



**Building Women's Leadership and Fostering Collaborations for  
Community Disaster Resilience:  
*Process Innovations and Case Studies from India***

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## Glossary

Acronym	Meaning
Amrut Jal	Amrut Water
Amrut Mithi	Fertile Nursery Soil
CPP	Community Practitioners Platform
CCA	Climate Change Adaptation
CDRF	Community Disaster Resilience Fund
CRF	Community Resilience Fund
DDMA	District Disaster Management Authority
DRDA	District Rural Development Agency
GPSVS	Ghoghardiha Prakhand Swarajya Vikas Sangh
IAY	Indira Awas Yojana
KSA	Kanchan Seva Ashram
KVK	Krishi Vigyan Kendra
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
PHC	Primary Health Centre
PRI	Panchayati Raj Institution
SHG	Self Help Group
SSP	Swayam Shikshan Prayog
NRHM	National Rural Health Mission
MSSRF	M.S. Swaminathan Research Foundation
INCOIS	Indian National Centre for Ocean Information Services
Zilla Parishad	District level local body
Gunte	1089 sq. ft
Khatta	3638 sq. ft
Gram Sabha	Village assembly
Sarpanch	Elected President of the local self government
Mukhya	Elected President of the local self government
Taluka	Administrative division under District
Zilla	District

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# EXECUTIVE SUMMARY

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## Setting the Context

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In 2010, the project - *Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience* - was launched by the Global Facility for Disaster Reduction and Recovery (GFDRR), the World Bank and leading civil society groups of South Asia and Central America. The project sought to equip women from resource-poor communities to shape community disaster resilience agendas and practices on the ground. The project was implemented in the most hazardous regions of India, Guatemala, Honduras and Nicaragua, over a three-year time frame.

The specific aim of the project was to build safe and disaster resilient communities by developing resilient local women leaders. By the end of the three-year project time frame, it was envisioned that participating community women would be equipped with the knowledge, resources, networks and confidence to:

- Mobilize communities to shape and implement innovative and 'ground-up' disaster resilience practices;
- Foster enduring relationships with local government institutions to build local and state mandates for community disaster resilience;
- Set up and lead local community coalitions to generate awareness and demand for community resilience practices;
- Bring their own voice and that of their communities into decision-making for disaster resilience and development planning.

From 2010-2013, the project rolled out in 4 countries of South Asia and Central America, in geographies that are most impacted by recurrent disasters. The projects on the ground were adapted to local contexts and implemented by leading civil society organizations (CSOs) of the respective countries.

This report captures the innovations, good practices and impact of the project that unfolded in India. Through detailed case studies and programmatic analysis, the author has sought to document the project insights, operational processes, challenges and the path moving forward towards mainstreaming community disaster resilience practices into long-term development planning for high-risk, disaster-prone regions.

## The India Implementation Partners

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Swayam Shikshan Prayog (SSP) served as the principal partner and key implementor of the project in India. Over three years, it collaborated with last mile communities of three states - Bihar, Maharashtra and Tamil Nadu - to build knowledge, processes and partnerships for nurturing grassroots women-led initiatives for building community disaster resilience.

SSP was tasked with the objectives of:

- Training and scaling networks of grassroots women's groups that developed, implemented and championed community resilience building in their local eco-systems;
- Facilitating partnerships between grassroots women's groups and district governments to promote and integrate community disaster resilience in local development planning;
- Enhancing the knowledge base of good community-women-led resilience practices and scaling them through multi-stakeholder platforms;
- Creating advocacy initiatives to ensure that regional/national disaster management entities endorse and integrate local community resilience practices into local development plans.

To expand the coverage of the project to multi-hazard geographies, SSP identified Bihar, Maharashtra and Tamil Nadu as its main project sites. It forged partnerships with three credible Civil Society Organizations (CSOs) in these states to solidify the last mile connect, and ensure on-going facilitation and support for its community-based women leaders.

SSP's partners in this process were:

- **Sakhi Federations** in Maharashtra and Tamil Nadu;
- **Kanchan Seva Ashram (KSA)** and **Ghoghardiha Prakhand Swarajya Vikas Sangh (GPSVS)** in Bihar.

### Project Coverage

Over a period of three years (2010-2013), SSP and its local partners worked with 250 Self Help Groups (SHGs), spread across 70 villages that are upended by recurrent floods, droughts and cyclones. **The strategy of catalyzing SHGs was adopted to leverage the channels of trust forged between SHG members and the social networks that they go on to create at the village level.** These networks, in turn, provided the structure for setting up long-term community-based coalitions for local disaster resilience.

## The Project's Theory of Change

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SSP relied on a two-pronged theory of change to shape this project:

- **Resilient women leaders build resilient communities and;**
- **Resilient communities trigger pro-active state action for disaster resilience.**

Together, the two principles transformed disadvantaged women into active citizens who first promoted disaster resilience within their immediate communities, and then sought to integrate it into development schemes and plans of their local governments.

### Resilient women build resilient communities

In its two decades of work with survivors of earthquakes, floods, droughts and the Asian Tsunami, SSP has recognized that local communities that live in hazardous regions are *inherently* disaster resilient. The women of these communities invariably self-organize and marshal their non-existing resources to create concrete stories of change and impact. Over time, and undeterred by the lack of support from state institutions, women steadily evolve local innovations and revive traditional wisdom to set up their own micro, disaster resilience practices. These practices however, get washed away by the force of large, infrastructure-driven disaster mitigation approaches of the state.

To ensure that grassroots women continue to build on their indigenous practice and succeed as champions of community disaster resilience, SSP bolstered their knowledge, financial and social capital during the tenure of this project - i.e:

- *Knowledge capital: or basic technical training and handholding in new world skills of disaster risk reduction, disaster response, recovery and long-term resilience;*
- *Financial capital: or access to modest financial resources that can enable the actual piloting of their community resilience ideas;*
- *Social capital- or recognition from local and state governments as real partners in taking community-based disaster resilience forward.*

### Resilient communities trigger pro-active state action

Further, for SSP, the efforts of women champions of community disaster resilience would come undone, if meaningful and long-term partnerships were not forged between them and the local, district or state governments.

These collaborations would be necessary to fulfill a few critical objectives.

- First, partnerships would compell local government bodies to listen to, and align with, the ideas of women champions of community disaster resilience. This would in turn, forge inclusive local schemes and programs for disaster resilience in vulnerable geographies.
- In the context of resource scarcity, partnerships with local women champions would also unlock general entitlement schemes such as MNREGA, Rajiv Awas Yojana, the Pull-Pulliya Yojana etc, for building the disaster resilience quotient of local communities.

- Finally, partnerships would lead to a formal acknowledgement of the public roles of grassroots women's groups in resilience programs as information managers and conduits of communication between communities and authorities.

## The Innovations and Outputs of the Project

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### Project Innovations

SSP and its local partners operationalized the project through multiple program and process innovations. Every innovation was crafted in partnership with the community women themselves. These innovations included:

- Re-imagining concepts of community disaster resilience from a gender lens - *through trainings and dialogue*;
- Putting women in charge of mapping disaster risks and vulnerabilities - *through structured and collaborative disaster risk mapping exercises with all local stakeholders*;
- Creating the country's first Community Resilience Fund (CRF) - *through the creation of administrative systems that transformed local women into grant makers who disbursed funds to peer groups*;
- Shaping learning journeys for women from multi-hazard zones to cross-pollinate insights and brainstorm on common challenges- *through technical trainings and peer learning networks*;
- Launching women-led task forces (the first in the country) that trained larger communities on community resilience training - *through rigorous trainings documented in a detailed manual*;
- Facilitating connections between women resilience champions and local government bodies to create a policy shift.

### Project Output

Over a three-year period, the project yielded significant outputs. These included:

- The training and organization of 1500 women community resilience leaders across 70 villages;
- The development of 70 village-level disaster resilience plans, post the conduct of village risk and vulnerability mapping exercises;
- The active implementation of 50 community-driven models of disaster resilience, funded by the Community Resilience Fund (CRF) and;
- The creation of 20 village-level disaster task forces, driven by 100 women.
- Training linkages between state technical institutes and professional training organizations that ensured that more than 750 rural women, grasped sophisticated techniques on sustainable agriculture, nutrition, sanitation and primary healthcare.

Importantly, SSP, in cohort with its partners and community women leaders, introduced two innovations in the field of disaster management and mitigation that are lean and replicable across different hazardous contexts- i.e. the Community Resilience Fund (CRF) and women-led, local disaster task forces.

**Community Resilience Funds:** CRF was a community owned, community managed and community monitored grant that was available to women's groups to implement ideas for building community disaster resilience.

A first in the country, the grant was available to women through the SHG federations that SSP and its partners allied with. The goal of CRF was to improve, sustain and protect the existing assets and resource bases of vulnerable communities and help them in acquiring new assets for diversifying their livelihood and income generation options. The engagement of the women and the oversight of

the federation and the village community at large ensured that the funds were replenished through prompt repayment of loans and redeployed to meet other emerging community needs<sup>1</sup>.

Over three years, the CRF grants, amounting to USD 50,909, launched 50 community models of disaster resilience. Because the funds were modest, women negotiated, matched and leveraged resources of upto INR 12 crores from other government and public schemes and programs. This experience with fund management gave community women the fillip to participate in the preparation of budgets at the Panchayat level and monitor development programmes by their governments closely.

**Women-led disaster task forces:** 20 villages of Bihar and Tamil Nadu set up their own customized, trained and ever-alert disaster preparedness task forces that function around the year. The task forces went on to train more than 900 other community women in aspects such as search and rescue, first-aid and disaster warning and monitoring signals.

## The Outcomes of the Project

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### Project Outcomes

The full continuum of project activities - organizing, training, peer networking, linkage building and access to the CRF - led to progressive shifts in the villages that were covered by the project. These shifts can be assessed on three key indicators that determine a community's disaster resilience index - i.e.:

- The economic or livelihood indicator -or issues of income generation, livelihood diversification, and ensuring food security for households prone to adverse impacts of disasters and climate change;
- The social indicator - or the positive shifts in the quality of lives, empowered political inclusion, leadership skills and access to knowledge, information and technology for grassroots women who live in disaster-prone regions and;
- The natural resources Indicator - or the conservation, preservation and regeneration of resources and strengthening of community capacities for addressing water, food and energy scarcities, as well as for improving the productivity of their resources, especially land<sup>2</sup>.

The section below illustrates the specific outcomes achieved by women resilience leaders in relation to the three indicators mentioned above:

### The Economic/ Livelihoods Indicator:

Across the three states that were covered by the project, concentrated efforts were made by women leaders to reduce migration by promoting sustainable forms of low-input based agriculture. At the community level, women began organising into groups to begin collective organic farming by leasing land and sharing manual labour. Specifically,

- 400 women organized to do collective farming, across the three states, where the profits were shared. The profit per woman ranged from Rs. 6000-8000 per annum.
- Vermi-composting units provided an additional income of Rs. 2000 per annum for 100 households.
- Alternate sources of livelihood like mushroom cultivation, handicrafts making, etc resulted in increased monthly earnings of about RS. 1500 per woman for 100 women in all 3 states.

Recognizing the interdependence between steadfast infrastructure and economic progress, women resilience leaders unlocked public funds to the tune of Rs. 1.8 crores in Bihar, Rs. 12 crores in Maharashtra and Rs. 39 lakhs in Tamil Nadu for infrastructure and other development related projects in the villages.

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<sup>1</sup> CRF Indicators, Vinod Menon, pgs 2 and 4.

<sup>2</sup> CRF Indicators, Vinod Menon, pgs 2 and 4.



### ***In the Domain of Infrastructure Development:***

- 1600 roads and bridges were constructed at the behest of SSP's community resilience leaders in Bihar and Tamil Nadu, while 1700 toilets and sewage systems were constructed or upgraded.
- 1300 homes in communities were built in Bihar and Maharashtra that were resistant to floods and earthquakes.
- More than 195 schools in Bihar were upgraded and their heights raised to prevent further damage from recurring floods.

### **The Social Indicator:**

1500 women were trained, organized and placed on the frontlines of local disaster management and mitigation processes. In the process, they sculpted new roles for themselves as local disaster resilience leaders. Their knowledge and social capital witnessed a sharp and disproportionate growth. Specifically:

- 400 women were trained in multi-dimensional aspects of sustainable agriculture.
- 900 women received specialized training in disaster-preparedness.
- As sharp communicators and negotiators, women resilience leaders received public acknowledgement for their roles as information officers and conduits between communities and the government.

### **The Natural Resources Indicator:**

- In drought-prone areas, 1300 women converted into ardent promoters of diverse agricultural practices and an additional 500 women took to organic farming in their small landholdings and revived local and traditional seed treatment methods.
- 1650 kitchen gardens were set up women leaders in Tamil Nadu and Maharashtra to supplement food security at the family level.
- 550 seedbanks and 350 grain banks were set up in Bihar and Maharashtra by community leaders to bolster the food security of their villages during and immediately after the occurrence of a disaster.
- Recognizing the direct connection between disasters, climate change and depleting green cover, 6500 trees were planted across 70 villages by 650 women who participated in the SSP project.
- 200 degraded or dying water bodies were revived by women's groups.

## **The Impact of the Project**

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The project, in a short three-year period, built new paradigms and triggered behaviour change for local women resilience leaders. Village eco-systems also awakened to a new way of reclaiming their lives with confidence and dignity, post the occurrence of disasters. They understood that reducing the impact of disasters can be well within their locus of control. As a farmer in Maharashtra commented, "A disaster can take away from us our physical, material and natural assets, but not our voice and dignity." Significant qualitative impact was however, not witnessed among stakeholders in local government systems, because heralding systemic change is long-term business.

We decode the qualitative impact achieved by the project below:

### **Introducing new perspectives on disaster management and mitigation**

Over a three-year period, the project led by SSP demonstrated that community women leaders, with informed solutions for building disaster resilience, can trigger progressive shifts in the economic, social and natural resource landscapes of their villages; that they can generate the demand for, and accountability towards, community disaster resilience.

By forging partnerships between women and local government bodies, SSP also showcased that disaster response, management and mitigation can truly be made inclusive; that the ideas and perspectives of multiple stakeholders can be included across the stream of disaster management –

from upstream, where decisionmakers sit, to downstream, where communities directly experience the impact of a disaster.

### Changing the terms of engagement between women and local government

Women's engagement and negotiations with their immediate communities and local governments, created an interactional shift among all stakeholders of the local ecosystem- from hapless and dependent women, they were now viewed as informed public leaders, seeking accountability from administrative officials. The participation of women grassroots practitioners in policy dialogues gave the project a significant fillip for scaling and replication to other parts of the country too.

### Unlocking public grants and government schemes for community disaster resilience

The increase in local partnerships between organised grassroots groups and local governments at the district and block levels unlocked resources from at least ten government development schemes for fortifying community resilience efforts. These general entitlement schemes, not specifically allotted to the local disaster agendas and disaster management offices of districts, nevertheless sure-fired the efforts of the women champions trained by SSP. For example, resources from MNREGA led to the construction and repairs of 100 farm ponds, 300 wells and 100 recharging pits in drought-stricken areas of Maharashtra, securing a measure of water-sufficiency in the drought-hit villages.

This process deepened the community confidence for seeking entitlements responsibly, from the state. It also gave local government official a new lens with which to understand community disaster resilience, and link it to their larger development mandates.

### Nurturing mobility and self-belief among women

The domino effect of the project was visible in the increase in social capital and confidence of women who participated in the project. Several community resilience champions had been previously constricted by the 'purdah', and the community embargo on their mobility outside of their villages. Previous to the project, none had engaged them in conversations on reclaiming their lives and their villages, despite their lives being upended by disasters. Government officials treated them as invisible entities. Women had not given themselves the self-permission to rise and take action.

But post their trainings from SSP, women from village communities, let little time pass before shedding customs of the purdah and unlocking their own potential to be change agents. An overwhelming majority of those interviewed for this report, said their families and communities publicly acknowledged them as drivers of change in their immediate environments.

## Replicability and Recommendations

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The combination of government and media recognition, presentation to national government authorities and the existing and on-going efforts of SSP and other partners, has well positioned the project to move to its second curve. By harnessing the experiences and expertise of local disaster resilience champions that have been nurtured, this project should move to other vulnerable states such as Uttarakhand, Kashmir, Assam and the North-East, that are often out of the purview of active development agendas.

# SECTION ONE-

## About the Project

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The Objectives, Approach, Strategic Framework, Innovations, Outcomes and Milestones of the Project



# 1. INTRODUCTION

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**Building Disaster Resilient Communities by  
Building Resilient Women Leaders**

## About the Project

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In 2010, a partnership between the **Global Facility for Disaster Reduction and Recovery (GFDRR)**, the **World Bank** and leading civil society groups launched the project ***Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience***. Implemented in the most resource-constrained, hazardous zones of India, its main purpose was to equip resource-poor communities living in regions prone to natural calamities to shape community resilience agendas and practice on the ground.

**The specific aim of the project was to create safe and disaster-resilient communities by building resilient community women.** Organizing groups envisioned that, by the end of the three-year project timeframe, participating women would be equipped with the knowledge, resources, networks and confidence to:

- Mobilize communities to evolve and adopt innovative local disaster-resilient practices;
- Foster enduring relationships with local government institutions to build local state mandates for community disaster resilience;
- Lead local community coalitions that would work year-round to build community resilience and unleash local sustainable development practices;
- Bring their own voices and those of their communities into decision-making for disaster resilience and development planning.

From 2010-2013, the project rolled out in the four countries of South Asia and Central America that are most impacted by recurrent disasters: India, Guatemala, Honduras and Nicaragua. The projects on the ground were adapted to local contexts and implemented by leading civil society organizations (CSOs) of the respective countries.

## Developing Women's Leadership toward Building Disaster Resilience Communities in India

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Swayam Shikshan Prayog (SSP) served as the principal partner and key project implementor in India. Over three years, it collaborated with last mile communities of three states - Bihar, Maharashtra and Tamil Nadu - to build knowledge, processes and partnership mechanisms for nurturing grassroots women-led initiatives to build community disaster resilience. SSP was tasked with the objectives of:

- Training and scaling networks of organized grassroots women's groups working for community resilience building;
- Facilitating partnerships between organized grassroots women's groups and local and district governments to integrate and promote community disaster resilience in local development planning;
- Enhancing the knowledge base of good community-women-led resilience practices and scaling them through multi-stakeholder platforms;
- Creating advocacy initiatives to ensure that regional/national disaster management entities endorse and integrate local community resilience practices into local development plans.

## About Swayam Shikshan Prayog (SSP)

Over the last 20 years, SSP has demonstrated local community-based disaster resilience practices among vulnerable communities that are likely to be impacted by disasters and climate change threats. Working in seven disaster-prone states across India, SSP has mobilized over 80,000 vulnerable women and their households in this endeavor.

Taking lessons from disaster reconstruction after the Maharashtra Latur earthquake (1993), SSP has gained substantial post-disaster recovery and resilience-building experience, including redesigning state beneficiary programs into community driven efforts, while linking them to poverty reduction and local governance of the respective states.

SSP has organized self help groups (SHGs) as the basic building blocks for long term planning, implementation, and monitoring activities bridging the relief-recovery phases and subsequent government/local council led development initiatives.

## Global Initiatives of SSP

Globally, SSP and its grassroots networks are part of leading Huairou Commission and Groots International's campaign work on community resilience through the Community Practitioner Platform CPP in resilience building for disaster risk reduction and climate resilience.

## Disaster Watch

SSP with the Huairou Commission facilitates Disaster Watch [www.disasterwatch.net](http://www.disasterwatch.net) - a platform for organizations, professionals to focus on pro poor, grassroots led practices and learning in resilience building.

## Forging Local Partnerships

To expand the coverage of the Women's Leadership in Resilience Building Project to multi-hazard geographies, SSP identified Bihar, Maharashtra and Tamil Nadu as its main project sites. It forged partnerships with three credible CSOs in these states to solidify the last mile connect, facilitation and support for its community-based women leaders.

SSP's partners in this process were:

- **Sakhi Federations** in Maharashtra and Tamil Nadu;
- **Kanchan Seva Ashram (KSA)** and **Ghoghardiha Prakhand Swarajya Vikas Sangh (GPSVS)** in Bihar.

These local partnerships enabled SSP to:

- Leverage existing networks of trust and relationships between the local CSOs and women's groups organized by them;
- Optimize partners' intimate understanding of local culture, local disaster mitigation challenges and the politics on the ground;
- Deepen the credibility and relationships built between partner CSOs and local government bodies and then push community disaster resilience training into development agendas.

## ABOUT SSP's Local Partners

**Sakhi Federations** were initiated by SSP in 2001 to address the developmental needs of rural women and their families living in disaster-prone areas. These federations are managed by women leaders who assess the risk, screen loans, disburse credit and collect repayments. The Sakhi Federations help in initiating dialogue channels with officials to forge alliances. They are ideal mediation and facilitation bodies for further grassroots groups in villages. Presence of these strong women federations at the grassroots, especially in Maharashtra and Tamil Nadu, have helped build acceptance of the introduction of new practices in agriculture.

**Kanchan Seva Ashram** is an NGO based in Muzaffarpur that works with ultra-poor communities, especially women, in five districts of Bihar since 1994. KSA largely focuses on addressing the education and health needs of the underprivileged. A showcase of their work is the long term resilience plan they helped develop and implement in the Darbhanga district of Bihar, an area that faces flood-related problems every year.

**Ghoghardiha Prakhanda Swarajya Vikas Sangh** has over 35 years of experience of working in sustainable community development across four districts in Bihar. The initial focus of the organisation was on the re-organisation and mobilization of Gramsabhas and Mahila Mandals with representation of every section of the society. Over the years, GPSVS has become a key agent of social change in several districts of Bihar, helping villages evolve from relief mode after a disaster like the Kosi floods into a more long-term and sustainable approach towards disaster resilience. They were the local partners for SSP in Supaul district, Bihar.

## Project Coverage

Over a period of three years (2010-2013), SSP and its local partners worked with 250 SHGs, spread across 70 villages that are susceptible to recurrent floods, droughts, cyclones and tsunamis. The strategy of catalyzing SHGs was adopted to leverage the channels of trust forged between SHG women members and optimize the social and organizational networks that they had gone on to create at the village level. These networks in turn provided the structure that was necessary for setting up long-term community-based coalitions for community resilience.

SSP defined the criteria for the selection of the women's group as:

- Presence and experience in dealing with disaster response for more than five years;
- Strong presence of SHGs and women leaders;
- Experience and leadership of SHGs in managing finance and accessing resources from financial institutions;
- Prevalence of active women's groups and Gram Panchayat (local governing body);
- Experience and demonstrated community leadership in implementing government schemes in partnership with local leadership<sup>3</sup>

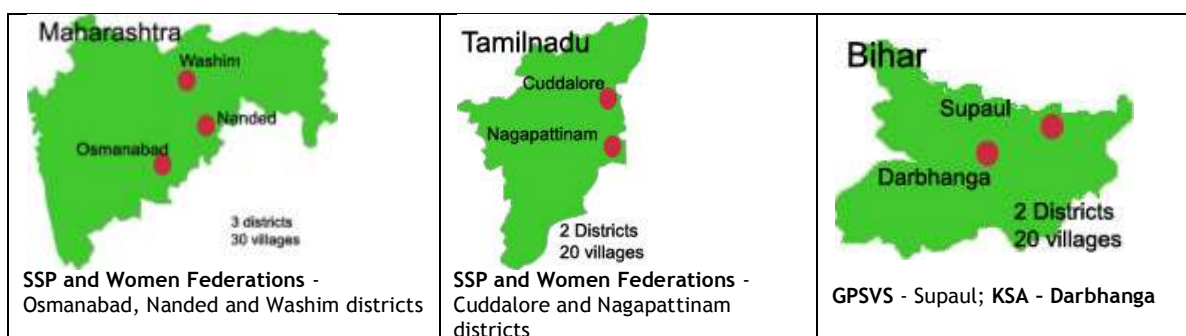


Figure 1: The Geographical Span of the Project

<sup>3</sup> Facilitating Women's Leadership and Forging Partnerships to Drive the Demand for Local Implementation of HFA: India Report, By Swayam Shikshan Prayog: June 2013

## Project Approach

SSP shaped this project on two key principles:

- Resilient women build resilient communities and;
- Resilient communities trigger proactive state action for disaster resilience.

Together, the two principles unleashed active citizenship among the most disadvantaged women to first promote community disaster resilience and then embed it into long-term sustainable development schemes and plans of their local governments.

## SSP's Core Beliefs in Building Disaster Resilient Communities

SSP understands 'resilience' as the capacity of a community to organize itself to reduce the impacts of disasters and climate change by protecting lives, livelihoods, homes and other assets, basic services and infrastructure. It includes a community's capacities to advance development processes, social networks and institutional partnerships that strengthen its ability to anticipate, cope with, resist and recover from disaster.<sup>4</sup>

In its 20-year journey of working with survivors of earthquakes, drought, floods and the Asian Tsunami, SSP recognized that, while the poor are greatly affected by disasters, those located at the intersections of poverty, gender and other forms of marginalization are the hardest hit. The case of unskilled Dalit women from ultra-poor fishing communities who lived in *kuccha* houses in last-mile panchayats of Bihar is an example. Among all population segments impacted by the devastating Kosi floods of 2008, this demographic had the least access to external resources to pre-empt and re-build their lives, both before and after those floods and ones that recurred in the subsequent years.

More debilitating than the lack of basic services is the mindset with which such communities were, and continue to be, viewed by policymakers - i.e. as hapless victims. This stereotype relegates the 'last mile', particularly women, to being invisibilized from disaster and development-related decision making processes.

SSP's field research and experience of two decades has sharply contradicted the 'victim' stereotype of communities living in disaster-prone areas. On the contrary, they have revealed that grassroots communities demonstrate the will and ingenious capacity for proactive response and action, both at the time of the disaster and post its occurrence too; that the poorest are always the first to act and rebuild not just their lives but also their communities in the aftermath of a disaster.

## Resilient Women Build Resilient Communities

SSP believes that local communities in hazardous regions are *inherently* disaster resilient. More often than not, it is the women of these communities who self-organize and marshal their non-existing resources to create concrete stories of change and impact. Undeterred by the lack of support from state institutions, they steadily evolve local innovations and revive traditional wisdom to build their own micro disaster resilience practices. These practices, however, get washed away by the force of large, infrastructure-driven disaster mitigation approaches of the state.

For grassroots women to continue to build on their indigenous practice and succeed as champions of community disaster resilience, it is critical that their capital quotient be bolstered - i.e:

- *Knowledge capital*: or basic technical training and handholding in new world skills of disaster mitigation, disaster risk reduction, disaster response, recovery and long-term resilience;
- *Financial capital*: or access to modest financial resources that can enable the actual piloting of their ideas of community disaster resilience;
- *Social capital*- or recognition from local and state government as real partners in taking community-based disaster resilience forward.

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<sup>4</sup> What Communities Want: Putting Community Resilience Priorities On The Agenda For 2015: Huairou Commission, 2013; Pg 55



Every innovation designed by SSP in the project focused on developing this triangulated capital quotient among women leaders of the identified project areas.

### Resilient Communities Trigger Proactive State Action

For SSP, the efforts of women champions of community disaster resilience would come undone if meaningful, long-term partnerships were not forged between them and the district or state governments.

These collaborations were necessary to fulfill a few critical objectives:

- First, partnerships would compell local government bodies to recognize and align with the ideas of women champions of community disaster resilience. This would in turn forge inclusive local schemes and programs for disaster resilience in geographies that are most likely to be impacted by disasters and climate change.
- In the context of resource scarcity, partnerships with local women champions would also unlock general entitlement schemes such as MNREGA, Rajiv Awas Yojana, the Pull-Pulliya Yojana etc, for building the disaster resilience quotient of local communities.
- Finally, partnerships would formalize the public roles of grassroots women's groups in resilience programs as information managers and conduits of communication between communities and authorities.

Therefore, by focusing on women and building partnerships between them and local government bodies, SSP demonstrated that disaster response and mitigation can truly be made inclusive; that it is possible to integrate the perspectives, ideas and actions of multiple stakeholders across the stream of disaster mitigation decision-making – from upstream, where decisionmakers sit, to downstream, where communities directly experience the impact of a disaster.

## Unleashing Community Innovations in Community Disaster Resilience

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This report captures the innovations, good practices and impact of community-led disaster resilience efforts that unfolded, over the three-year project period, in Maharashtra, Tamil Nadu and Bihar under SSP's leadership.

Through programmatic analysis and detailed case studies, the author has sought to identify the key insights, operational processes, challenges and the path moving forward, to mainstreaming community-led disaster resilience as a strategy, not just for disaster mitigation, but for the overall sustainable development of disaster-prone regions of India.

### Report Methodology

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This research study was carried out in two distinct phases - the first phase focused on backroom secondary research and the second was that of primary research. Primary research was qualitative in nature. It comprised:

- In-depth interviews with SSP's senior management, which ranged from two-four hours each.
- In-depth interviews with the heads of the local partner organizations in Bihar, which ranged from one-two hours each.
- Eight Focus Group Discussions (FGDs) with members of women's groups across Bihar, Maharashtra and Tamil Nadu - Conducted over two-four hours, these discussions centered on the many nuances of women's experiences in building disaster-resilient communities. An average of eight to ten women participated in each FGD.
- Key informant interviews with five to six individual women changemakers who were part of SSP's project.

While a standard questionnaire was created, it was tweaked to adapt to state variations.



## 2. THE ROAD TO DISASTER RESILIENCE

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New Ideas, Achievements and Challenges in Building Disaster Resilient Communities

## The Strategic Innovations Framework

According to SSP, building community disaster resilience entails addressing three critical factors:

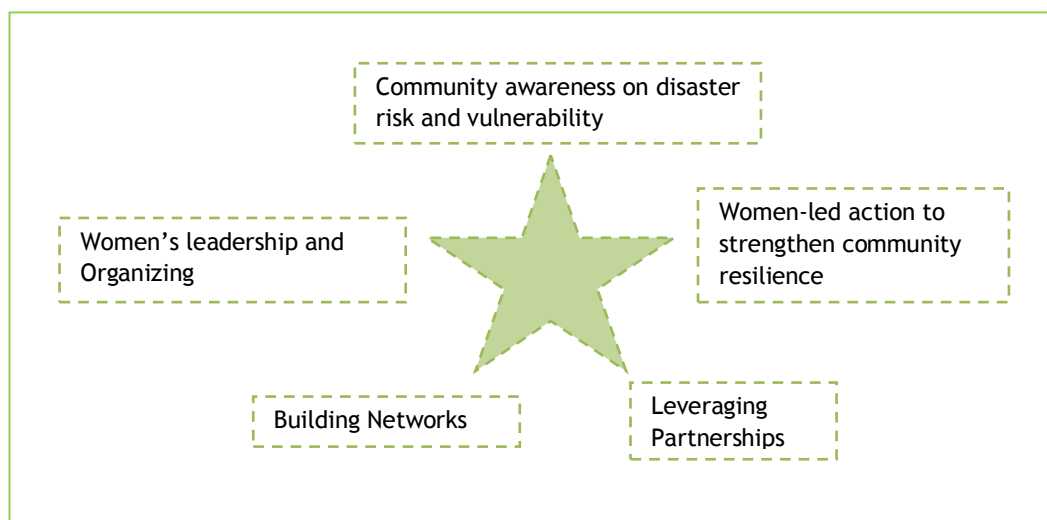
- The economic factor - or issues of income generation, livelihood diversification, and ensuring food security for households prone to adverse impacts of disasters and climate change;
- The social factor - or the positive shifts in the quality of lives, empowered political inclusion, leadership skills and access to knowledge, information and technology for grassroots women who live in disaster-prone regions and;
- The natural resources factors - or the conservation, preservation and regeneration of resources and strengthening of community capacities for addressing water, food and energy scarcities, as well as for improving the productivity of their resources, especially land<sup>5</sup>.

SSP addressed this trinity of factors by putting women in charge. It shaped the project, *Building Women Leaders for Community Disaster Resilience*, on five key strategies, each of which put women on the frontlines. The strategies were:

1. Building community awareness on disaster risk and vulnerability;
2. Unleashing women-led action to strengthen community resilience;
3. Leveraging partnerships to strengthen women's voice as resilience champions;
4. Building networks to create cross-sectoral partnerships between women and other players and;
5. Organizing and forging women's leadership for disaster resilience and long-term sustainable development planning.

These five strategies were inter-related and interdependent. They came together to form SSP's Star model for building local disaster resilience in vulnerable communities.

Figure 1: SSP's Five-Star Strategy for Building Disaster Resilience



## Operationalizing the Innovations

SSP and its local partners operationalized its Star strategy framework (stated above) through multiple program and process innovations. Every innovation was crafted in partnership with the community women themselves. These innovations included:

- A. Re-imagining concepts of community disaster resilience from a gender lens;
- B. Putting women in charge of mapping disaster risk and vulnerability;
- C. Creating the country's first Community Resilience Fund (CRF) and developing the administrative structures to enable local women to disburse funds to peer groups;

<sup>5</sup> CRF Indicators, Vinod Menon, pgs 2 and 4.

- D. Shaping learning journeys for women from multi-hazard zones to cross-pollinate insights across regions and brainstorm on common challenges;
- E. Launching women-led task forces (the first in the country) that trained larger communities on community disaster resilience;
- F. Facilitating connections between women resilience champions and local government bodies to create a policy shift.

The table below matches SSP's Five-Star strategies with its program innovations:

**Table 1: SSP's Five-Star Strategy Co-related with Program Innovations**

Strategies	Program Innovations
Building community awareness on disaster risk and vulnerability.	<ul style="list-style-type: none"> <li>- Re-imagining concepts of community disaster resilience from a gender lens.</li> </ul>
Unleashing women-led action to strengthen community resilience.	<ul style="list-style-type: none"> <li>- Putting women in charge of mapping disaster risk and vulnerability.</li> <li>- Creating the country's first Community Resilience Fund (CRF) and developing the administrative structures to enable local women to disburse funds to peer groups.</li> </ul>
Leveraging partnerships to strengthen women's voice as resilience champions.	<ul style="list-style-type: none"> <li>- Facilitating connections between women resilience champions and local government bodies to create a policy shift.</li> </ul>
Building networks to create cross-sectoral partnerships between women and other players.	<ul style="list-style-type: none"> <li>- Shaping learning journeys among women from multi-hazard zones to cross-pollinate insights and brainstorm on common challenges.</li> <li>- Building linkages between women leaders and local technical training institutes to hone the technical and conceptual acumen of the former in implementing disaster resilience programs.</li> </ul>
Organizing and forging women's leadership for disaster resilience and long-term sustainable development planning.	<ul style="list-style-type: none"> <li>- Launching women-led task forces (the first in the country) that trained larger communities on community disaster resilience.</li> </ul>

We present below the details of the program innovations sculpted by SSP and the outcomes that were achieved by the project.

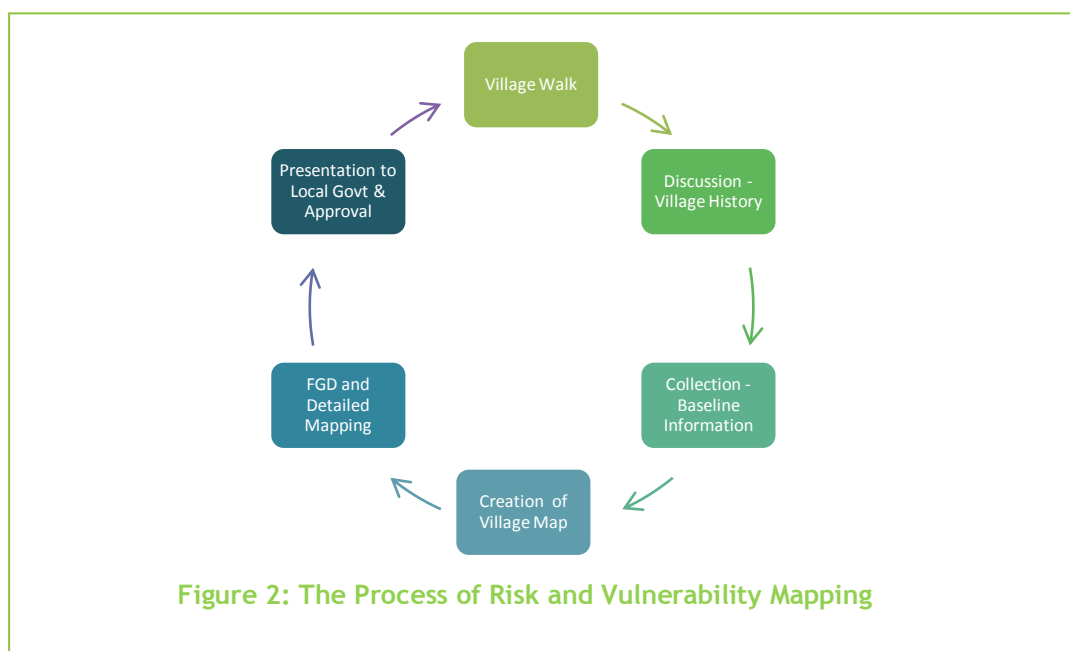
### **A. Re-imagining Concepts of Community Disaster Resilience From a Gender Lens**

SSP kicked off the project by organizing awareness campaigns and orientation sessions with local women leaders and federations from grassroots communities. The purpose was to catalyze these groups to organize for collective action to build long-term disaster resilience in their areas. These sessions developed the conceptual understanding of women on resilience initiatives towards climate change adaptation and disaster risk reduction. It foregrounded and co-related the everyday economic, social and natural resource management challenges that women face in their communities with their vulnerabilities to natural hazards and climate change

### **B. Putting Women in Charge of Mapping Disaster Risk and Vulnerability**

Women were organized and trained to identify their communities' resilience priorities. Following the training, they conducted vulnerability and hazard mapping exercises as the foundational step towards initiating disaster resilience activities. The activity served as an active platform for women to fully understand and analyze local the root causes that aggravate their local disaster and climate change risks and vulnerabilities. The drill of mapping priorities honed women sharply in on areas of collaboration with local governments and elected bodies. To trigger awareness, consensus and ownership over the exercise by all stakeholders of the local system, the risk and vulnerability

mapping exercises were attended by a cross-section of the community - women members, elders, youth, PRI members and local government representatives.



The process of vulnerability mapping began with a recce of the village and a discussion of the history of the village. After baseline information was collected, the women’s groups etched an accurate village map where local resources and resource providers were appropriately located. The map was then put up for focused group discussions to mutually develop a framework of vulnerabilities and risks. These vulnerabilities were then prioritized through a series of local consultations, which yielded in a detailed village map of disaster and climate change vulnerabilities.

The exercise did not end with mapping. The process also unpacked ideas and responses of mitigating the risks. Simple, practical solutions from various community members were stitched into comprehensive disaster resilience plans. These were then presented before local government bodies to solicit their support towards the operationalization of the plans. Equipped with the tools and processes of mapping, women went on to periodically review the progress of the implementation of their local resilience plans.

In many ways, then, vulnerability mapping exercises went way beyond their mandate of building village-level disaster resilience plans: they created a new public role for women as resilience planners and information providers.

More than 70 village risk mapping exercises were rolled out and vulnerabilities were identified in key domains such as:

- Agriculture
- Infrastructure
- Water and Sanitation
- Health
- Livelihoods
- Disaster Preparedness

The table below provides readers with a snapshot of the risks that were identified along with their aggravating factors.

**Table 2: Mapping Risks: Activities Implemented**

Risks/Vulnerabilities	Aggravating Factors
<p><b>Agriculture &amp; Malnutrition</b></p> <ul style="list-style-type: none"> <li>• Destruction of crops due to drought, flood, irregular rain patterns</li> <li>• Food and Fodder scarcity</li> </ul>	<ul style="list-style-type: none"> <li>• Unexpected weather conditions, promotion of cash crops, poor quality of soil</li> <li>• High investments in chemical fertilizers</li> <li>• Lack of water for irrigation and drinking</li> </ul>
<p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>• Vulnerable habitats, drainage, roads, bridges</li> </ul>	<ul style="list-style-type: none"> <li>• Absence of drainage facilities</li> </ul>
<p><b>Water, Health and Nutrition</b></p> <ul style="list-style-type: none"> <li>• Water contamination and waterborne diseases</li> <li>• Malnutrition</li> </ul>	<ul style="list-style-type: none"> <li>• Dysfunctional primary health centres, lack of awareness on sanitation and hygiene</li> <li>• Lack of vehicles and ambulance services, absence of sanitation facilities (drainage, sewage)</li> <li>• Prevalence of open defecation and lack of toilets</li> <li>• Poor maintenance of drinking water sources and storage systems</li> <li>• Inadequate nutritious foods for children and pregnant women</li> </ul>
<p><b>Livelihoods</b></p> <ul style="list-style-type: none"> <li>• Loss of income and livelihoods caused by floods</li> </ul>	<ul style="list-style-type: none"> <li>• Over emphasis on cash crops</li> <li>• Lack of food crops</li> <li>• No alternative livelihood options for women and migrants</li> </ul>
<p><b>Disaster preparedness</b></p>	<ul style="list-style-type: none"> <li>• Lack of awareness on early warning and reduction of loss, neglect by local government</li> </ul>

### C. Creating the Country's First Community Resilience Fund (CRF)

SSP in collaboration with local partners and women resilience champions pioneered the Community Resilience Fund - a community owned, community managed and community monitored grant that was available to women's group to implement ideas for building community disaster resilience. A first in the country, the grant was provided to women by the SHG federations that were allied with SSP and its partners. The goal of CRF was to improve, sustain and protect the existing asset and resource base of vulnerable communities and help them in acquiring new assets for diversifying their livelihood and income generation options. The engagement of the women and the oversight of the federation, and the village community at large, ensured that the funds were replenished through prompt loan repayment and redeployed to meet other emerging community needs<sup>6</sup>.

The CRF grants, which were distributed at the district and taluka level, were used to demonstrate simple yet significant ideas for fostering local disaster resilience. Because the funds were modest, they catalyzed women to negotiate, match and leverage resources from other government schemes and programs. While risk mapping had given them an up-close understanding of their vulnerabilities, CRF provided them an opportunity to operationalize concrete solutions for strengthening the economic, social and natural resources capacities of their eco-systems and reduce the impact of disasters on their lives.

SSP partnered with women's federations to audit community plans and the transfer of funds and to monitor their activities. Fund management was new for women participants. Therefore, the following guidelines were stipulated to ensure transparent and efficient money management:

- Federations were set up as legal entities with the capacity to receive and manage funds;
- Women's groups were trained in proposal writing to access the funds for community resilience initiatives;
- Mobile teams were set up with federation leaders who travelled to project sites to monitor the utilization of funds;

<sup>6</sup> CRF Indicators, Vinod Menon, pgs 2 and 4.

- A timeline of monthly meetings of Executive Committees from each federation was finalized to share experiences, brainstorm on challenges and to distil learnings from CRF.

This experience with fund management motivated women to participate in the preparation of budgets at the Panchayat level and to also monitor development programs by the governments more closely.

A total sum of USD 50,909 transferred to women’s groups went into the implementation of model innovative practices in 50 villages.

**Table 3: Disbursal of Community Resilience Fund**

States	Federations Funded	Amount (INR)	In US Dollars
<b>Maharashtra</b>	Women Federation, Tuljapur	7,00,000	12727
	Women Federation, Washim	4,00,000	7273
	Women Federation, Nanded	4,00,000	7273
<b>Tamil Nadu</b>	Women Federation, Cuddalore	3,00,000	5455
	Women Federation, Nagpattinam	4,00,000	7273
<b>Bihar</b>	Women Federation, Darbhanga	3,00,000	5455
	Women Federation, Supaul	3,00,000	5455
	<b>Total</b>	<b>28,00,000</b>	<b>50909</b>

With the successful implementation of the initiative, federations are now receiving sizeable social and economic returns on the disbursed amounts and are able to further reach out to newly formed SHGs to boost their innovations.

### Using CRF to Create Model Practices

Community-based projects undertaken with the support of CRF were broadly in the domains of sustainable agriculture, natural resource management and building local disaster-proof infrastructure. We present below brief vignettes of the range of disaster resilience projects that were funded by CRF:

#### In the Realm of Sustainable Agriculture

- **Organic Farming:** In Maharashtra, women leaders converted more than 200 hectares into organic farm land using CRF.
 

*“ Use of organic methods has led to better productivity and utilization of less water due to new varieties of crops that sustain in less water” - Anita Kulkarni, Woman Leader from Maharashtra*
- **Agricultural Improvements:** In Bihar, 196 women purposed INR 1.65 lakhs towards agricultural improvements, while equally contributing with their own land and manual labour.

#### **Success Stories: Inter-Crop Farming in Maharashtra**

After her exposure visits, training and mapping exercises, **Mangaltai**, a woman leader from Maharashtra, took INR 10,000 from CRF to start her own vegetable garden. She convinced her husband to replace expensive raw materials procured from the local shop with manure and seeds that she had stored from the previous harvest. Mangaltai had her farm’s soil tested and, to improve the fertility of the soil, she cultivated green vegetables on seven Guntha (0.17 acre) of land. With an additional investment of INR 2000 from her personal savings, Mangaltai successfully harvested a good crop. She earned an impressive profit of INR16000 in just over four months. Her initiative prompted many other village women to explore setting up their own vegetable gardens - a small, but significant step in building community-level food security and strengthening income bases.

- **Vermi-Compost Production in Tamil Nadu:** The Women's Federation in Community Development & Disaster Management in Tamil Nadu, in partnership with the Centre for Indian Knowledge Systems (CIKS), organized an exposure visit for over 30 women to train them in innovative methods of organic farming, such as vermi-composting, organic cultivation, waste management and bio-composting. Subsequently, the SHG members in Nochikadu village approached the Women's Federation for the Community Resilience Fund for financial support to start vermi-composting. The local Federation provided INR 10,000 as their 50% contribution to the overall costs, while the remaining amount was pooled in by community. Today, the group produces up to 200 kgs of compost per week which, is sold at INR 4-6 per kg. They are now keen to also explore markets in Cuddalore and Pondicherry.
- **Collective Agriculture of Jute in Bihar:** The women's group in Jage Araji village in the Birpur district of Bihar identified jute cultivation for their CRF initiative. With a sum of INR 10,000 as seed money and training on jute cultivation from GPSVS (SSP's partner organization in Bihar), they began cultivation on 0.54 hectare of leased land, as their husbands refused to part with any land. They made a profit of INR 18,000 from just the first harvest of jute. Besides being a lucrative business, jute is also an all-weather and flood-resistant produce that has the unique quality that all parts of it can be used for multiple purposes. It is also a useful resource during floods - it prevents the flooding of fields, revitalizes soil health and can also be used as a food crop during emergencies
- **Kitchen Gardens for Local Food Security in Tamil Nadu:** Women's federations motivated SHG members to use a part of CRF allocations to cultivate their own vegetable gardens. Over 300 households of Nagapattinam and Cuddalore in Tamil Nadu now maintain organic kitchen gardens with over fifteen varieties of vegetables for their personal use and sale at the local market.

*“ Earlier we used to buy all our vegetables for household use from the market; now we save on all those expenses and use our locally grown vegetables.”* - Rajeswari, SHG member, Nachikadu, Tamil Nadu

#### In the Realm of Natural Resource Management

Grassroots communities across Maharashtra made use of a variety of government institutions and schemes to address water scarcity and poor agricultural productivity and initiated activities towards water conservation (construction and revival of wells), afforestation, etc.

*“ We have realized that if we are to protect our village environment, we would have to plant trees - during floods most of our fertile soil used to flow away. Now, over 25 women in our village planted 5 trees each - it already looks better!”* - Pramila Devi, Woman Leader, Bihar

#### In the Realm of Infrastructure Development

Women's federations and groups in all three states started educating their communities on the use of safe drinking water and sanitation and hygiene practices to reduce health risks. Women's groups in twenty villages of Maharashtra and four villages of Tamil Nadu built low-cost toilets with the help of government subsidies, CRF disbursements and by unlocking the resources available with their Gram Panchayats.

### **D. Shaping Learning Journeys for Women from Multi-Hazard Zones**

Even as women experienced actively, responsibly and successfully with CRF, SSP ensured that they were on a continuous learning curve. Formal and organic trainings and learning exchanges were organized for them through two routes:

- a) Training linkages with formal institutions and;
- b) Creation of peer learning networks

#### **Training Linkages**

SSP and its local partners facilitated technical training programs across all identified villages to enhance communities' technical expertise to deal with disasters and resource constraints. Women's



federations identified local resources and knowledge houses like the government-run Krishi Vigyan Kendras<sup>7</sup>, agriculture universities, NGOs, research centres and other government affiliated institutions to help impart training to women's groups.

Trainings were conducted after identifying the key themes on which women's groups needed skill building and fortification. The themes were as follows:

### Technical Trainings in Agriculture:

- **Soil and Water testing:** Krishi Vigyan Kendras trained 400 women members in the judicious use of fertilisers, especially those with organic components as well as in drip and sprinkler methods to conserve water usage for agriculture.
- **Traditional and Local Seed Preservation and Conservation:** Women were also taught by KVKs to preserve and using local seeds in villages of Bihar and Maharashtra. They were also encouraged to increase the variety of seeds in their inventory by initiating exchanges with other communities.
- **Inter/Mixed Cropping:** KVKs of Washim in Maharashtra and local agricultural universities were roped in to teach women about techniques to conserve water in drought prone and flood-afflicted regions of Bihar and Maharashtra
- **Vermi-composting:** Women from six villages of Tamil Nadu were trained to adopt vermi-composting as were communities in Maharashtra to produce compost from agricultural waste. SSP facilitated these trainings in coordination with block- and district-level government departments, KVKs and agricultural universities.
- **Organic Farming:** Collective organic farming on leased or personal land was a key part of the training imparted to most women's groups across all the three states where the SSP project was implemented. KVKs, partner NGOs in Bihar trained these groups to produce good produce of commercial value. There were also inter-village and inter-state exposure visits to help women create local solutions to their problems by adapting the knowledge garnered.

*“ Usually our centre gets enquiry for assistance from male farmers. To see women farmers through the Federation approach us for innovative learning on organic farming is a first and very impressive” - Dr. V.G. Takankhar, KVK Tuljapur*

Enthused by the participation from the communities and women's groups, government institutions also shared modern agricultural equipment, either free or at a subsidized cost.

### Technical Trainings in Diversified Livelihood:

SSP facilitated skill development workshops in organic farming, mushroom cultivation, handicraft making, candle making, coir making, kitchen garden cultivation and vermi-composting to diversify options available to women's groups for sustenance and livelihood generation.

### Peer Learning Networks

A key feature of SSP's approach to empowering women in community resilience strategies, peer learning exchanges were encouraged at every level – village, district, block or state. Peer learning networks also accelerated the scaling up of resilience initiatives across India. Apart from the peer trainings conducted at the village, district and block level two to three times a year, over the last three years, ten community leaders from Maharashtra, eight from Tamil Nadu and six from Bihar travelled to various states to train women's groups in other states.

To create live 'classrooms' of learning, 15-20 villages were identified across the project sites as model villages. Their purpose was to serve as laboratories for learning and replication of community resilience strategies (also refer to Section II of this report for more detailed write-ups on a few model villages). Model villages were selected on the following criteria:

- The intensity with which women's groups took ownership of the programs.
- Active participation of all stakeholders in decision making and agenda setting processes.

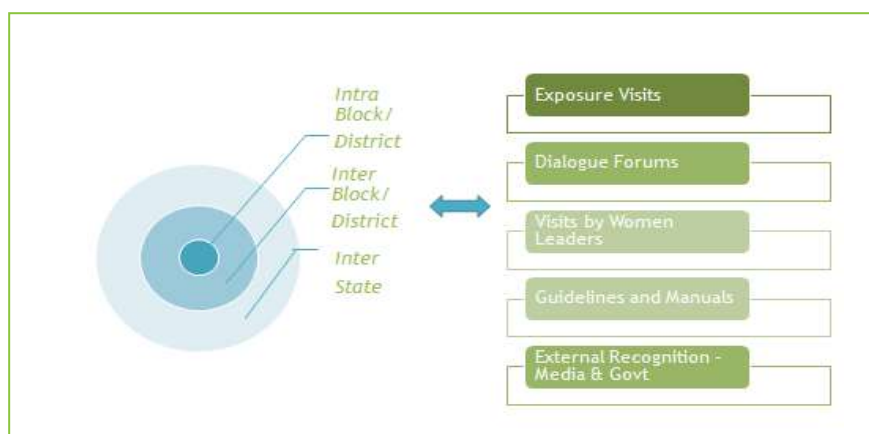
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<sup>7</sup> Government-run district level farm science centre

- Ability of the women members to drive changes and advances through innovative practices and liaisoning with government bodies and other stakeholders to secure development initiatives.

Selected women’s groups travelled to these model villages as part of peer learning networks. They would be accompanied by other local grassroots organizations working on similar issues. Women leaders from these model villages also often travelled out to communities to train them on building partnerships and addressing risks and development challenges to create safer communities.

**Figure 3: Levels and Methods of Peer Learning**



The two-way commerce of information and ‘how-tos’ created an environment of learning that was new to the women participants. Additionally, tools and guidelines developed by enterprising women’s groups complemented the organic transfer of knowledge with concrete documentation on disaster preparation, drought management and CRF management.

This culture of exchange and dialogue spurred several state and district level discussion forums. In May 2013, the Community Practitioners Platform (CPP)<sup>8</sup> was organized in Bihar, which was attended by 40+ women leaders from Bihar, Maharashtra and Tamil Nadu. Collectively they presented best practices for building community disaster resilience before the State Disaster Management Authorities, district level officials and representatives from over 14 regional NGOs. Such platforms have helped bridge the gap with government authorities and build their understanding and interest on the intent and initiatives of the program.

### **E. Launching Women-Led Disaster Task Forces that Trained Larger Communities on Building Disaster Resilience**

Women-led disaster task forces were conceived to move grassroots women and communities to take purposive action towards disaster resilience just before, during and immediately after a disaster. In immediate succession to the risk mapping exercises, women’s groups in most villages in Bihar and Tamil Nadu were mobilized to set up six committees that together constituted one local disaster task force. The committees included an early warning team, a rescue team, a management team, a medical Team, an information team and the relief distribution team. Each team consisted of four to five women members, along with a few men from the community who supported their efforts. Women voluntarily chose the teams they they wished to join and were held accountable to concrete team roles and responsibilities. Over twenty women-led disaster task forces were formed in Darbhanga and Supaul Districts of Bihar alone.

<sup>8</sup> Supported by Huairou Commission and Groots International

Quickly, women took full ownership of these committees and developed innovative systems and processes. We have shared a few examples of the working of the all women disaster task forces below:

- As part of the early warning team, a woman leader from Maulaganj Village (of Darbhanga District, Bihar) devised the strategy of tapping on her relatives, who live in an area that experiences floods before her region does, for information. This enabled her to send out accurate and timely warning messages to her village about the approaching floods.
- Members of the medical team held camps to urgently respond to rampant diseases like malaria and measles after the floods had abated. They also took on the responsibility of collaborating with the government health departments to organize health camps for pregnant women and children throughout the year.
- The rescue team would typically swing into action immediately after a flood or cyclone struck. In many villages, women were seen rescuing the elderly, pregnant women and children out of harm's way. Meanwhile, local relief distribution teams would prioritize the maintenance of a food bank for stranded community members.

In periods of lean activities, the disaster task forces proactively trained local communities in disaster preparedness and mitigation in Tamil Nadu and Bihar. Based on their learnings and experiences, SSP has compiled a comprehensive 'Disaster Task Force Training Manual' for quick and accurate replication of the model for other groups to adapt and implement in their geographies.

## F. Facilitating Connections Between Women Resilience Champions and Local Government Bodies to Create a Policy Shift

SSP actively facilitated engagement opportunities for the women's groups with government bodies at the village, district and state levels. The training and facilitation helped these women to successfully negotiate partnerships with the government and other administrative groups. The main issues and demands raised by a number of villages were clustered via a joint sharing and planning process. This was followed up by a collective presentation to the block authorities, leading to common agreements regarding the implementation of the activities decided upon.

Information fairs, exhibitions and workshops were set up as common platforms through which PRI leaders, district/block/village officials, community leaders and SHGs could interact with each other, fostering opportunities for regular dialogue and negotiations with the elected leaderships of their respective panchayats.

## Finding Solutions: Addressing Vulnerabilities

SSP's Five-Star Strategy framework and multiple program innovations colluded to create a local drumbeat and demand for community disaster resilience practices across 70 villages of India. While in the next chapter we detail the key milestones that were achieved by women champions of disaster resilience, here is a quick summary of the several initiatives that were rolled out as part of this project:

### In the Domain of Disaster Preparedness:

Every region of SSP's operation combated diverse categories of disasters and set up differentiated risk-averse strategies to ensure minimum disruption of lives and livelihoods. While North Bihar continued to be ravaged by floods, earthquakes and fire, communities in coastal Tamil Nadu wrestled with the triple threat of floods, cyclones and tsunamis. In contrast, the plains of Maharashtra's villages were scorched by severe drought, leading to water scarcity that was devastating communities, cattle and land.

Regardless of the nature of disasters encountered, women leaders across the three states were unanimous in that they had to set up their own mechanisms of disaster preparedness which would be accessible at the village-level, be multi-faceted and address issues beyond that of infrastructure collapse. They also set upon themselves the task of integrating their disaster preparedness efforts within those of the district government.

Successful rounds of negotiations between women, the local community and the local government bodies led to the formation of six disaster task forces that were linked with the District Disaster Management Association (DDMA) for relief, rescue and rehabilitation. Presented below is a quick look at the activities conducted by women’s groups to build ground-level disaster preparedness.

**In the Doman of Agriculture:**

**Table 4: Disaster Preparedness & Resilience Activities Across the Three States**

Disaster Preparedness Activities	Accomplishments
Seed and Grain banks	550 seedbanks and 350 grain banks were set up in Bihar and Maharashtra to bolster the food security of communities during and immediately after the occurrence of a disaster.
Survival/Emergency Kit	1500 emergency preparedness kits and 1000 First-Aid boxes were created and maintained from indigenously-sourced materials by women’s groups across Bihar and Tamil Nadu.
Flood/Earthquake Proof Homes	1300 flood and earthquake-proof homes were constructed by unlocking government funds and supplementing it with their own savings.

All villages under the SSP project faced the common problem of poor soil fertility caused due to the indiscriminate use of fertilisers and pesticides. Compounding this challenge were the floods that rendered vast tracts of agricultural land unsuitable for farming in North Bihar, leading to poor productivity, crop failure and a resultant loss of livelihoods and indebtedness. Communities in Maharashtra, on the other hand, faced severe droughts, high dependency on water and pesticide-intensive cash crops. Since these crops severely affected the soil health, women’s groups investigated and experimented with drought-resistant, water-efficient crops and suitable farming methods. At a community level, they began the promotion of growing grass and jowar as fodder for livestock.

More than 800 women across Bihar, Maharashtra and Tamil Nadu were trained on the technical aspects of sustainable agriculture. A majority among them conducted water and soil testing exercises and received training on adopting low-input based sustainable agriculture practices like altering crop patterns, inter-cropping, using home-produced compost, and maintaining seed and grain banks.

The table below illustrates the intensity of engagement of women leaders of disaster resilience in nurturing sustainable agricultural activities.

**Table 5: Sustainable Agricultural Activities Conducted Across the Three States**

Sustainable Agriculture	Accomplishments
Collective Farming	400 women engaged in collective farming across the three states.
Vermi-Composting/Bio Composting	300 women set up local vermi-composting and bio-composting projects.
Promotion of mixed cropping, inter-cropping and other sustainable agricultural practice, SRI	1300 women were converted into ardent promoters of diverse agricultural practices.  An additional 500 women took to organic farming in their small landholdings.  More than 500 women revived local and traditional seed treatments to reduce crop failure.

### In the Domain of Natural Resource Management:

In villages across all three states, rampant deforestation or the lack of adequate tree cover emerged as critical detriments leading to extensive soil erosion. Women's groups promoting community disaster resilience took the long-run perspective of re-greening their areas. They turned to the age-old tradition of planting trees to preserve soil cover during rains and floods. Rapid drying and degradation of ponds and other natural water bodies that served the irrigation and drinking water needs of the communities were also flagged as matters of much community worry. Communities had to evolve methods to revive dried up water resources and prevent the pollution of water bodies from large-scale urbanisation and indiscriminate waste disposal practices.

**Table 6: Natural Resource Management Activities Across the Three States**

Natural Resource Management	Accomplishments
Tree Planting	6500 trees were planted across 70 villages by 650 women who participated in the SSP project.
Revival of water sources	200 degraded or dying water bodies were revived by women's groups.
Kitchen gardens	1650 kitchen gardens were set up women leaders.

### In the Domain of Infrastructure Development:

Post the risk mapping exercises, women's groups were able to establish the interconnectedness between their access to infrastructure such as roads, drainages, toilets, bridges and habitats and their disaster and climate change vulnerabilities. Consider the following examples:

- Among the severest and least discussed casualties of the annual Bihar floods is the disruption of children's education. Because primary school buildings are rickety and cannot withstand the force of the water, children are unable to return to classrooms, even as life around them starts to limp back to normalcy.
- The absence of roads and bridges in Bihar routinely disrupts the safe evacuation of people in situations of impending and grave disaster.
- The dismal lack of adequate toilets and clogged drains and water disposal systems, after the occurrence of a flood, aggravates water-borne diseases and creates a veritable sanitation disaster in Bihar.

To address all these development fractures, community resilience leaders consulted with government bodies to access and catalyze government scheme on roads, drainages, toilets, bridges and habitats. The table below illustrates the infrastructure revival that women leaders triggered in their respective geographies.

**Table 7: Infrastructural Improvement Activities Across the Three States**

Infrastructural Improvement	Accomplishments
Construction of Roads & Bridges	1600 roads and bridges were constructed at the behest of SSP's community resilience leaders in Bihar and Tamil Nadu.
Construction of Toilets and Sewage Systems	1700 toilets and sewage systems were constructed or upgraded.
Construction of Flood and Earthquake-resistant homes	1300 homes in communities were built in Bihar and Maharashtra that were resistant to floods and earthquakes.
Improvement of School Infrastructure	193 schools in Bihar were upgraded/their heights were raised.

### In the Domain of Water and Sanitation:

Most villages under the SSP led Women's Leadership in Resilience Building Project in India struggled to access essential services during a natural disaster. Floods and cyclones cut off even the limited access that villagers had to clean drinking water. Drinking unsafe water or saline water, during and

after the occurrence of a disaster was the chief trigger for massive water-borne diseases and other related illnesses among children.

Women leaders convinced government bodies to begin the regular testing of water sources to curb the recurrence of water borne diseases. The community also succeeded in getting 434 hand pumps installed in Bihar and Maharashtra (the hand pumps were raised to a safe level in Bihar) to secure access to clean drinking water.

#### In the Domain of Health and Nutrition:

Participants successfully negotiated with Primary Health Care centres for the provision of better facilities and routine check-ups, especially for children and pregnant women. They also worked towards improving child care centres. The local government bodies were approached to implement available government health schemes. Women's groups began maintaining kitchen gardens and cultivating less-input intensive vegetables to build up self-sufficiency and create grain banks for local nutrition. Three-thousand-seven-hundred-and-fifty health check up camps were organized at the behest of community leaders.

#### In the Domain of Livelihoods:

Concentrated efforts were made to reduce the need for migration from the village in search of livelihoods by promoting sustainable forms of low-input based agriculture. At the community level, women began organizing themselves into groups to begin collective organic farming by leasing land and sharing manual labour.

## Challenges That Were Overcome

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From 2010 to 2013, the road to building women's leadership for community disaster resilience was tough for SSP and its partners. The project experienced choppy waters at various stages of its journey.

As leadership building among women's groups has faced challenges for decades, SSP and its partners encountered a set of barriers that they had anticipated at the time of the launch of the project. But they were not prepared for the level of intensity with which these problems struck. These had to be sensitively tackled to ensure not just immediate outcomes but scaling and replication of the model too. The key obstacles that emerged during the course of the project could be summarized as:

- **Initial mindsets of local stakeholders of post-factum relief as opposed to sustained community resilience building which ties into broader development agendas -** Misinformation and general apathy were the two significant roadblocks in convincing local authorities of the need for preventive disaster resilience and risk reduction efforts. Most government bodies are yet to climb out of the 'post-factum' model of relief work as the dominant path for addressing disasters and their impact. Despite the involvement of PRI officials at every stage of community resilience building efforts, especially mapping exercises, much more time had to be invested to broaden their views on disaster resilience and preparedness. Involving the media in Darbhanga, Bihar, to publish the disaster resilience efforts of local women stirred a significant measure of acknowledgement and accountability among PRI and other government officials. Despite availability of appropriate schemes, ineffective implementation slowed down development work. In Tamil Nadu, the biggest challenge was building ownership and a collaborative approach with the PHCs, DRDA, and Agriculture Departments
- **Discomfort of local CSO partners in putting funds in the hands of women champions -** Women were considered inexperienced by local partners of SSP in handling funds allotted for projects. There was significant scepticism about their abilities to identify key issues facing their communities and villages as a whole. Their ability to monitor and oversee the successful implementation of the possible infrastructural and agricultural improvements constantly came under the scanner. Demonstration of proof of concept and successful initiatives were the key to convince the government officials of the credibility of the program and its objectives.

- **Structural resistance to women being in charge** - Despite considerable contributions to the program's activities, there was resistance from most external stakeholders, primarily local government officials, towards women's participation at PRI forums and bodies like village assembly, etc. The lack of voice for women within the traditional village hierarchy and years of male dominance and conditioning were major blocks that had to be bare knuckled. Most government officials suffered from the same lack of trust that the community as a whole did in the ability of women to transform themselves into change agent. In many villages, in the program stages, women too, were diffident about what they had set out to accomplish. Patience along with constant handholding was essential in dispelling notions of mistrust, hesitance and lack of confidence.
- **Inability of women champions to forsee the connectedness between disaster impacts and development factors, such as health, education, and sanitation** that are closer to home or more closely linked to their personal well-being. In Supaul District, Bihar, the 'group' concept of social development was very new. It took an entire year of orientation, capacity building and vulnerability mapping for women to truly believe in the importance of the program.

### Ancilliary Challenges

There were several other factors that posed hurdles in the implementation of this project. While some were relatively local issues, others were issues that have been widely documented in discourses of building community-based women's groups and increasing women's participation in local governance. We present details below:

- In Bihar, caste issues emerged as a major barrier, where higher caste Mukhya & Sarpanch were not willing to help lower-caste families
- Collective farming/livelihood options were not readily accepted by the women's groups or communities. This meant placing immense faith in their co-members' commitment, becoming team players and working for a common good, which often unleashed competition and clashed with the desire for personal benefits.
- The community's lack of faith in the abilities of their womenfolk was mirrored in the women's own low self-confidence. For SSP, the biggest challenge was to convince the women to step out of the boundaries created by their families or communities (and often themselves) to travel outside their village for exposure visits and knowledge-transfer platforms.
- There were instances where corrupt systems and bureaucratic inefficiencies were the chief obstacles to village development and resulted in wasted time as well as resources. The installation of toilets in Bihar, for example, was fraught with delays and malpractices.

*“If we go and straight away demand our rights, the officials don't react and nothing is ever done. Nothing works better than displaying the good work that we have done. We need to tell them problems that we face with public infrastructure/ government systems while we are dealing with it - show that we are also working on it, and not just blaming them.”*

- Sheela Devi, Woman Leader from Bihar



### 3. THE MILESTONES ALONG THE WAY

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The Successful Demonstration of Community Resilience by Women Leaders



## Achievements of Women Leaders in Community Resilience Building

Over three years, SSP's endeavors reached out to 15,000 households in three states to create awareness and spur action for tapping into internal and inherent community resources to demonstrate disaster risk reduction and resilience. More than 1500 women members spread across 70 villages took the lead to map, assess and minimize their disaster and climate change related vulnerabilities. The vulnerability mapping exercise alone directly impacted 2000 families.

The country witnessed early and successful demonstration of two innovations in the field of disaster mitigation, risk reduction and resilience - the Community Resilience Fund (CRF) and women-led, local disaster task forces. CRF seeded at least 50 enduring models of resilience practices that are currently being nurtured and taken forward by the villages. Twenty villages of Bihar and Tamil Nadu have their own customized, trained and ever-alert disaster preparedness task forces that function around the year. They have gone on to train more than 900 other women in aspects such as search and rescue, first-aid and disaster warning and monitoring signals.

Taken together, the two innovations showcased that local women with researched solutions, when equipped with technical skills, financial resources and the confidence of a collective, can trigger multiple shifts in the economic, social and natural resource landscape of their communities; that they can generate the demand for, and accountability towards, community disaster resilience.

The increase in local partnerships between organized grassroots groups and local governments at the district and block levels unlocked resources from at least ten government development schemes for fortifying community resilience efforts. These general entitlement schemes, not specifically allotted to the local disaster agendas and disaster management offices of districts, nevertheless sure-fired the efforts of the women champions trained by SSP. For example, resources from MNREGA led to the construction and repair of 100 farm ponds, 300 wells and 100 recharging pits in drought-stricken areas of Maharashtra, securing a measure of water sufficiency in the drought-hit villages.

Women's engagement and negotiations with the government created an interactional shift among stakeholders of the local system - from hapless and dependent women, they are now viewed as public leaders, seeking accountability from administrative officials. The participation of women grassroots practitioners of community disaster resilience in policy dialogues gave the project a significant fillip for scaling and replication to other parts of the country too.

The domino effect of the project was visible in the increase in social capital and confidence of the women who participated in the project. Several trained community resilience champions had previously been constricted by the 'purdah' and social and community embargos on their mobility outside of their villages. They were quick to shed these customs after their training from SSP and sculpt news roles as community resilience leaders.

*“ One of the most impressive outcomes envisaged through this enabling partnership is the reinforcement of successful illustrations of the demystification of the widely held belief that women are marginalized, helpless victims in disaster situations who need to be provided with relief to overcome their distress situations and the dissemination of successful best practices of experiences of organized women's groups who perform the function of change agents and radically transform the disaster situation as an opportunity to empower women, improve their resilience and thereby ensure community resilience”.*

-As told by an NDMA Member to Swayam Shikshan Prayog

Over a three-year period, SSP was able to highlight through this project the conceptual and practical sophistication of women-led community-based disaster resilience efforts over traditional models of disaster mitigation. The table below illustrates the paradigmatic shifts that SSP and its partners were able to demonstrate<sup>9</sup>:

**Table 8: Differences Between Traditional Disaster Mitigation and Women-Led Disaster Resilience Methods**

Traditional Methods of Disaster Mitigation	Community Disaster Resilience Led by Women Leaders
<p><b>Grassroots women identified primarily as vulnerable groups.</b> Views grassroots women as a vulnerable group and as victims, thus marginalizing them from decision-making, and reproducing vulnerabilities</p>	<p><b>Grassroots women identified as active agents of resilience.</b> Views vulnerability as structural and seeks to redress it by positioning grassroots women as active agents of resilience by incorporating their knowledge, practices and networks into resilience programs. Actions that support this perspective include:</p> <ul style="list-style-type: none"> <li>• Setting standards for engaging grassroots women’s organizations in the design, implementation and evaluation of risk reduction, relief, recovery, reconstruction, and risk reduction programs</li> <li>• Formalizing public roles of grassroots women’s groups in resilience programs as information managers who can enable information flow between communities and authorities, and create a demand for resilience.</li> </ul>
<p><b>Organizing advocacy as secondary to disaster-focused actions.</b> Perceives grassroots organizing and engagement with decision makers as secondary to or separate from resilience-building activities, which are often narrowly defined.</p>	<p><b>Organizing advocacy as crucial for grassroots women to advance their priorities.</b> Perceives mechanisms for grassroots organizing and engagement with decision makers as crucial for advancing grassroots women’s strategic resilience priorities.</p>
<p><b>Invest in physical resource base.</b> Invests primarily in building, protecting and strengthening communities’ physical resource base (e.g. - housing and infrastructure)</p>	<p><b>Investments in social and political resources as key to strengthening resource base.</b> Invests in strengthening grassroots women’s leadership, organization and institutional partnerships as key to building, protecting and strengthening communities’ resource base.</p>
<p><b>Short-term action to protect existing resources.</b> Focuses mainly on protecting resources through emergency preparedness, response and early warning programs.</p>	<p><b>Sustained long-term action to accumulate and protect resources.</b> Promotes strategies that bundle the accumulation of resources with the protection of resources through ongoing development initiatives, recognizing that the poor communities with limited resources are motivated to take sustained action that help them accumulate and protect their resources.</p>
<p><b>Resources and agenda-setting is with government.</b> Resources flow primarily through governments or non-governmental organizations that set priorities for action at local levels.</p>	<p><b>Resources are allocated to grassroots organization.</b> Allocates resources that go directly to grassroots women’s organizations so that they act on local priorities, demonstrating their capacities to build resilient communities.</p>

## Key Achievements at a Glance

### Building Leadership and Capacities of Women at the Grassroots

- 1500 women trained in the multi-dimensional technicalities of building community disaster resilience across 70 villages in Maharashtra, Bihar and Tamil Nadu.

<sup>9</sup> CRF Indicators, Vinod Menon,pg 4

- Previously voiceless women now engage with local governments on development issues and representation in Government/PRI committees (District Disaster Management Authority, authorities related to education, health, etc)
- 100 women trained to set up and drive 20 village-level disaster task forces that have in turn trained 900 rural women in aspects of community resilience.

### Better Agricultural Productivity and Soil Quality

- Adoption of low-input based sustainable agriculture practices like altering crop patterns, inter-cropping and using home-produced compost have led to increased productivity on **1400 acres** of land across the three states.
- Over 50 households that practice soil-replenishing practices have reported savings of close to **Rs. 7000-9000 every year**.

### Livelihood and Income Generation

- Women leaders converted more than 200 hectares of arid or under-utilized land into organic farms in Maharashtra and kitchen gardens in Tamil Nadu. The produce was used for personal consumption as well as for retail, which supplemented family incomes.
- 400 women were involved in collective farming across the three states, where the profits, which stood in the range of **Rs. 6000-8000 per annum**, were shared.
- Vermi-composting units provided an additional income of **Rs. 2000 per annum** for 100 households.
- Alternate sources of livelihood like mushroom cultivation, handicrafts making, etc resulted in increased monthly earnings of about Rs. 1500 per woman for 100 women in all three states.

### Better Management of Natural Resources

- Trainings on drought management were provided to women's groups in Maharashtra through partnership with the KVKs and Agricultural Universities.
- Under the MNREGA, 100 farm ponds, 300 wells and 100 recharging pits were constructed/repared in Maharashtra.
- Green coverage was extended in 37 villages across the three states and over 6000 trees were planted.

### Food and Fodder Security

- The shift from cash crops to less water-intensive food crops like jowar (sorghum), local vegetables and grass in 32 villages, and the promotion of grain banks in 30 villages, secured food and fodder related shortages in the community. More than 3000 women converted over 2000 acres into organic farm land across Bihar, Maharashtra and Tamil Nadu.

### Development of Local Infrastructure

- Strong partnerships with government institutions at the village and district level yielded impressive results with respect to improving local infrastructure. These included road building and repair, improving village school cum shelters, building drainage and bridges in flood-prone areas and constructing low-cost toilets in Bihar and Maharashtra.
- The Panchayat body in many villages integrated women's groups into village development committees on education, health and water. In Kadgaon, Maharashtra, more than ten women contribute actively in various committees from local to district level.
- Public funds to the tune of Rs. 1.8 crores in Bihar, over Rs. 12 crores in Maharashtra and close to RS. 39 lakhs in Tamil Nadu were mobilized and utilized for infrastructure- and development-related projects in the villages.

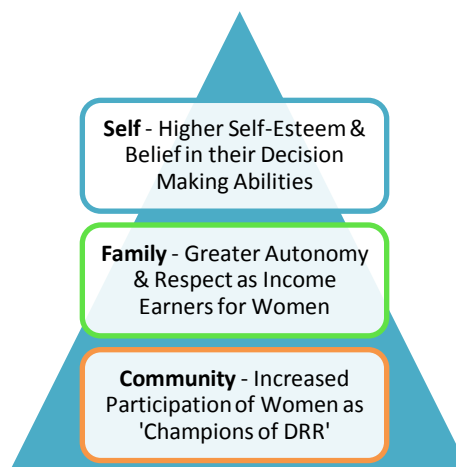
### Better Access to Quality Healthcare

- Negotiations with the local PHCs and child care centers for better service provision and collaboration with local governments for the implementation of government health schemes improved the community's access to health in at least 50 villages.

## Enhancing Social and Development Capital: Self, Family and Community

At the broader community level, most of the 1500 women members who were part of the SSP project continue to be active participants in community activities and are regarded as rightful change agents. Women from fairly conservative backgrounds in Bihar, who until four years back were restricted by the 'pardah' system, now travel to various states and participate in national and regional forums as 'champions of community disaster resilience.' The project's collective approach has bolstered community ties, empowered women and brought women closer to one another.

Figure 4: Creation of Social and Developmental Capital



At the family level, women have received greater autonomy and respect, especially due to the additional income they bring in. Their knowledge and understanding of sustainable agricultural practices, health, hygiene and managing finances has also significantly added value to the perceived worth of women members within the household.

However, the biggest change has been that felt by the women themselves. Their newfound abilities and freedom to travel, learn, coach others and ably interact have had a positive impact on their sense of self-worth and esteem. They have also gained confidence after successful negotiations for their rightful due from government officials. The success stories of these women are the biggest examples of how the SSP project has transformed lives. These women are now equipped to be not just nurturers for their families but also providers. They now confidently make independent and well-informed decisions with respect to not only their families but also their communities.

*“ We have been respected by government officials and representatives. Our minds have opened up and we are certainly more confident after having met various dignitaries. Earlier, our husbands only used to handle these matters and we had never thought that there would be a day when we would ourselves go to meet officials and negotiate with them.”*

- Renu Devi, Woman Member, Darbhanga District, Bihar

## Replication of the SSP Model

The Grassroots Network<sup>10</sup> across Maharashtra, Tamil Nadu, Bihar, Orissa, Andhra Pradesh and Assam has ensured the replication of initiatives to areas even beyond the scope of SSP's project. There has been an ongoing attempt to build a cadre of women trainers who would further coach women on leadership skills and creating innovations. Exposure visits, visits by women leaders to emerging groups, dialogue forums, etc have been effective strategies for transferring knowledge and learning.

*“ Women from various villages where we had not even worked came to us and said they that also wanted to do this. There is a strong network between villages and information spreads fast which is helping us replicate.”* - Vijay Kumar, Kanchan Seva Ashram

<sup>10</sup> Grassroots Network, supported by Huairou Commission and Groots International, has a presence across South Asia, S.East Asia and Latin America - women federations, women leaders, CBOs and NGOs form part of this network

# **SECTION TWO - Resilient Model Villages Led by Resilient Women Leaders**

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**Case Studies from Bihar, Maharashtra and Tamil Nadu**



# Model Villages

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Bihar

# Emerging as Torch-Bearers of Resilience Building

## Jagir Araji, Supaul District, Bihar

### Context

Jagir Araji was one of the worst affected villages in the Kosi floods of 2008 due to its geographical proximity to the area of the breach. The worst flood in over three decades saw the village inundated under two to three feet of water. Unlike in similar floods of 1973 when the waters receded fast, concretization of highways meant that water had few outlets from which to flow out. Most families lost their livestock, grains, fodder and other precious belongings to the floods and were forced to camp out on the highway with little food, shelter or water.

Rescue efforts were largely private initiatives in the form of hired boats by relatives from neighbouring areas. Almost 40-50% of the families fled to their relatives' homes in Nepal and neighbouring regions while others took shelter in filthy government relief camps, where sanitation and hygiene was virtually non-existent and food, medicine and blanket supplies were limited.

*“ Many of us were compelled to sell jewelry or whatever livestock we had left to take our kids to private doctors as the medical services in the relief camps weren't effective at all.”*

Six months later, when some of the water had receded, families moved back to the devastated village to find no roads, schools or other basic infrastructure standing.

*“ We realized that we would have to start our lives with a clean slate and that it wouldn't be easy at all.”*

With no income or agricultural produce, food for almost two months was only the two quintal wheat that each household had received from the government after the disaster, which resulted in malnutrition among not just children but also grown men and women.

The region is also vulnerable to earthquakes (falls under Zone 5 - High Risk) and frequent fires due to the use of firewood as fuel in kaccha houses. Therefore, the necessity for a comprehensive community disaster resilience plan was compounded by the exhausted financial clout of the community to tide over such disasters.

### Community Resilience-Building Journey

Since 2010, GPSVS<sup>11</sup> had been spearheading rehabilitation work in the region, for which they set up a Village Development Management Committee<sup>12</sup> and also revived an erstwhile SHG to promote community and women's participation. SSP took the momentum forward and incorporated a

### At a Glance: FactSheet

- △ **Location:** 7kms from Birpur town (District Headquarters)
- △ **Population:** 180 households (OBC & ST)
- △ **Average Annual Income:** INR 24,000-30,000
- △ **Occupation:** Migration to towns in Bihar and North India, and Agriculture
- △ **Participation:** 1 SHG (14 members)

Jagir Araji is the first village from Supaul district that is associated with SSP and has led the way in innovatively coping with disasters by experimenting with sustainable agricultural practices as a means of climate change adaptation. Agency building of the women members has been the central theme of the initiative.

<sup>11</sup> Ghoghardiha Prakhanda Swarajya Vikas Sangh (GPSVS)

<sup>12</sup> Formed in 2009 to ensure proper implementation of community development activities. Revised in 2011 with a CCA and disaster resilience focus and also instated a compulsory 50-50 ratio of men and women (earlier it was 40-60). It comprises 12-15 members - village leaders, women leaders, PRIs officials, teachers, government representatives.

nuanced lens of constructing resilient and sustainable communities into the group's existing work. The thirteen-member SHG was first trained in community disaster resilience concepts and the capacity building of communities against disasters. The concept of 'collective farming' and becoming active shareholders in rebuilding their village became the two lodestones of their work ahead.

The women first conducted a three-day mapping exercise that also involved the VDMC members. Not waiting for the already delayed governmental intervention, the women began working on the community development plans. They improved village connectivity by building bamboo bridges and raising roads via volunteer work. They also convinced the Mukhya to raise ten hand pumps in the village. Also, six solar street lights at designated spots were installed using funds mobilized to the tune of INR 1.5 lakhs from the Solar Lighting Scheme of the SDMA<sup>13</sup>. The women also canvassed for a cemented raised platform to shelter people stranded in the floods and mobilized INR 393,000 from the MNREGA.

**Unlike in other areas, the women of Jagir Araji convinced the Block Agriculture Office to provide aid as an impetus to kick-start vermi-composting in the village.** Since, eight beneficiaries have received INR 10,000 each and estimate potential savings to be Rs. 100/kathha. Also, 13 women and their families now regularly maintain seed banks, a practice that their ancestors used to follow. Community farming, carried out using the 'Community Resilience Fund' disbursed by a GPSVS-created federation, has reaped considerable profits for the women members. CRF was disbursed in three allotments of Rs. 10,000 each – the first in 2011 reimbursed women members' expenses for pursuing community development activities, while the second (2012) and third (2013) were for collective farming. The entire group of 13 women started by collectively farming jute on 16 kathha (0.54 hectares) of leased land and made use of their profits from the first season to increase the leased landholding to 18 kathha (0.61 hectares). With the cultivation of jute and maize since 2012, each member of the group has made a profit of approx Rs. 2000.

*“The success in collective farming has helped us to plough back the profits to our personal farming and also wish to save it in future to be able to buy land someday. Also, we have learnt to work together peacefully and figured out a system for the same.”*

Over the course of the last three years, five enthusiastic women leaders have emerged from Jagir Araji. After participating in various exposure visits to other model villages in Bihar and witnessing collective farming, vegetable cultivation and organic pest control techniques, they now host peer exchanges with younger groups. A focal point of their shared learning sessions is how they found solutions to interpersonal issues faced while all farming together and how to create accountability when ten women are collectively responsible for a piece of land.

*“Since we have been the pioneers in the district to take up this program, it is our duty to spread the word and inspire others to follow suit.”*

Also, there is a thriving Women's Task Force in the village – one that feels responsible for the entire village and also uses local resources to improve its own skills. GPSVS has organized workshops and disseminated information on how families can prevent fires (a frequent phenomenon owing to use of firewood and kachha house). All women members also attended a workshop along with their husbands on how to build earthquake- and fire-resistant houses. Seven to eight inspired women have already convinced their families to build such homes. Two to three trainings have also been held to involve children in the community disaster resilience processes

### **Impact of Community Disaster Resilience Initiatives**

Despite being one of the recent additions to the pan-India program, the women of Jagir Araji have successfully combined preparing communities against floods or earthquakes with addressing the underlying risks of poor health infrastructure, hygiene issues, sustainable livelihoods through agriculture, etc. Increased understanding of the government machinery and schemes was an

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<sup>13</sup> State Disaster Management Authority



enabling factor as well as a by-product of the initiative. During the last three years, they were able to mobilize a sizeable **INR 11.4 lakhs of public funds** via various government schemes.

These women have also proven that they are income earners for the family too, making cash profits of around INR 2000. They have a complete understanding of the situation that initially the profits may not be too high, as the members paid leases of their land, but it will gradually multiply. They surely have their eyes set on the bright prospects of their collective farming practices.

Collective farming has not only resulted in profits but also in better understanding of their own expenses:

*“ We were never aware of the profits we made via farming as our husbands managed the finances. However, now we can keep accurate profit-loss accounts and equally take part in the family agriculture.”*

Also, in families where the male members are migrants, women now experience greater autonomy while running the household:

*“ If our husbands are out, we still have our own hard-earned income. Now we won't be solely dependent on the income that our husbands bring back”*

**Empowerment and Capacity Building:** The disaster resilience training has offered a window of opportunity for women to take centre stage in the development of their village:

*“ Initially we all were hesitant to attend meetings, fearing what our elders would say. Now our in-laws and husbands are often not even aware of our whereabouts, we can go wherever we want – they trust us after seeing the inroads we have made with our work. Now we women call our husbands to meetings so that they can also learn and often go to the bank even when the husband needs money.”*

Most women have now also started participating at the Gram Sabha:

*“ It wasn't until two years ago that most of us attended our first Gram Sabha. Gradually we have started asking questions and stating our viewpoints. We believe it is our right to be heard.”*

They also interact with government officials in the district and meet other women and eminent personalities at workshops and knowledge-sharing platforms:

*“ Now we don't think twice before initiating a new idea or proposing a solution. We have been heard at various platforms and so know that we are capable of taking wise decisions. We were entrusted by GPSVS to go on a district level campaign to raise our experience with disaster risk mitigation and preparedness during the 'Flood and Earthquake Week', in June 2013. Everyone is distraught by disasters, so there is a crucial need for us to disseminate our learnings further. This entire exposure taught us a lot about what still needs to be done at the district level – which gave us a macro picture and broadened our horizons”.*

**Future plans:** The women leaders have taken their role as change agents very seriously and aim to spread waves far and beyond. They wish to motivate other women in their village to start new SHGs and also build a cadre of women leaders across the district.

*“ Only if new women leaders will come up, will we also learn more. If we are the only women who will work then how will we grow, who will we learn from?”*

The fact that these disasters are seasonal but the impact of community disaster resilience initiatives is perennial is what drives most of these women.

# Demonstrating the Power of Collective Action

## Maulaganj, Darbhanga District, Bihar

### Context

Maulaganj village in Darbhanga district of Bihar was not prepared to face the destruction wrought by the Kosi floods of 2008. Every rainy season brought with it a fear of flooding of at least two-three feet in most areas of the village due to fluctuating rainfall patterns in the region. However, no one anticipated flooding of the magnitude that occurred in 2008. Few households managed to save their prized possessions, important documents like identity and legal papers, their livestock or stock of grains when the marauding waters of Kosi swept away everything in its path.

Most families were stranded on the highway, built on higher ground than their village, for over a month – with no access to even basic facilities like food, drinking water, toilets or even medical care. The few families that managed to reach government relief camps suffered as many children and infants in the group began to die from water-borne diseases that were not checked in time. The only bits of relief supplies that the stranded villagers of Maulaganj received from the government were severely rationed dry food and blankets.

When the families returned a couple of months later after the raging waters had subsided, they found their village in shambles. The un-cemented roads to their village were muddy and treacherous, houses had toppled or were uninhabitable, drains were clogged and there was no drinking water. The hand pumps they had relied on for water had become submerged in silt deposits. The mounds of sand deposit that now covered most portions of their fertile agricultural land also dashed hopes of reviving productive farming soon.

It took the government around four months after the Kosi floods to distribute half a quintal of wheat and INR 2250 per household to compensate them for the losses in the flood. It took over a year for the village school to start operating again after the floods. For nearly two years after the floods, Maulaganj struggled unsuccessfully to attract the state government's attention to help put their lives back on track. The men made attempts, often in their individual capacities, time and again to appeal to the local bodies for help to rebuild the village, but little help was forthcoming.

*“ We received no support from the government either while we were displaced or even after we came back. They only distributed food but in terms of rehabilitation of the village infrastructure and livelihoods, no assistance was provided,”* recounted a frustrated Maulaganj villager.

To begin life afresh, Maulaganj residents needed money to begin clearing their land of the silt. While the men tried their hand at local work like construction, agricultural labor and masonry, a few others decided to make ends meet by commuting for odd jobs to the nearest town. The women meanwhile sold the few bits of jewelry they had on them or mortgaged them at a monthly interest rate of 5% with the local moneylenders. With the money they now had, they began low-inputs based vegetable cultivation to earn a living.

### At a Glance: FactSheet

- △ **Location:** 1.5 kms from Darbhanga Town,
- △ **Population:** 225 households (SC & OBC)
- △ **Occupation:** Agriculture on leased land
- △ **Average Annual Income:** INR 30,000-36,000
- △ **Participation:** 7 SHGs (12 members each)

Women leaders from the village have emerged as mentors and coaches for women in other villages across Bihar. They have managed to convince their families to shun the regressive 'purdah system' and persuaded banks to begin offering zero balance accounts to the entire village.

## The Community Disaster Resilience Journey

The lives of Maulaganj villagers began changing in 2010, when Kanchan Sewa Ashram<sup>14</sup> decided to help the women of the village re-establish their Self Help Groups that were defunct since the 2008 floods. They helped these groups realize the need for building community resilience to floods and offered help in adopting sustainable livelihood practices.

The project began with a three-day mapping exercise to identify a range of issues that were crucial to disaster preparedness and those that could kick-start the long-term development of the community along with actionable solutions.

The women collectively identified the need for cemented roads with proper drainage facilities and the building of bridges as the infrastructural needs of their community. Local wisdom suggested that a school be built on a raised platform along with hand pumps to avoid the devastation witnessed during the floods. They also decided that their village needed well-run government health care centers and toilets installed.

Thus the process of rebuilding lives began, a process also rooted in reducing the risks faced by villagers due to disasters. The women took the lead here to oversee that houses that were built after the floods through the Rajiv Gandhi Awas Yojana were built in a flood-proof manner on raised platforms. Similarly, the women convinced the Block Education Officer to sanction INR 14 lakhs under the Bihar Education Project for the rebuilding of school infrastructure. They also rallied a pool of young talent (from among the 16-18 year-olds of the village) to teach the younger children to tide over the disruption in their studies due to the floods. Around INR 28 lakhs was mobilized to repair the crumbling infrastructure of the village, like arterial roads, and build new bridges needed to improve the community's mobility.

*“Wherever we go we are respected and felicitated. We meet varied women at exposure visits, trainings, workshops - we learn from them and also teach them.”*

Women members also took the lead to persuade local Panchayat officials and the Block Development officers to organize regular health check-ups by ANMs and ASHA workers.

Disturbed by the poor government healthcare facilities in the village, women members influenced the local PRI officials and Block Development Officer to organize regular visits and health check-ups by ANMs and ASHA workers, especially for pregnant women. Women members have monitored the effectiveness and presence of the ANMs ever since. Also, post every flood the members organize a seven to ten day medical camp and also arrange for all the medical equipment and medicine.

To improve the poor infrastructure of the village school, they managed to get INR 14 lakhs sanctioned by the Block Education Officer (via Bihar Education Project). They also pushed for the implementation of unused state government schemes like the Mukhyamantri Kanya Surakhsha Yojana<sup>15</sup>, by negotiating with the Child Development Protection Officer. The enthusiasm shown by the women in these development activities inspired the local MLA to put them in charge of auditing and monitoring the fair implementation of all the construction work happening in Maulaganj.

The women also made the most of the Community Resilience Funds (INR 10,000) that the seven SHGs based in Maulaganj received over the last two years for collective farming. To date, a total of ten groups of five members each have taken up collective farming. Vegetable cultivation has been the popular choice, with the exception of one enterprising group that leased 16 kathha (1.3 acres) of mango gardens at a cost of INR 16,000 (INR 10,000 from CRF and INR 6,000 of personal savings).

The women SHGs also created a Women's Task Force to help provide leadership to the key roles they had taken up within their community in disaster management and community building processes. To avoid being unprepared for disasters like floods, an Early Warning Team was set up and a member created a system of receiving flood warnings from her relatives who live in other villages which get affected by floods first.

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<sup>14</sup> SSP's local partner for the Women's Leadership in Resilience Building Project in Darbhanga District, Bihar

<sup>15</sup> The aanganwadi of the village gives a birth certificate to parents of a girl child, which the parents can use to claim INR18,000 when the girl turns 18.

Disaster-preparedness practices like maintaining a stock of dry foods and also fodder for their livestock, storing savings and important papers in plastic bags at higher places in the house, compiling a list of emergency contact persons with details etc – ideas that were suggested by the women themselves, have been enforced. Around fifteen women also maintain a seed bank, a practice they began after receiving training from KSA.

*“ Now there is an organized system even within all the madness of the floods. We are responsible not just for our own families but the entire village.”*

The confidence that they gained from negotiating, implementing and monitoring projects in their village led women leaders of Maulaganj SHGs to mentor other groups based in Darbhanga and Supaul districts of Bihar in best practices – like engaging with government bodies, collective farming and the spirit of women’s activism.

Women leaders from Maulaganj also helped SHGs in neighbouring Jamal Chak village to tackle a bout of measles by helping them organize medical camps and mobilize government medical resources.

### **Impact of Community Disaster Resilience Initiatives**

Infrastructural development of the village has been the most apparent and widely-felt impact of the initiatives taken up by women’s groups in Maulaganj, positively impacting over 200 households. Solutions have been found for issues raised by the women via the Community Development Plan, such as:

- *better access to the highways, neighboring villages, markets and healthcare facilities;*
- *improved access to high quality medical care; and*
- *clean drinking water.*

The collaborative efforts of women’s groups of Maulaganj with the authorities led to the mobilization of public funds to the tune of INR 43 lakhs, that, though allotted had never found its way into community development activities of Maulaganj. The community, as a whole is now more aware of the appropriate government officials to approach and which schemes and policies to make use of to further development.

**Improved Agricultural Practices:** The stress placed on collective farming and sustainable agricultural practices during the training sessions have benefitted over 91 women and their families. Almost 50 women have also contributed to their household income with the profits of INR 1500-2000 per annum that they made from collective farming. The women SHG (mentioned in the community disaster resilience journey section) that had leased 16 kathha (1.3 acres) of mango gardens at a cost of INR 16,000 made significant profit of INR 27,000 over six months, i.e. INR 5400 per woman. The average profit per rotation for each group member lies in the range of INR 1200-1500.

**Resilience during floods:** As a result of the formation of the disaster task force and the overall orientation towards planning ahead and building resilience against floods, most women and their families are prepared to react to a flood. Regularly-organized meetings have seen large turnouts from among the community. The leadership roles in most of these activities, including monitoring government projects and new community initiatives, have been largely taken up by the women of the community.

*“ Like we are responsible for all the work at home, we consider all these activities also our own responsibility - the entire village is also our home”*

**Increased Confidence, Self-Esteem and Voice:** Thanks to leadership initiatives from collaboration with government agencies and peer information exchange programs, women have begun developing their own voices to demand their rights and share their best practices at national platforms.

*“ Earlier we used to just run away even at the sight of a police official, now we negotiate with them fearlessly! If we had to travel to a bank, we would take our husbands or mother-in-laws with us, now we can travel anywhere - even to Kathmandu!”*

As a celebration of women’s increased confidence in engaging with banks, an event had been arranged whereby 40 bank managers from the district came to learn from these women. These banks now accept even zero balance accounts, something that benefits not just the women members but the entire village.

**Role Models for Collective Action:** From helpless women of flood-ravaged villages, the women of Maulaganj have shown the willingness and tenacity to improve their lot along with addressing the needs of their community. Their successes have now made them role models for other women to start similar groups not just in Maulaganj but other neighbouring villages too.

*“ We go around and tell women about how to start a group, have trained others to conduct village mapping exercises, have told groups about various government schemes and have also imparted tips on how to collaborate with government officials without offending them. We also monitor their progress and engage with them on an informal basis.”*

Around 40 bank managers from across the district congregated at an event where women in Maulaganj explained their collective activities and community development model. These banks now offer not just these women’s groups but the entire village the option of zero balance bank accounts.

Muslim women, who make up a large percentage of Maulaganj’s population, felt empowered to convince their families to do away with the restrictive ritual of the ‘purdah’ system to set a new precedent for the largely conservative community. They have now emerged as ‘champions of justice’ for their community and village, leading peaceful demonstrations and processions along highways and outside government offices and other public spaces demanding their rights.

*“ We all have learnt the essence of collaborative partnership with the government. From being reactive and violent, when young men earlier used to fight with government officials, we have now shown how we can peacefully and legally demonstrate in front of authorities and get our work done.”*

**Future Growth:** The women are now eager to focus on improving the sanitation facilities available to every household.

*“ We have come to the conclusion that most diseases are a result of the lack of toilets. Thus we want to seriously tack this problem in times to come. If floods were to occur in the future, we wouldn’t want the same unsanitary situation as earlier.”*

Thus, these enterprising women of Maulaganj have now moved beyond being restricted to just the community disaster resilience and CCA mandate of the program by applying themselves diligently to the needs of their communities by learning the key tenets imparted during the training and applying it to other development issues as well.

# Creating A Model Village of Disaster Risk Reduction

## Harichanda, Darbhanga District, Bihar

### Context

The residents of Harichanda village in the Darbhanga District of Bihar were used to braving the inconvenience of seasonal floods. Their logistical challenge usually was how to escape the rampaging waters along with their livestock and belongings to high-lying areas. The annual partial flooding rendered commuting near-impossible, restricted the access to drinking water as hand pumps got submerged, and education of children got disrupted due to flooding of the school premises. Health and hygiene issues also cropped up during this time every year due to the choking of drains and poor sanitation facilities.

### At a Glance: FactSheet

- △ **Location:** 5kms from Darbhanga Town, Darbhanga District
- △ **Population:** 1200 households (SC and OBC)
- △ **Occupation:** Agriculture on leased land and local construction work
- △ **Average Annual Income:** INR 24,000-30,000
- △ **Participation:** 12 SHGs (12-15 members each)

Women identified key infrastructural improvements like improving school facility and building concrete roads to aid disaster resilience. Cultivation of dhaincha<sup>1</sup> and SRI<sup>1</sup> have been key agricultural innovations adopted by them.

However, none of this could have prepared them for the devastation wrought by the Kosi floods of 2008. The waters of the Kosi and the accompanying rains ravaged agricultural fields, destroying the entire produce. For the villagers, they lost their only means of livelihood, stored grains, livestock and the few precious belongings they owned.

*“ Many of us went hungry - we often ate one meal a day or sometimes not even that. No medical facilities were available. Also, since there were no toilets, the state of sanitation was very poor - waterborne diseases were inevitable.”* - A woman member

For nearly six months after the floods, life was in limbo. Rebuilding lives began nearly after six months of the floods. People who owned small pieces of land and those who had leased small holdings began clearing the huge sand deposits left behind in the wake of the floods. They funded this by using up the meager leftover savings or sold the minimal jewelry they had. Such hand-to-mouth living and the fear of abject poverty drove men out of their village in search of remunerative work - some went to nearby Darbhanga town while others migrated to Punjab and other cities in North India. Meanwhile, on the cleared patches of small land holdings, the women began low-cost intensive vegetable cultivation.

Through this time, the only flood relief aid that the community received from the state government and other authorities was rice and wheat, which arrived in rescue boats, and a nominal compensation of INR 2500/household.

### The Community Disaster Resilience Journey

Harichanda has around eight SHGs that had earlier been formed under the BGRF<sup>16</sup> but ceased to function after the Kosi floods. In 2009, Kanchan Sewa Ashram, a local partner of SSP, took the initiative to re-mobilize these SHGs under the renewed mandate of the Women's Leadership in Resilience Building Project. They began operations by conducting a three-day mapping exercise, mentored by experienced women leaders from Maulaganj village.

*“ Our women friends from Maulaganj explained to us the merit of the program, how we could all work together to improve our village. Creating a map, identifying problems faced by the*

<sup>16</sup> Government's Backward Regions Grant Fund prompted formation of SHGs to further literacy among women)

*community and also solutions to them - all this was taught. Since they were there we developed confidence in the program.”*

Seven crucial infrastructural needs identified by the women’s groups were condensed into a Community Development Plan, which was then submitted to the government bodies for support in implementation. Of these seven issues, three were tackled with the support of the district authorities in the last two years.

The village school, which caters to over 100 children, used to be a two-room facility with no toilet. The children and teachers had to travel almost two kilometers to access a toilet. However after the floods, the women’s groups sought the cooperation of the District Education Officer and mobilized over INR 14 lakhs to renovate and expand the village school. They also ensured that a toilet was built within the premises. The women also accessed the BRGF and MLA’s Development Fund to get the ‘kachcha’<sup>17</sup> village roads concretized - nearly INR 7 lakhs of public funds was sanctioned for the roads.

After receiving training from the Block Agriculture Office and KSA, the women began changing and experimenting with traditionally practiced agricultural styles. Most exchanges have been centered on cultivation of ‘dhaincha’, maintaining a seeds bank, and also how best to function as Task Force Committees.

*“ Seeing and learning from others gives us the confidence that someday we will also be able to be as proficient as them.”*

The groups received a total of INR 15,000 for their Community Resilience Fund - INR 5000 in 2011 to cover their expenses for community development initiatives, and INR 5000 each as revolving funds in 2011 and 2012 for collective farming. To date, seven groups of five members each have made use of the revolving fund to cultivate around five kathha of land (0.41 acre) each. Besides vegetable cultivation, a couple of groups tried dhaincha and made a profit of INR 1000 per group member per rotation (each rotation lasts six months) from sale of dhaincha seeds and firewood. Profits from SRI<sup>18</sup> have been in the same range and the CRF was used to incentivize it as people otherwise found it a very risky proposition.

*“ Till few years back, we were forced to get loans at a 5% interest rate to lease farmland. Now we can use the CRF amount to do collective farming which doesn’t seem very burdensome and investment-heavy.”*

The women’s groups also created a **Disaster Task Force** in late 2011, with several sub-teams looking into different aspects of community life. The medical team of the Task Force achieved their biggest victory when they succeeded in getting the District Magistrate of Darbhanga to order for a medical camp to check the spread of measles among the children of the community. They achieved this by petitioning the Block Public Health Department about the lack of treatment facilities.

*“ People very openly told us that never before had they scene so many doctors/nurses/ANMs in our village. They were surprised to see how we had managed to arrange that. People now know that we are here to look after the interests of their families and children. Earlier women used to only worry about their own families, but through this initiative there was a rise in community spirit and cohesion.”*

### **Impact of Community Disaster Resilience Initiatives**

The 25-30 women who had adopted sustainable agricultural practices are now reaping the benefits of their new methods. They managed to reduce the costs of inputs by about INR 2000-3000 per woman per annum through the lower use of fertilizers, improving soil fertility and the better use of wastelands. They also reported increased income from collective cultivation of rice and dhaincha. The women earned about INR 1200-1500 per member per rotation, which proved to be a welcome

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<sup>17</sup> Not concrete

<sup>18</sup> System of Rice Intensification

additional income for their households. Women who opted not to sell the produce but save it for personal consumption also reaped benefits.

*“ Like before, we still take money to buy rice from our husbands, but since we grow our own rice, we spend that money responsibly on our children’s healthcare and educational needs. We also convince our husbands about practices like vermi-composting, mixed cropping and SRI.”*

Around ten women now practice vermi-composting at a fraction of the cost of fertilizers and pesticides while 25 others have taken up SRI on an individual basis. Thirty-five women of Harichanda now actively farm dhaincha on an individual (land leased using savings) and collective basis (using CRF). Thirty families are also making better use of available resources like wastelands by leasing that land at a fraction of the cost (nearly five times cheaper) and also using the unfertile, flooded wastelands for dhaincha cultivation. These practices have resulted in drastic improvement in the soil fertility, creating a win-win situation for both the farmers and the landlords.

Frequent knowledge exchange trips organized in collaboration with SSP have proved highly beneficial in inspiring women to expand their horizons. In fact, sustainable practices like vermi-composting have re-emphasized the wisdom of traditional practices followed by earlier generations. All women members of the SHG now prepare and keep aside dry food items at least two months prior to the monsoons, to ensure there is adequate food in case of flooding. Inspired by these women, others have also begun adopting this practice.

The program started with only eight SHGs in Harichanda. Since then it has grown to twelve, which demonstrates the success and popularity of the model. It has also inspired women from across the Panchayat to establish SHGs. Successful negotiations with the government have also helped mobilize nearly INR 21 lakhs of public funds via various government schemes and funds. Partnering with the government has not only meant petitioning and demanding improvements but also monitoring the functioning of government projects in the village - a task entrusted to the women SHGs by the government/PRI authorities themselves.

*“ We have been respected by government officials and representatives. Our minds have opened up and we are certainly more confident after having met various dignitaries. Earlier, we depended on our husbands to handle these matters. We had never imagined that there would be a day when we would ourselves go to meet officials and negotiate with them.”*

From voiceless members unheard even among their families, these women now contribute not only to their family’s income and growth but also to their village’s progress as well.

**Future Aspirations** - Women members are enthusiastic about experimenting not only with collective farming but also with collective livestock rearing using their pooled savings.

*“ We need to continue to work collectively if we are to succeed the same way as we have. We wouldn’t have any voice if we weren’t together. This way we know that we only march ahead and never back out or die down!”*

They are keen to acquire skills in livestock rearing so as to follow best practices and reap maximum benefits. As part of building resilience against floods, the women look forward to conducting a round of review mapping. Installation of toilets, better drainage facilities, and construction of new houses in high-lying areas continue to be among their top priorities. The Health Committee of the Women’s Task Force is exploring means to set up its own ‘samudayik bhawan’<sup>19</sup> that offers healthcare and schooling option during the annual months of flooding.

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<sup>19</sup> Community Centre





# Model Villages

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Tamil Nadu

# From Vulnerability to Empowered Role Models

## Keelamoovarkarai, Nagapattinam District, Tamil Nadu

### Context

In 2004, when the Indian Ocean Tsunami battered the east coast of India, the rampaging waves swallowed 6000 lives across the country. The coastal district of Nagapattinam in Tamil Nadu was the most affected on the Indian mainland, 76% of the total lives lost to the tsunami were from this district. Since then, other cyclones like Nisha (2008), Nilam (2010) and Thane (2011) have continued to wreak havoc in Nagapattinam. Apart from displacing people from their homes, each cyclone and the resultant floods also destroyed crops like paddy, groundnut and maize; and damaged catamarans (fishing boats), small enterprises and precious livestock.

### At a Glance: FactSheet

- △ **Location:** Keelamoovarkarai, Nagapattinam
- △ **Population:** 2260 (485 households)
- △ **Occupation:** Agriculture and Fisheries
- △ **Average Annual Income:** INR40,000-50,000
- △ **Participation:** 32 SHGs

Women stepped out from their homes to negotiate with local and civic bodies for developmental work in their communities. An emergency task force was created to forewarn, evacuate and provide for disaster relief to reduce casualties and damage due to disaster.

Every disaster in the region has meant a loss of at least one month's income for the community. For the predominantly fisher folk of the region, earning a livelihood had become a highly cost-intensive business due to the severe depletion of fish stocks. While earlier, traditional catamarans could reel in a good catch, now the fishermen had little option but to rely on diesel powered motor boats and expensive nets to go deeper into the sea to find fish.

Life for the villagers of Keelamoovarkarai got tougher with each calamity. Drinking water became scarce as the ground water got contaminated and salt-saturated to the point of rendering it unfit for both consumption and irrigation. The community had little choice but to depend on water tankers or the river Kollidam for their water needs.

### The Community Disaster Resilience Journey

For over a decade, 32 SHGs functioned successfully in Keelamoovarkarai, largely focusing on savings and credit functions. After the 2004 Tsunami, the community started to actively brainstorm about building disaster preparedness and resilience in order to minimize the losses suffered in every calamity.

Initially, it was a challenge to gain the confidence and trust of the community and Panchayats. The women of the fishing community faced stiff opposition from men, especially of the traditional village Panchayat, which is even more powerful than the elected Gram Panchayat. Until a few years back, many of the women members had not even stepped out of their houses. However, they soon realized the need for collective action and, as SHG members, they organized and attended meetings. They also began gaining the confidence to visit banks within and outside their villages.

The hazard and vulnerability mapping carried out in the village with the support of SSP included federation and SHG members, youth groups, the president of the Panchayat, and ward members. They collectively identified local issues like infrastructure, inadequate sanitation facilities, poor road conditions, unsafe drinking water, lack of drainage and water channels, insufficient awareness of disaster mitigation and the need for setting up an early warning system.

*“After our mapping and focus group discussions we approached the village Panchayat President. They initially they did not care about our activities. Through our continued effort, the village Panchayat has now come forward to solve some of the local issues with via the MNREGA scheme.” - A woman member*

After the mapping, the group presented a petition to the village president and the Block Development Officer (BDO) to carry out these activities. Simultaneously, the community ensured that these issues were raised in Gram Sabha meetings until all necessary clearances were secured.

*“ In the beginning whenever we talked about disaster management, no one really bothered but with SSP and the Women Federation’s guidance, we continued to mobilize the community, and conducted house visits to encourage participation from women.” - A group leader*

One of the first initiatives to be carried out by the Panchayat was the clearing of the Karuvelam shrubs that surrounded the village. These shrubs had led to several villagers getting entangled and drowning in the floods caused by the tsunami. The district administration also pitched in and completed road repairs, constructed drainage channels and cemented a one-kilometer-long village road under the tsunami fund<sup>20</sup>. This was a vital development as it ensured easy and quick evacuation in the event of a disaster.

**Building Partnerships:** From the very outset, the women’s group’s focused on building community ownership driven towards change. They ensured that key stakeholders like the local gram Panchayat and the Block-level Development Officer were equally involved in the infrastructure projects. Similarly, for other risks and vulnerabilities mapped, they began liaising with other institutions like the Fisheries Department and Thiruvangadu Primary Health Centre. The District Rural Development Office (DRDA) in Nagapattinam also contributed via capacity and skill building training programs for the community. The MS Swaminathan Research Foundation (MSSRF), Centre for Indian Knowledge Systems (CIKS), TVS and many other voluntary organizations also offered support to the women through various livelihoods and skill development trainings.

Groups of women were also trained in organic farming, mushroom cultivation, handicraft making, developing kitchen gardens and vermi-compost making. A learning exchange at the beginning of the project to Alli Vilaham (an organic village developed by CIKS, Chennai) instilled confidence in the women to participate in new experiments in the field.

*“ Initially banks never recognized us. But when we became part of Women federation, financial institutions started supporting us on various livelihoods and skill development programs.” - Amutha, Woman Member*

**Formation of a task force team:** With support from SSP, a 30-member disaster task force team was created to provide early warning and initiate the rescue of vulnerable people in the event of a disaster. Teams were created and divided into subgroups, including Early Warning, Rescue, First Aid, Monitoring, and Assessment. Each team had three members and an ideal gender balance. This task force was equipped to understand community needs, negotiate with the government, prepare the community to reduce risk, and train local people in search, rescue, warning, and rehabilitation.

This force is now providing training to other village communities to equip themselves in a similar fashion. So far, they have formulated task forces in eight neighbouring villages. On completion of training, the team even performed mock drills near the sea shore and all the team members proudly demonstrated their newly acquired skills to the public. The team also opened a bank account and initiated an emergency fund, with a contribution of INR 50 made by each member every month, which could be accessed in time of a medical emergency or other contingencies in the family.

### **Impact of Community Disaster Resilience Activities**

Traditionally people in this region held more fatalistic attitudes, resigned to nature’s fury. The Women’s Federation and the initiatives that they introduced in partnership with SSP introduced a change in mindsets. From silent, uncomplaining endurance, they transformed themselves through collective action into changemakers. They demonstrated that they could not only map risks and prepare the community to face disasters, but also become resilient to recoup post- disasters with

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<sup>20</sup> Fund under the Tsunami Relief Program of the state

minimum damage. The negligible damage left in the wake of cyclone Thane of December 2012 was due to the alert community response to the possible calamity.

**Emergency response & rescue efforts during the Thane cyclone:** A group of active women leaders alerted many villages by using messaging and mobile telephones based on messages received from the local Panchayat and the cyclone updates on television channels. They acted quickly to inform families inhabiting low-lying areas and organized the evacuation of 50 aged and physically challenged people and 300 others to safe-havens and shelters like government schools and cyclone centers. Basic needs of evacuees like food rations, milk, and water were also provided for until it was declared safe for people to return home. The team also worked with the local government and community to clear the area of electricity poles and trees, restore drinking water, improve roads etc.

Eight women leaders who led the disaster relief and rescue operations also visited the affected villages in Cuddalore and conducted a need assessment with communities, which they submitted to local authorities to replicate the model.

Over the last three years, another significant change has been the improvement in the overall health of the community, mainly due to increased awareness regarding relevant government healthcare schemes. The Women Federations also promoted the cultivation of kitchen gardens to encourage local food security and to curb anemia among women, bringing down healthcare-related expenditures.

Forty women from the groups that underwent training developed their own kitchen gardens. These women, who had earlier never stepped outside their village, now participated in peer learning and exchange programs in neighbouring villages of Nagappattanam and later in Maharashtra in Maharashtra. As many as eight such exposure visits were organized, which incrementally raised the confidence of the women in their own abilities to cope with, manage and bounce back from disasters.

**Future initiatives:** The group aspires to develop such task forces in other coastal villages in Cuddalore and Nagapattinam districts, while also setting-up a cyclone/flood warning system in their own village.

# Harnessing Women Power to Reverse Devastation

## Nochikadu, Cuddalore District, Tamil Nadu

### Context

Cuddalore was one of the worst affected districts of Tamil Nadu during the tsunami of 2004. Though the official figures pegged the number of dead in the disaster at 700, over 90,000 people living in the region were affected by the widespread devastation. Traditionally, the coastal district of Cuddalore has been highly prone to floods and cyclones. It also happens to be one of the more backward districts of Tamil Nadu. Cuddalore's population lost livestock worth INR 29 lakhs in the tsunami and over 500 hectares of land was rendered overly salty and unusable. The tsunami's devastation was compounded by subsequent floods and cyclones like Nilam, Nisha and Thane that pushed the already backward population further into a cycle of poverty and debt. More lives were lost in these disasters and the environment suffered severe reverses.

Over 90% of the residents of Nochikadu depend on agriculture for their living and cultivate traditional cash crops like cashew. However, growing cash crops is fraught with risk. Apart from being highly cost-intensive, the yields are sensitive to the soil and water quality. Nochikadu's soil and water resources had become highly polluted over two decades of suffering environmental reverses, with limited attempts by the community to undo the damage. As a result, the already indebted farmers began reaping more losses.

Similarly, lack of anti-pollution norms allowed chemical factories in the neighborhood to release harmful effluents into the rivers, polluting the drinking water source for communities living along the banks of the river. As the situation continued unchecked, health problems began to abound. The only respite from these woes was when monsoons brought rainfall to the region. However, the lack of irrigation facilities to tide over the summers led to a drastic fall in their income by as much as 40%. The already dwindling population of livestock also began to suffer due to fodder shortage and the dearth of clean drinking water sources.

### The Community Disaster Resilience Journey

The Women Federation of Nochikadu was formed in 2010 with 28 members. There were 32 active SHGs in the village and women assembled in groups for saving and credit based activities. Two community members, who were trained by SSP in 2011, organized the vulnerability mapping exercise of Nochikadu with the help of SHGs, youth groups, and the ward and village Panchayat members. The mapping identified key issues that posed a threat to the village and the community like water scarcity and pollution, soil degradation, a fall in agricultural production, the growing use of chemicals and health and sanitation related issues.

Initially, the biggest challenge for the Women Federation was to motivate local women to come out of their homes for meetings. Women leaders and the SSP facilitators literally went door-to-door to meet families and convince men of the gravity and urgency of the situation. They also coaxed them to encourage their wives to participate in the meetings. The women worked hard to build credibility and obtain the support of others in the community, Panchayat and other public institutions for support to organize health camps and meetings.

### At a Glance: FactSheet

- △ **Location:** Nochikadu, Cuddalore
- △ **Occupation:** Agriculture (especially Cashew)
- △ **Participation:** 32 SHGs and 28 Member Federation

Women groups shifted cultivation from cash crops to low input based organic farming, vegetable cultivation through shared labour, and vermi-compost production - witnessed a 25% rise in income earned by women. The areas experienced regeneration of the environment and replenishment of exhausted water resources.

**Building relationships:** The Women Federation members met with the block-level agriculture and horticulture officers in Kurinchipadi, the Horticultural Department and the Agricultural research centre in Cuddalore to create a network of support for the women. This network helped the women procure certified seeds, bio-fertilizers, saplings and agriculture equipment at subsidized rates.

In 2011, the Centre for Indian Knowledge System (CIKS) supported the training of 28 women in organic farming, vegetable cultivation and vermi-composting. A three-day training program on mushroom cultivation and a day-long orientation to understand methods of pest control were also organized for the aspiring organic farmers.

Soon after, women in Nochikadu began to maintain two vermi-compost units and commenced vegetable cultivation using bio-fertilizers. The women's groups also leveraged credible relationships that the Women Federation had developed hitherto with banks and cooperative societies, aimed at accessing funds and other crucial support for varied infrastructure- and development-related activities in the village.

One of the first initiatives taken up by the community was to replace cashew cultivation with less water-intensive crops like ground nut, sesame, pulses, vegetables and a casuarina nursery. People developed nearly 250 small ponds in and around their fields to save ground water during the rainy season. These water bodies helped increase water availability for cultivation by a minimum of six months. The women also started practicing crop rotation; for instance, after a harvest of groundnut or black gram, they would plant vegetables or start a casuarina nursery to ensure a minimum income to smoothen the family's consumption. The adoption of these environmentally friendly practices along with the use of bio-fertilizers significantly reduced the cost of cultivation by 20-40%. To address labor issues, the women's groups worked collectively to optimize their time. They also decided to aggregate and market their produce together.

*“ We started working together to reduce our costs and time; our vegetable products are sold in nearby villages and towns by our group members.”*

Another focus area for the women was the below-average quality of healthcare provided at their local PHC. They met with the district-level health functionaries and convinced them to organize two health camps and also orientation programs for the community. These were organized to help residents consult a general physician for a basic health check-up. A Village Health Nurse (VHN) was also arranged to visit Nochikadu regularly. Now, with the support and assistance from women leaders of the village, the nurse attends to those in need of medical intervention. Referral services and access to specialized care was also made available in collaboration with the Pondicherry Institute of Medical Sciences.

Steps were also taken to develop the local infrastructure in partnership with the Gram Panchayat and the District Rural Development Authority (DRDA) for construction of toilets. This was the biggest step taken towards improving hygiene and sanitation in the village. They also lobbied for building a 100-meter-long cemented road in the village.

SSP and the Women's Federation organized six peer learning exchanges for the women from Nochikadu to model villages in Maharashtra and within Tamil Nadu. These visits helped build the group's confidence levels and elevated their standing in the eyes of their family members and the larger community.

### **Impact of Community Disaster Resilience Initiatives**

The vermi-compost unit started by the SHG members in Nochikadu now involves 25 women and is active in six villages. They also built a separate shed for compost production with a capacity of ten compost beds. Each week, they harvest about 20 kgs of vermi-compost from each compost pit, producing an impressive 800 kg from the ten compost pits in total in every cycle. They sell this compost to the horticulture department and at the local market at INR 4-6 per kg. The vermi-compost production model has now spread to other parts of Cuddalore and neighbouring Pondicherry too. These vermi-compost units can provide each woman an income of INR 400 -600 per month.

The shift from cash crops to food crops and the use of compost and bio fertilizers has improved the soil quality, reduced the dependence on intensive irrigation while the vegetable rich diet has improved women and children's health in the community. With the decrease in cultivation costs, the average income of the women has increased from 10 -30%.

**Future Plans:** The group is motivated to work harder to improve the community's access to government schemes. They are also trying to adopt new technologies like drip irrigation into their local agricultural practices to boost their agricultural production. They also intend to promote a producer company and develop at least 40 women entrepreneurs from their village. They believe more capacity building trainings on varied facets of agriculture could help improve their skills and capabilities.



# Model Villages

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Maharashtra



# Leading Water Conservation and Drought Coping Practices

## Walki, Washim District, Maharashtra

### Context

The Vidarbha region of Maharashtra was once the rice bowl of Maharashtra. Unpredictable monsoons, combined with the shift to monoculture of input-intensive cash crops like cotton and soybean, wreaked havoc on the region's ecosystem. Today, Vidarbha faces the twin threats of food- and water-insecurity. The villages of Vidarbha reflect this grim reality. An overwhelming 90% of the residents of Walki village in the Washim district of Vidarbha, Maharashtra rely on agriculture as their chief source of income.

Walki relies on seasonal rains for irrigating their crops. However, the high returns from the cultivation of cash crops lured farmers from Walki to change their cropping patterns. In the last two decades, the farmers moved away from traditional crops like sorghum (jowar), millets (bajra) and cereals to water-intensive cash crops like cotton and soybean. When climate change began playing spoiler, untimely rains and long summers made farming conditions more challenging. The farmers' difficulties were compounded by the rising cost of agricultural inputs (seed, fertilizers and pesticides) that made farming unviable. The intensive and widespread use of chemicals also adversely affected the ecosystem - leading to soil degradation, ground water pollution and pest resistance.

Traditionally, the crop residues from jowar became the feed for their livestock. However, the shift from traditional farming to cash crops also decreased the availability of fodder. The prolonged years of severe drought also affected the water table in the region. The reservoirs and wells dried up and the population of livestock began to dwindle. The skewed emphasis on chemical-aided cash crops at the expense of local and low cost food crops also added to the food insecurity of the community. As the debts began piling up, the hapless farmers had few options left to explore. According to an estimate by the National Crime Records Bureau, 8702 farmers committed suicide in Vidarbha between 2001 and 2010. In the case of Walki, 71% of the farmers defaulted on loans taken for agricultural purposes from banks.

To meet crucial living expenses, many in the community had to borrow from informal local moneylenders. Food- and water-insecurity led to malnutrition. Bacterial infections like dysentery and typhoid fever became common and the majority of the women became anemic.

### The Community Disaster Resilience Journey

SSP facilitated the detailed mapping of the village and identified the key issues that the women's groups wanted to address - water scarcity, health and sanitation, soil erosion and food security. Many SHG meetings were conducted and a Gram Sabha was organized to discuss the issues and explore solutions. At first, the men and the village elders, habituated to making all decisions, were skeptical about the efforts that the women's groups wanted to initiate. Doubts were also expressed over the ability of the women, who had so far been relegated to their households, to accomplish all that they had set out to do.

*“The men have always dominated agriculture and all the decision making whether it was farming or local issues and this was one of our biggest challenges. Earlier they never called us*

### At a Glance: FactSheet

- △ **Location:** Central Vidharbha Region
- △ **Population:** 900 (212 households)
- △ **Occupation:** Agriculture

Over INR 12 lakhs was marshalled from various government sources to recharge wells, widen ponds and build check dams and bunds. Walki has sufficient reserves to meet its drinking water and agricultural needs for the next 2-3 years and is a model village.

*for Gram Sabha or discussed anything related to the matters to our village with us.” - Vandana Bai*

Gradually as the groups linked with the PRIs, district authorities and other institutions to access government schemes like the MNREGA and relevant information on agriculture, the men and other village leaders changed their opinion.

**Building partnerships and capacities:** SSP facilitated a partnership with the Agricultural University at Akola to train the community on new practices and techniques in agriculture. This resulted in the setting up of an Agriculture Formation Centre in the village. These formation centers were advised by **Krishi Doots**, agriculture practitioners who taught other farmers about the benefits of friendly pests, use of bio-pesticides, steps in seed preparation, soil testing, timing for sowing and ways to reduce the use of chemical pesticides. They also helped the farming community in Walki to optimize the efficient use of appropriate chemical fertilizers and provided them critical information on available government schemes.

The Krishi Doots thus began to slowly change the attitude of farmers, which led to the adoption of more sustainable and environmentally friendly practices. Apart from working closely with the Panchayat Samiti and district and block agricultural departments, the women’s groups also initiated partnerships with other institutions like NABARD, Cooperative Banks, and Dr. Panjabrao Krushi Vidyapith for agricultural/technical knowledge support, credit facility and access to relevant schemes and services. They also tapped into available technological advances through the agriculture information centre. The community used mobile-based technology supported by Reliance Foundation and MSSRF to receive updates on the market rate, weather etc.

The women’s groups tackled water scarcity, another high-priority issue, by introducing efficient water management practices like recharging community water sources like wells and ponds, constructing new structures where needed, and planting trees. As much as INR 150,000 were mobilized through Government schemes and the MLA Fund and over 70% of the community came forward to volunteer their labor and time.

Partnerships with the district authorities, access to the Gram Vikas Yojana, and a government fund of INR4 lakhs were crucial facilitating factors in carrying out the water conservation initiatives in the village. The women led a campaign to recharge the existing wells through diverting rain water, the deepening and widening of ponds, wells, and the construction of check dams and bunds to increase the water level. Effective techniques of land mulching also improved the surface water availability on farm land, soil moisture and reduced evaporation losses, thereby improving soil fertility. Use of efficient irrigation systems such as drip irrigation and sprinklers also helped reduce the overall water consumption.

The local authorities were persuaded to repair the access roads to the village. The community contributed their labor for the desilting of a local nala (drainage system). Over INR 1.25 lakhs was mobilized towards planting of 2000 trees along the roadside in collaboration with the Forest Department to improve the green cover in the arid region. Another notable achievement was the creation of a 2-km-long, 80-foot metalled road, constructed at the cost of INR 1 lakh, sourced from the 13th Economic Plan.

The fertile soil extracted from wells and ponds was sold to the farmers for a small fee of INR 150. The farmers then used these in their fields to rejuvenate their pesticide-polluted cultivable lands. The community lobbied with the NABARD and Panchayat and received a sanction for the construction of loose boulder structures, plugs for water percolation and contour building. All these water harvesting activities transformed Walki from a drought-ravaged area to a model village, a leader in water conservation and drought coping practices.

### **Impact of Community Disaster Resilience Initiatives**

The transformation of Walki over a period of two years inspired over 500 women from nearby villages and districts to visit the village and learn from their success. Watershed management and techniques for using and implementing the recharge pit program became the key focus of these peer learning exchanges.

As many as 90 recharged pits have been constructed across Vidharbha and Marathwada, following the Walki model. The women's group from Walki has visited more than 20 villages in the district to share their knowledge and experience of resource management and building disaster resilience. Over the last two years, greater awareness of the harm caused by the indiscriminate use of pesticides and fertilizers has encouraged other villages in the area too to adopt low-input based organic farming. This has resulted in a steady drop in the use of chemicals and today each family manages to save at least INR 2000 per acre. Also practices like soil testing, vermi-composting and local seed preparation saves each farmer INR 6000 per year.

Walki today is a water-secure village and has enough water reserves for the next two-three years for drinking and irrigation needs.

**Future Plans:** The community's foresight and willingness to change their ways has led to the recharging of their water sources and stabilization of agriculture-generated income. The community now looks forward to playing a proactive role in managing not just their natural resources effectively but also sharing their knowledge and expertise with others. The next goal is to train many more women leaders who can spearhead development initiatives in their own villages and also inspire others to do the same.

# Advocating Self Reliance and Sustainable Development

## Katgaon, Osmanabad District, Maharashtra

### Context

Katgaon, a village in the Osmanabad district close to the border that Maharashtra shares with Karnataka, was a classic example of the damage wrought by climate change and poor agricultural practices. Inadequate and untimely rains, rising temperatures and depleting water tables had led to drought, crop losses and the spread of disease amongst the community and their livestock populations.

Like in other villages of Marathwada region of Maharashtra, Katgaon's population was heavily reliant on agriculture for its main source of income. The villagers too had moved to growing cost-intensive cash crops like sugarcane and cotton over traditionally grown ones like millet and sorghum. Water-intensive agriculture had depleted the water table by as much as 65%, leaving bore wells and reservoirs dry. Continuous droughts over two years reduced the yield of crops like sugarcane, grapes, soyabean and onions further. In some cases, farmers cut their standing sugarcane crops and razed down their grape orchards, as there was no water available for irrigation. Fodder availability was also low. The situation was compounded by unpredictable weather conditions and rising temperatures, which led to an outbreak of infectious diseases within the livestock population.

### At a Glance: FactSheet

- △ **Location:** 60kms from Osmanabad
- △ **Population:** 10,000 (2500 households)
- △ **Occupation:** Agriculture
- △ **Average Annual Income:** INR 25000 - INR 1Lakh
- △ **Participation:** 40 SHGs + 25 member Krishi Mahila Mandal

500 women initiated organic farming of vegetables and cultivation of traditional, less water dependent crops. Mobilized funds and support for recharging as many as 100 wells and a fully equipped Primary Health Centre now accessed by neighbouring villages.

Built a rich pool of 100 women leaders who help in replicating the success of these initiatives.

### The Community Disaster Resilience Journey

There were 40 active SHGs in Katgaon and a Krishi Mahila Mandal, which was set up with the help of SSP. The vulnerability mapping exercise, facilitated by SSP, witnessed the participation of over 150 women from the community. The key issues that came up were decreasing agricultural output due to vagaries of weather, the lack of quality drinking water, health and sanitation related problems and a pressing need for anganwadis. From the very outset, the group ensured maximal involvement of the Sarpanch and the Gram Panchayat and built their cooperation into all plans and activities.

*“To develop a partnership, both sides should recognize and respect each other – partnerships develop when there is confidence, trust and commitment.”* –Sanjivini, A Woman Member

As the women came together and took the lead in addressing local issues, they also gained confidence in their own abilities. Development committees on varied issues were formed so as to allow each group to imaginatively expand its ambit. The women worked hard to build relationships with the local- and district-level institutions to ensure support for their planned activities.

### Building Partnerships

Scientists from Krishi Vigyan Kendra (KVK) Tuljapur visited Katgaon to provide on-site training on organic farming, soil testing, local seed preservation and conservation. KVK collaborated with

block- and district-level agriculture departments and trained 100 women in local seed preservation, soil testing and intercrop/mixed crop cultivation. Another 150 women were taught vermi-composting. Twenty-five women farmers were also taken to Bangalore for a study tour organized by the district agricultural office that taught them about developing kitchen gardens and group farming.

Sixty-five women from Katgaon and nearby areas attended a ten-day-long training organized by SSP on community entrepreneurship. They actively participated in sessions that looked at the theoretical and practical aspects of starting and managing a business, conducting need analyses, marketing and account keeping. Following this, fifteen women started their own small enterprises, including cloth and bangles stores and stalls for homemade products like noodles, papads and milk.

In 2012, two farmers' field schools were also organized to help women understand jowar and gram crop management. These programs built the capacities of women at grassroots and helped raise their confidence. They began slowly transforming into tough negotiators, ready to take charge of their land, village and its resources.

Water scarcity was another key problem that emerged during the vulnerability mapping. The women tackled it with the support from the GP and the MNREGA scheme. One hundred defunct wells were cleaned, deepened and widened at the cost of INR 2 lakhs per well. These were then recharged to build water sufficiency for the village. Soil was extracted from a 16-acre pond, the biggest water resource across Katgaon, at the cost of a whopping Rs 2 crores, by tapping into various schemes. The water from this pond caters to a vast variety of community needs, including livestock and agriculture. All these efforts have led to an increase in the ground water level as well as guaranteeing at least five years of water availability for agriculture and other purposes.

With the Gram Panchayat's support, the women's groups also accessed the Nirmal Abhiyan scheme, a Maharashtra and Central Government scheme for BPL families, which aided in the construction of much needed toilets for 35% households in the village. The women also succeeded in procuring land from the GP and, with support from the Women and Child development department, opened four anganwadis (child care centers) in the village.

The women's groups also addressed the health concerns of the community by regularizing the functioning of the Primary Health Centre (PHC) at Katgaon. Although previously functioning, it was not running optimally as the doctor did not live in the village and was only available for a fixed period every day. Representations by the women's groups and meetings organized with the district health officials led to the guarantee of a doctor's presence in the village. Buoyed by the success of their negotiations, the group met with district authorities to further improve local health infrastructure.

One of the potentially hazardous practices identified by the women during the mapping exercise was the indiscriminate dumping of waste around the village. The SHG members worked with Gram Panchayat and, in a massive exercise that deployed 100 tractors, cleared the accumulated waste over a period of one month. Thereafter, the waste was segregated and the biodegradable component put to good use on the agriculture land.

## Impact

The current goal of the women in Katgaon is to make their community 100% free from open defecation in the coming years by ensuring adequate toilet access for their population. They also ensure the periodic conduct of health melas and community checks, which assure check-ups for women for common health ailments like anemia and malnutrition. Today, the village and its residents have access to not just a doctor but also a nurse, a basic stock of medicines and an ambulance service. This health care centre is now accessed by more than 12 neighbouring villages.

The Gram Panchayat resolved the issue of unsafe drinking water by laying a new pipeline and installing a tank and filter to improve the water quality. As a result of this project, waterborne diseases in the community have reduced significantly in number.

Waste accumulation, which had been a big issue in Katgaon, is now a thing of the past, as waste segregation continues to be adopted as a best practice.

The organic farming initiative that began over two years ago has been expanded to include more than 500 women in Katgaon. A measure of its success is the significant increase of over 30% in women's earned income. Their role in improving their individual lives and those of the community has earned them respect and recognition. There has been a palpable improvement in the health of the community due to the use of organic home-grown vegetables and jowar (sorghum) cultivation for their personal consumption too. The community also reports a reduction in the expenditure on healthcare and vegetable purchases from the market.

Before any decision is taken on a development issue, the Sarpanch now takes the women's groups into confidence. Block and district government officials have begun visiting the village regularly to keep them apprised of subsidies and other supporting schemes.

Today, a rich pool of more than 100 women leaders in education, health, sanitation and community enterprises has been created. This 'expert group' from Katgaon has also visited around 40 villages in the neighbouring districts to share their skills and experience with other women. More than 50 women from other villages have visited Katgaon to learn about best practices in resilience building.

Emboldened by their success, women are eager to experiment with new varieties of crops as well as to try different agricultural techniques. Another group of five landless women took an acre of land at lease for a year for INR 5000 to start collective organic farming. They enjoy working together and believe that their investments will yield favorable results. The group is currently waiting for the rains to start sowing bajra and tur under inter-cropping and plan to use their own local seed in the future.

**Future Plans:** The women's groups want to take greater initiative and learn new agricultural practices to improve their crops. They also want to ensure that every household has a toilet in their village. The women's group also dreams of setting up a college in their village. They look forward to doing all this in a collective, as they believe therein lies great strength. They also look forward to many more exposure trips and learning visits to other blocks and districts to learn from their peers.

# Revolutionising Lives Through Sustainable Organic Farming

## Gandhura, Osmanabad district, Maharashtra

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### Context

The Marathwada region of Maharashtra is not just strapped for resources but also highly prone to drought. The eight districts of Maharashtra that fall in the Marathwada region are among the 100 poorest districts of India. Lack of rain, unpredictable weather conditions and little to no conservation methods in place to manage water resources have added to the hardships of the communities living here.

For the inhabitants of Gandhura in the Osmanabad District of Maharashtra, water scarcity had become a way of life in the last five years. Climate change, coupled with a systemic neglect of traditional water conservation practices, had resulted in perennial drought. For the pre-dominantly agrarian community of Gandhura, it became difficult to eke out a single kharif crop. As a result, there was critical lack of fodder for the livestock as well.

The shift from food crops like sorghum and millets to water-intensive sugarcane and other cash crops that took place in Gandhura began over ten years ago. Lured by the high returns yielded by cultivating sugarcane, the farmers traded in their food crops. What they did not realize was that a hectare of sugarcane consumes 70,000 liters of water per day, which is equivalent to the daily requirement of 3,000 people. The sugar factories that fuelled the need for sugarcane in the region, apart from using up water resources, also contributed to severe water pollution. The result was a drastic drop in the water table across Osmanabad district by over an average of six meters over the last five years.<sup>21</sup>

As a result, Gandhura's villagers began to face acute drinking water shortages. There was also little water left to irrigate their crops or for their livestock. About 90% of the community was forced by the acute water scarcity to abandon cash crop cultivation, which drastically impacted their incomes and quality of life. The dehydrated land, stripped off its nutrients and polluted by the excessive use of chemical fertilizers and pesticides, had also hardened to the point of being useless for cultivation. Livestock perished to hunger and disease. The government intervention to improve the plight of these unlucky farmers was scattered and temporary. The aid focus was largely on drought relief measures like supplying drinking water at sporadic intervals and setting up an animal shelter. There was no attempt made to initiate policy-level changes or look at long-term solutions towards building community resilience.

### The Community Disaster Resilience Journey

Nine SHGs were already active in Gandhura but their focus had been largely on small savings and providing loans to its members. The Women's Federation and SSP spearheaded the formation of Krishi Mahila Mandal (KMM) in 2010 with 25 members. They mobilized women and conducted vulnerability mapping trainings within 20 villages to identify the key issues with respect to agriculture, livelihoods, environment and livestock. The trainers returned to work with the community in partnership with the PRIs and helped the women to take the Sarpanch, Gram Panchayat, ward members and village elders into confidence. Together, they mapped vulnerable areas and village resources.

*“Our Gram Panchayat was not supportive in the beginning due to lack of confidence in our skills and leadership. However, when we started identifying issues through various activities and met government officials many times in a group and demanded more information, training, support schemes to sustain our activities, the Gram Panchayat started recognizing*

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<sup>21</sup> Sugarcane guzzles but cash dazzles, *The Telegraph*, April 17 2013 - Jaideep Hardikar

*us. After doing mapping, we realized what is the problem in our village and how could we address it.” – Anita Kulkarni*

### **Building Partnerships**

SSP facilitated the partnership of women’s groups with a Krishi Vigyan Kendra (KVK) in neighbouring Tuljapur, block and district agricultural offices and Parbani University. KVK trained 50 women’s groups in six villages on a myriad of activities ranging from organic seed processing, land preparation, soil testing, production of organic compost, pest control and selection and timing for seed sowing to marketing their products. In another training conducted by KVK, twenty-five women farmers from ten villages were taught about internal mulching, the use of water and the selection of seeds according to the land quality. In all, more than 150 women were trained in soil testing, 20 in organic composting, 100 in local seed preparation and more than 100 women were given exposure to inter-crop/mixed crop cultivation.

The KMM also partnered with NABARD and ATMA (Agriculture Technology Management Authority) on organic farming-related initiatives. This association led to creative initiatives like information melas for farmers and facilitation of group exposure visits.

*“ It was difficult in the beginning to convince our family and community about these agriculture practices. Our husbands were focused on cash crops even though there was no water. There was no trust or self-confidence within the community. Women hardly ventured out and we did not know how to take decisions. All these years our community leaders and husbands were making all the decisions and plans.”*

Efforts were taken to recharge water bodies in partnership with the Gram Panchayat and a three-km-long water pipeline was created. Around 110 wells were constructed in this manner and recharged under the MNREGA scheme. Soil extracted from four ponds not only helped in deepening the water source but was also used to enrich more than 750 acres of farming land.

Women also turned their collective attention towards the health and sanitation issues faced by the community. They accessed the MNREGA scheme in collaboration with the Panchayat and built as many as 215 toilets. They also ensured that there were regular visits by doctors to the local Primary Health Centre. These measures, along with the consumption of nutritious organic food, improved the overall health of the community, bringing down hospital visits and expenditure on health.

### **Impact of Community Disaster Resilience Initiatives**

The Women’s Federation took charge of verifying community proposals and identified those members with the highest potential to sustain and replicate these initiatives in other areas. SSP lent its support via the Innovation Fund, which amounted to a substantial INR 1 lakh to translate their ideas into action. The women had complete control over their funds and their key focus was low-input based agriculture, multiple cropping with water efficient varieties and the preparation of seeds to reduce the overall cost of production. Subsequently, thirty women, of which four were landless and had leased land for cultivation, began organic vegetable cultivation in selected areas of their land.

Initially, women cultivated water-efficient crops like Toor, Urid, Soya and Moong on small, half-acre plots of their family land. However, they soon began expanding their area of cultivation to two acres. Those who were landless leased land in their names from big farmers and initiated collective farming. They also adopted mixed cropping, which increased the yield for both crops. There was enough for both their own consumption and retail in the local market. Thus, the women managed to raise their incomes significantly by about 25%. The women also managed to secure drip irrigation sprinklers and other equipment for subsidized rates from the government. This further improved water management and minimized consumption.

The training in local seed production from KVK inspired around 100 households to begin germinating their own seeds over 200 acres of land. This resulted in huge savings as seed prices had gone up as much as three times in the preceding few years. Optimum utilization of water, organic and collective farming and methods adopted to enrich the barren lands also bore fruit within a couple of years. The cost of cultivation per acre decreased from INR 10,000 to INR 7000. Additional



training on sales and marketing strategies gave the women farmers greater confidence to take their products to the local markets.

*“ We were using chemicals earlier and it damaged our soil and environment. We came to know about the bad practice of using chemicals and fertilizers after joining Krishi Mahila Mandal and received training. We are now converting agriculture waste to bio-compost.” – Anita Kulkarni*

In the last three years (2011-2012), as many as 12 learning exchanges occurred across Maharashtra, Bihar, and Tamil Nadu, in which over 300 women participated to transfer best practice stories. Fifty women leaders from four states took part in a conference in Bihar that proved to be a big morale booster. The woman leaders were also instrumental in sharing their learnings in 40 villages across Osmanabad and Nanded in Maharashtra.

*“ To address water scarcity and lack of quality food, conversion of cash crops to food crop was a big change in our life. We have convinced our husbands and community by doing it and showing good results in organic farming. Now our family also converted from cash crops to food crops and sugarcane remains only on 10% of land.”*

The most significant outcome of these initiatives has been the growth of self-esteem and confidence among women members. They began believing in their abilities to make a difference to their own lives and their community's all-around development. Today, women are at the core of various village development committees and proactively take the lead in meetings and Gram Sabhas to monitor the local health, education and water agendas of the village.

*“ For any issues in the village, now the Gram Panchayat approaches us for our ideas and suggestions.” –Damyanti Bosale*

**Future Plans:** The women's group looks forward to greater access to technology, growing collective farming and replicating similar initiatives in the state. The next actions on their wish list are starting a dal mill and setting up a company to sell their produce directly to the market. They also hope to develop more community leaders with expertise in building community resilience.

# Annex 1: Case Study Questionnaire

## Case Study Questionnaire - SSP-World Bank Project

**Introduction:** I am a consultant from New Delhi and am working with SSP to compile their achievements and progress on the Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience project and CCA across rural communities in Maharashtra, Tamil Nadu and Bihar. You all have been champions of grassroots innovations and I am here to learn from you all. It would be great if you could share insights about your experiences. I have a questionnaire and it will take about two-three hours to complete this conversation.

### Section 1: Demographics

1. Name of the Village:
2. Name of Panchayat:
3. Name of the Zila:
4. Name of all the Members of the Group & Total Number -


5. Average Age Profile of the Group

Age Brackets	Number of Members
Below 25yrs	
25-35yrs	
35-45yrs	
45-55yrs	
Above 55yrs	

6. Average Educational Profile

Education Brackets	Number of Members
Illiterate	
Literate	
1 <sup>st</sup> -4 <sup>th</sup>	
5 <sup>th</sup> -7 <sup>th</sup>	
8 <sup>th</sup> -12 <sup>th</sup>	
B.A	

7. Social Profile (Numbers and Types)

	No. of Members	Types
Schedules Castes		

<i>Scheduled Tribes</i>		
<i>OBC</i>		
<i>General</i>		

#### 8. Occupational Pattern (of the Women Members)

<b>Categories</b>	<b>Number of Members</b>	<b>Comments</b>
<i>Agriculture</i>		
<i>Unskilled Construction Work</i>		
<i>Skilled Masonry/Artisanship</i>		
<i>Micro-enterprise</i>		
<i>Others</i>		

*General Occupational Profile and History of the Village (As shared by the women, community leaders and local community workers):*

## Section 2: Context

9. Please describe for us the nature of natural calamity that you encounter every year/once in a few years. (*Floods in Bihar*)

10. Have you noticed changes in the pattern of these natural calamities over the years? if yes, what have they been?

11. What were the long-term changes that you have witnessed in your family and community/ village due to the natural calamities?

- a) Increased migration (in your family and community)? Please explain.
- b) Rise in prices of essential goods? Please explain by how much and what were the challenges that this caused.
- c) Changes in your soil condition and cropping pattern? If yes, what were these changes?

12. What extent of losses have you and your family faced over the last five years due to the natural calamities? (*Note to Interviewer: Following points could be guiding points to express losses*)

- a. Material/Asset
- b. Livelihoods
- c. Access to Basic Necessities and Infrastructure
- d. Social Capital/Networks

13. Prior to your association with this project, how would you cope after the occurrence of a calamity?
14. What support would you get from the government or local Panchayat?
15. What positives and negatives did you notice about the government support that you received?
16. Did you ever try to raise your voice or speak against wrong doings/inefficiencies of the government?
17. What happened when you did raise your voice?

### Section 3: The Community Disaster Resilience Journey

18. When did you first hear of the Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience program? How did you hear about it?
19. What were the reasons for you to get associated with the program?
20. What did you most like about the project's concept - what was new or uplifting about the concept for you? (*Guiding Points for Interviewer: that women can be in charge of preparing for, reducing risks and reorganizing life after or during a disaster; that you could take the lead in the process*)
21. Please explain in detail your experience with the program (risk and vulnerability mapping).
  - a) How were you organized?
  - b) What training did you go through especially for vulnerability mapping?
  - c) What were the main vulnerabilities that you identified?
  - d) What solutions/ activities did you identify for addressing the vulnerabilities that you mapped?
22. How did you prepare yourself for implementing the solutions/activities? Did you go through any training/exposure visits?
23. Please give us a step-by-step account of the actions that you have taken as part of your disaster resilience program. (*CRF, Committees, Peer-learning and knowledge exchange, dialogue/collaborative efforts with government authorities and local Panchayat leaders, etc*)
24. What challenges did you face as you went along with your activities (*with anecdotes*)?
  - a) Within your group
  - b) From family and community
  - c) From Government officials or other external stakeholders.

25. How did you learn to negotiate with your larger community and government?
26. What were the successful points of negotiation with your larger community and government?

### Section 4: Impact

27. What changes have you begun to notice in your village due to your community resilience efforts?
28. How many families have benefitted from your group's efforts?

29. Do you see yourself differently after this experience? (*community leader/higher self-esteem/etc*)
30. Are there any stories that you would like to share, about the impact of your work?
31. Where do you see your initiative going in the next five years?
32. Who will take these initiatives forward?
33. What needs to be done to sustain and take your work forward?

## Annex 2 - Partner Interview Questionnaire

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1. Before your partnership with SSP and the Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience project, how did you go about preparing communities for the imminent floods and then how did you conduct post flood rehabilitation?
2. Five years ago, what was your perspective and approach to disaster management? What was your community's, especially rural women's approach to living and coping with disaster?
3. When you first heard of Building Women's Leadership and Fostering Collaborations toward Community Disaster Resilience project, what were your immediate thoughts? What about the project concept were you most attracted to? What about the concept were you the most skeptical about?
4. Why did you agree to partner with SSP on this initiative?
5. What have been your key insights and learnings over the last three years?
  - a. Please explain in detail, and with anecdotes, keeping the following in mind :
    - i. Mindsets of women and the community
    - ii. Mindsets of local government officials
    - iii. Mindsets of your own team
    - iv. The training of women (vulnerability mapping, climate change, basic services, livelihoods and local partnerships)
    - v. The ability of women to handle a fund independently
    - vi. Formation of task forces by the women leaders - what were their key responsibilities
6. What were the key challenges that you faced?
7. Which of the challenges were you able to resolve successfully; which challenges persist. Reasons for both.
8. Please describe the details of the Community Resilience Fund. What would be your assessment of the performance of this fund?
  - a. What were the challenges that you encountered?
9. What according to you has been the most significant achievement of the community disaster resilience project in your area?
  - a. Please explain in detail, and with anecdotes, keeping the following in mind :
    - i. Impact of the program on the larger community
    - ii. Mindsets of women and the community and how women perceive themselves
    - iii. Emergence of women's leadership
    - iv. Mindsets of local government officials
    - v. Partnerships between local government officials
    - vi. Mindsets of your own team

- vii. The training of women (Vulnerability mapping, climate change, basic services, livelihoods and local partnerships)
- viii. The ability of women to handle a fund independently
- ix. Formation of task forces by the women leaders - what were their key responsibilities

10. Have you witnessed organic replication of this program? If yes, in what ways? Who and what is driving this replication?
11. What do you see as the future of this initiative. What role would you like to see your organization play?
12. What would you do differently, if you had to design this program again?