna Midha, noted "Children's health suffered due to fast food. Hospital admissions were due to chemical farming as it led to many illnesses, pain in hands etc. But as we took to organic farming our body is fine, family is fine. Seeing us others too are getting aware and our relatives too are joining us."

Krishna Das a retired teacher in his 70s spoke of "four mothers in each of our lives who take care of us and they are our teachers for life: 1. Our own mother, 2. Bado Ma (Elder Mother), Earth (Mati), 3. Our Teachers and 4. Our Nature (Prakriti). If we follow their teachings no harm will come to us, our community, our earth and our cosmos."

Another teacher, Vandana told that "by joining Navdanya we have saved ourselves and our generations. We have to live together. The mothers need to discourage their children from eating fast food, for it destroys a child's future."

Pranab da, a Panchayat Block Leader stated, "We need to take organic farming as a social movement. Tell everyone that fast food is poison. And this message can be propagated, to all the nooks and corners of the country."