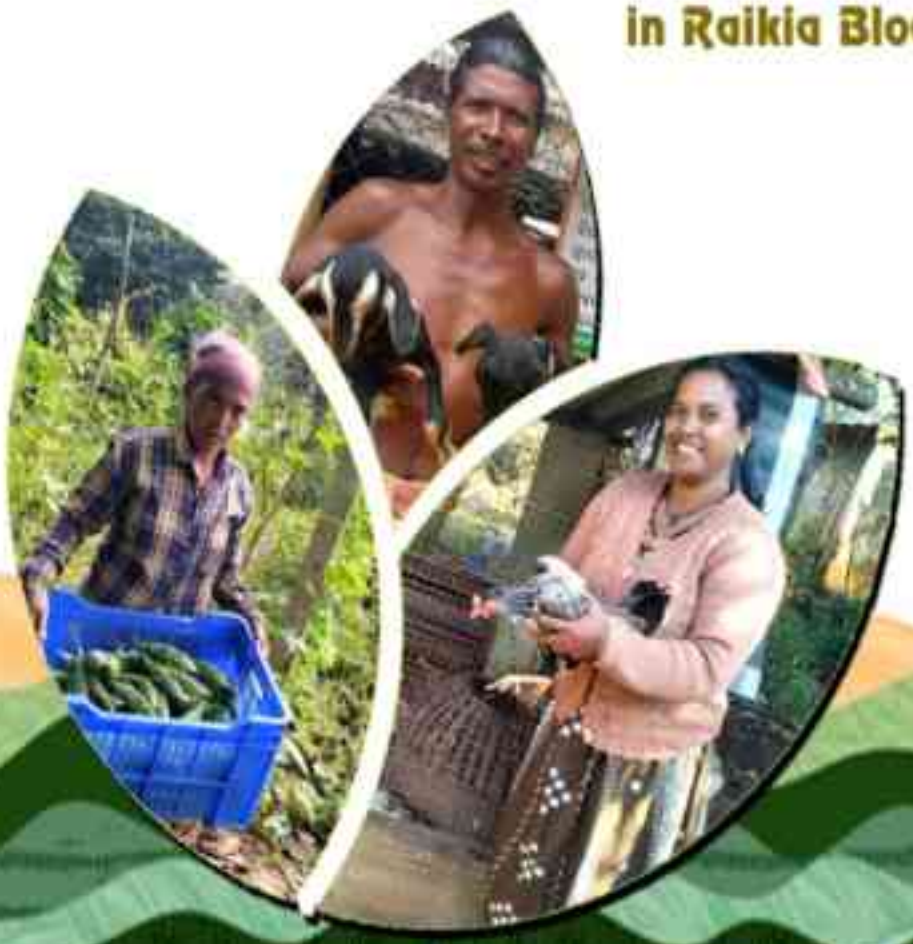
A Report on

Special Programme for Promotion of Integrated Farming

in Raikia Block, Kandhami



SWATI, Kandhamal

The Project

Special programme for Promotion of Integrated Farming in tribal Areas (SPPIF) is a state-sponsored initiative focused on comprehensive agricultural development by integrating crop, livestock, and fishery sectors. The program aims to improve farmer livelihoods through optimal resource utilization, diversification, and value chain interventions.

The Department of Agriculture & Farmers' Empowerment, Government of Odisha has been actively promoting various models of integrated farming systems across the state. Integrated Farming aims to establish the interconnected system, incorporating crops, animals, and subsidiary enterprises to optimize resource utilization and mitigate adverse environmental impacts. The SPPIF programme has been implemented in 9 District of Odisha. (Koraput, Rayagada, Gajapati, Nuapada, Malkangiri, Bolangir, Kalahandi, Kandhamal, Mayurbhanj& Malkangiri) with the following objective.

1. Objectives

- Optimum utilization of available natural resources with principles of Reduce, Recycle, Reuse & Recovery.
- Promotion of site specific and landscape-based farming systems through diversification, intensification, and integration in cluster approach.
- To improve livelihoods and income of farmers through enterprises, marketing, and value chain interventions by WSHGs/FPOs.

Social Welfare Agency & Training Institute (SWATI), Phulbani, was selected as the facilitating NGO for implementing the SPPIF project across 10 Gram Panchayats of Raikia Block, Kandhamal District.

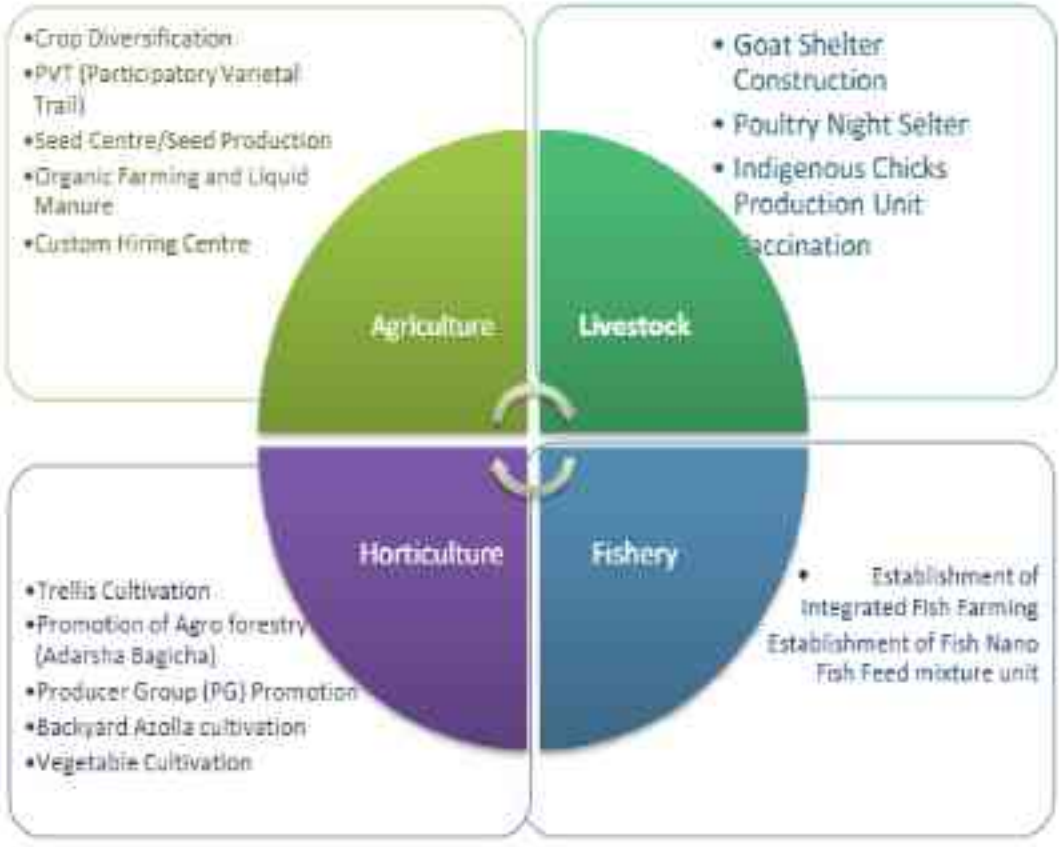
Key Features

Resource Optimization	Cluster-Based Implementation	Livelihood Improvement	Technology Diffusion	Community Institutions
•The program emphasizes the principles of Reduce, Recycle, Reuse, and Recovery to make the most of available natural resources	•SPPIF is implemented in clusters, with a focus on specific areas to ensure focused development	•The program aims to enhance farmers' income through various interventions	•SPPIF facilitates the adoption of modern technologies and best practices in agriculture, animal husbandry, and fisheries	•The program encourages the establishment of community-level institutions to strengthen farmer participation and self-governance

Focus Area

Crop Diversification and Intensification	•SPPIF encourages farmers to diversify their crops and adopt intensive farming practices
Soil Health Management	•The program focuses on improving soil health through various measures like nutrient management and organic farming techniques
Livestock Development	•SPPIF supports the development of livestock enterprises, including goat rearing, poultry farming, and pig farming
Fishery Development	•The program promotes fish farming, including the development of farm ponds, supply of quality fingerlings, and integrated fish farming systems
Value Chain Development	•SPPIF aims to strengthen the value chain for agricultural produce, connecting farmers with markets and facilitating better price realization

There are 4 components in SPPIF – Agriculture Development, Horticulture Development, Livestock and Fishery. The major programs under these components are –



Brief Description of Components

Agriculture Development

Crop Diversification

Promotion of Crop Diversification and Intercropping in the midlands and uplands of the SPPIF clusters.

PVT (Participatory Varietal Trail)

Participatory varietal selection is a participatory method through which seed varieties/ landraces suited to the region and preferred by farmers are identified. After identification, further purification and multiplication of landraces can be carried out.

Seed Centre/Seed Production

Establishment of Community level seed centres anchored by WSHGs/FPOs. It shall focus on non-millet crops

Organic Farming and Liquid Manure

WSHGs/FPOs shall be trained on different bio-char /bio inputs/natural farming concoctions like Handikhata/ Jibamruta/ Nimastra/ Panchagabya/ Bramhastra/ Agniastra/ Blue Green Algae, other inoculants deemed suitable for the crops which are grown locally.

Custom Hiring Centre

In order to make farm machinery for hiring at an affordable price, and to make available within the reach of small/marginal farmers, Custom Hiring Centres shall be anchored by FPOs/ WSHGs.

Horticulture Development

Trellis Cultivation

The Trellis system of vegetable cultivation shall be promoted to ensure optimum utilisation of land resources. In this method the plants creep vertically with support of ropes or wire.

Vegetable Cultivation

To meet nutritional security in rural areas, seeds/ seedlings of vegetables shall be supplied to the beneficiary in convergence with Departments

Promotion of Agro forestry (Adarsha Bagicha)

To promote agro forestry, the Adarsha Bagicha shall be taken up, which should have a minimum 0.5 acre of upland/ midland. It will tentatively constitute forest species plantation, horticultural plantation, seasonal crops and peripheral plantation. A unit of vermin compost should be constructed to encourage natural farming methods.

Producer Group (PG) Promotion

Producer Group (PG) approach shall be taken up in the SPPIF project areas with involvement of interested farmers for high value crops. The approach of synchronization among the production cycle shall be promoted through the PG approach.

Livestock

Goat Shelter Construction

An ideal and hygienic shelter is also of equal importance for livestock rearing. Shelters with proper ventilation shall lead to less mortality, good health, and desire growth of animals thereby ensuring better income.

Poultry Night Shelter

Poultry Night Shelters with proper ventilation and protection for less mortality, good health, and desire growth of poultry thereby ensuring better income.

Indigenous Chicks Production Unit

The programme aims at promoting indigenous chicks' production units in cluster mode for creating a supply chain of chicks/ growers and adult birds on a regular basis.

Vaccination

To overcome various types of poultry and goat diseases which cause mortality in poultry and goat rearing, field-level vaccinators shall be trained in vaccination.

Backyard Azolla cultivation

For development of feed resources in their backyard for animals to reduce cost of production and increase farmers' income as it is a good source of vitamins, Protein, Amino acids, and micronutrients.

Fishery Development

Establishment of Integrated Fish Farming

The integration of fish farming with allied activities of agriculture, horticulture, and livestock

Establishment of Fish Nano Fish Feed mixture unit

Local farmers are not able to afford supplementary feed for fishes because of high price. Establishment of Nano Fish feed mixture unit is intended to enable low-cost feed production by reducing cost involvement in transportation and value chain.

Cluster Information

Working Year	Name of the GPs	Total Villages	No of Village Covered	Target Areas	Area Covered
Cluster - 1					
Year 2022-23	Petapanga	45	41	2500 Ha	CDP – 100Ha
	Mandakia				Vegetable – 40 Ha
	Manikeswar				Trellis – 8.4 Ha
Cluster - 2					
Year 2023-24	Dadingia	47	42	2500 Ha	CDP – 275 Ha
	Sugadabadi				Vegetable – 40 Ha
	Gumamaha				Trellis – 8.4 Ha
Cluster - 3					
Year 2023-24	Karada	89	80	2500 Ha	CDP – 260 Ha
	Badabaraba				Vegetable – 10 Ha
	Indragada				Trellis – 10 Ha
	Ranaba				P.Irrigation– 20 Ha

Activities & Achievements

Activities	Achievements/Years		
	2022-23	2023-24	2024-25
Crop Diversification Plots	100 Ha	275 Ha	260 Ha
Trellis	210 HH	200 HH	200 HH
Vegetable Cultivation	80 HH	55 HH	100 HH
Liquid Manure	1 WSHG	4 WSHG	4 WSHG
Participatory Varietal Trail	1	1	1
Goat Shelter	275 HH	200 HH	300 HH
Poultry Night Shelter	1000 HH	1000 HH	500 HH
Indigenous Chick Production Unit	5 Nos	5 Nos	3 Nos
Fish Feed Mixture Unit	2 Nos	2 Nos	1 Nos
Fingerling	35 Acr	10 Acr	3 Acr
Azola Farming	10 Farmers	8Farmers	2Farmers
Seed Production	1 Farmers	1 Farmers	4 Farmers
Protective Irrigation	-	-	50 Acres

First Year (2022-23) Activities & Achievements

SWATI has initiated the SPPIF program in Three Gram Panchayats (Petapanka, Mandakia, , and Manikeswar) of Raikia block in the first phase. The program has adopted a cluster-based approach to enhance livelihood opportunities and sustainable agriculture.

- **Agriculture Development**

  - **Crop Diversification Plots:** Farmers have cultivated black gram in 25 hectares and mustard in 75 hectares of land.
  - **Vegetable Cultivation:** 210 farmers have been supported with materials for vegetable cultivation using the trellis method, and 70 farmers have received high-yielding vegetable seeds.
  - **Liquid Mannur Preparation –** The WSHG of Manikeswar has been trained for Liquid Mannure Preparation

- **Livestock Development:**

  - 1000 families from 3 GPs have been supported with poultry sheds for local poultry farming.
  - 275 goat farmers have been provided goat sheds.
  - 5 local chick production centres have been established across 3 Gram Panchayats.

- **Fishery Promotion:**
    - Two fish feed production units have been set up at Mandakia and Manikeswar GP to ensure availability of feed for fish farmers.
    - 100 farmers have been provided fingerlings for fish farming.

- **Capacity Building:** A series of trainings and orientations have been conducted for farmers on vegetable cultivation, fruit orchard raising, animal husbandry, goatery, poultry farming, pisciculture, and organic manure preparation.

Second Year (2023-24) Activities & Achievements

In the second year of the SPPIF project, SWATI expanded its interventions by identifying three new Gram Panchayats—Dadingia, Sugadabadi, and Gumamaha—covering 42 villages of Raikia block under Cluster-2. Adopting a cluster-based approach, the project continued to enhance livelihood opportunities and promote sustainable agriculture.

Agriculture Development

- **Crop Diversification**: 300 farmers supported for pulses and oilseed cultivation, covering 275 hectares of land.
- **Vegetable Promotion:**
    - 200 families supported to practice vegetable cultivation through the trellis technique.
    - 55 households provided with seeds and saplings for diverse vegetable cultivation.
- **Organic Practices:** 4 SHGs trained and supported for liquid manure preparation.
- **Innovation:** Conducted 1 Participatory Varietal Trial (PVT) program with farmers to introduce and test improved crop varieties.

Livestock Development

- **Poultry Farming:** 1000 families from 3 GPs supported with poultry sheds for local poultry rearing.
- **Goatery**: 200 goat farmers provided with goat sheds.
- **Chick Production:** 5 local chick production centres established across 3 GPs.
- **Fodder Innovation:** 8 farmers supported for Azolla cultivation to enhance livestock nutrition.

Fishery Promotion

- **Fish Feed Production:** 2 fish feed units set up at Dadingia and Gumamaha GPs for local feed availability.

- **Fish Farming:** 50 farmers supported with fingerlings for pisciculture across 10 acres of land.

Capacity Building

A series of trainings and orientations were organized for farmers on:

- Vegetable cultivation and fruit orchard raising
- Animal husbandry, goatery, and poultry farming
- Pisciculture
- Organic manure preparation

Third Year (2023-24) Activities & Achievements

In the third year of the SPPIF project, SWATI expanded its coverage by adopting four new Gram Panchayats (Karada, Badabaraba, Indragada, and Ranaba) in Raikia block. The interventions reached 80 villages, covering:

- 1338 Scheduled Tribe households
- 193 Scheduled Caste households
- 255 Other Backward Caste households
- 11 General Caste households

The project continued to promote sustainable agriculture, horticulture, livestock, and fishery development through a cluster-based livelihood enhancement approach.

Agriculture Development

- **Crop Diversification & Intercropping:**
  - 791 farmers supported across 260 hectares of land.
  - Cropping patterns included:
    - Black gram – 100 hectares
    - Black gram + Maize – 100 hectares
    - Black gram + Red gram – 20 hectares
    - Cowpea + Maize – 40 hectares
- **Seed Production:** 4 farmers supported to produce the new variety Kalinga URD in 10 hectares.
- **Participatory Varietal Trial (PVT):** Conducted with farmer Panchanana Dalabehera of Gandharbhuin to introduce and test the indigenous variety Daringbadi Mala Biri (Black gram).
- **Protective Irrigation:** Support extended to develop protective irrigation facilities in 50 acres of land.

Horticulture Development

- **Trellis System:** 200 farmers supported for vegetable cultivation using the 10-Cent Trellis Model.
- **Vegetable Cultivation:** 100 farmers supported with seeds, saplings, and inputs for improved vegetable production.

Livestock Development

- **Goatery:** 300 households supported to construct goat shelters.
- **Poultry:** 500 households supported to construct poultry night shelters.
- **Indigenous Chick Production Units:** Established 3 units at:
    - Kodinga (Manikeswar GP)
    - Dibari (Sugadabadi GP)
    - Baanda (Gumamaha GP)

Fishery Development

- 5 farmers supported for pisciculture, covering 3 acres of land

Impact of the Program

The SPPIF program has significantly encouraged farmers to adopt integrated farming systems, leading to enhanced income and livelihood security. With support in vegetable farming, poultry, goat rearing, and fish farming, farmers are now able to generate multiple streams of income within a sustainable framework.

Adoption of Improved Practices: Introduction of modern techniques such as trellis cultivation **and** bio-farming practices has enabled farmers to achieve higher yields at lower costs. The use of trellis systems in vegetable cultivation has also reduced villagers' dependence on forests for tree branches, contributing to environmental conservation.

Increase in Livestock Population - The population of goats and indigenous poultry has increased, providing farmers with a steady and sustainable source of income

Capacity Building: Through systematic trainings and orientations, farmers have developed practical skills in improved agriculture, animal husbandry, and fish farming, making them more self-reliant and productive.

Youth Engagement: The program has inspired the rural youth to view farming as a profitable livelihood option. An increasing number of young farmers are now motivated to take up agriculture and allied activities, reversing the trend of migration.

Cluster-Based Approach: By promoting agriculture in cluster mode, the program has not only improved production levels but also strengthened collective marketing opportunities, helping farmers access better markets and fair prices.

Food and Nutrition Security – Support for vegetable cultivation has encouraged farmers to practice seasonal vegetable farming, ensuring the availability of fresh vegetables for household consumption and thereby improving family food and nutrition security.

Revival of Agricultural Tradition – The project has led to the revival of traditional seed varieties of pulses, oilseeds, and vegetables. Alongside this, age-old farming techniques such as mixed farming, organic farming, and intercropping have been reintroduced and practiced by farmers.

Case Study:

Reviving Traditions, Nurturing Dreams – The Journey of Renu Mallik's Indigenous Chick Production Centre

In the quiet tribal village of Kamberikia in Sugadabadi Gram Panchayat, the gentle clucks and chirps from a modest poultry shed tell a story of revival, resilience, and dreams. At the centre of this story is Renu Mallik, a 35-year-old farmer's wife who dared to step beyond her daily struggles and embrace entrepreneurship.

The Spark of an Idea

Life was not easy for Renu's family. With farming as their only source of income, they often struggled to meet household expenses—children's education, medical costs, and day-to-day needs. When she first heard, in a village meeting conducted by SWATI (the facilitating NGO), about the SPPIF-supported Indigenous Chick Production programme, something clicked within her.

"I thought to myself, *why not give it a try?* This can bring me some extra income and security for my family," recalls Renu with a smile.

Her husband stood by her decision. "He admired my courage," she says proudly. That encouragement was enough for her to take the leap.

Building the Dream

With support of **₹1.28 lakh from ATMA, Kandhamal**, Renu began shaping her dream. She constructed a 20x30 ft poultry shed with

asbestos roofing, bought feeders, drinkers, 40 hens, and 10 indigenous cocks. Adding ₹40,000 from her own savings, she invested wholeheartedly.

SWATI provided her with training on indigenous poultry farming, chick production, vaccination, and disease management. With her diligence, Renu ensured her birds stayed healthy, losing not a single one.

"I never knew I could handle vaccination myself. But now, I do it regularly. It gives me confidence," she says.

The First Success

Three months later, excitement filled her poultry shed. Ten hens began laying eggs, followed by more in subsequent months. Soon, 327 chicks hatched. Renu raised them with care, and within weeks, sold 258 chicks at ₹35 each—earning ₹9,000 from the very first batch.

Her confidence soared. Within a year, she sold nearly 1,000 chicks across four cycles, earning over ₹35,000. At the same time, her flock grew to 135 birds. To reduce feed costs, she even constructed an Azolla pond—a low-cost nutritious fodder for her poultry.

A Tradition Revived

For generations, tribal households had reared indigenous poultry for nutrition, rituals, and festivals. But with the rise of commercial broilers, this practice was on the brink of extinction. Today, thanks to women like Renu, indigenous breeds are making a comeback.

"Local chickens are always in demand. People love their taste, and even a 1 kg bird sells for ₹500 or more in the market," Renu explains.

She believes that if every household rears at least 10 birds, they could easily earn ₹10,000 annually. Moreover, the cultural demand—eggs and cocks for rituals and pujas—ensure a constant market.

Looking Ahead

Renu's eyes light up when she talks about the future. "This is not just about chicks; it is about self-reliance. Next year, I am confident I will earn ₹1 lakh from chick production alone. My dream is to make this centre a model for others in the village."

Her story is more than just a personal success—it is a testimony to how reviving traditional practices with modern support can create sustainable livelihoods. Renu has not only built a source of income for her family but also become an inspiration for other women in her community.

Growing Prosperity through Trellis Farming

In the Year 2023, When the SPPIF program reached Kalingpadari village, farmer Jabaharlal Pradhan saw a new ray of hope. With support from SWATI, he received trellis materials worth ₹12,500 to practice vegetable cultivation on ½ acre of land.

Earlier, Jabaharlal cultivated small patches of crops with low returns. But after adopting the trellis system, he began cultivating a variety of vegetables such as bitter gourd, beans, chilli, and cucumber. With improved methods, he is now able to grow seasonal vegetables three times a year.

"Now, each season gives me a profit of nearly ₹15,000. In one year, I earn more than ₹50,000 just from vegetable farming," shares a proud Jabaharlal.

Through training provided under the project, Jabaharlal mastered bio-farming techniques. He prepares and applies organic manures such as Handikhata, Nimastra, Panchagavya, using his farm residues and cattle manure/urine. His commitment to organic practices has made his vegetables healthier and more attractive to consumers.

Jabaharlal's organic vegetables are in high demand at the Raikia market, fetching him better prices than conventional produce. This not only boosts his income but also earns him respect as a model farmer in the community.

With the earnings from farming, Jabaharlal now supports his family of six members entirely through agriculture. What makes him proud is that all his family members are engaged in farming activities, ensuring steady employment at home.

Encouraged by his success, Jabaharlal is planning to expand his vegetable farming further in the coming years.

"Farming has given me dignity and security. I want to show others in my village that agriculture can truly change our lives."

From Wage Labour to Confident Farmer The Story of Gurudev Mallick

Gurudev Mallick lives with his parents, wife and two children in the Village-Piserama,Gp-Dadingia. For many years, Gurudev Mallick lived under economic stress. His family's livelihood depended on agriculture, cattle rearing, and wage labour, but the income was too meagre to meet food and household needs. Regular work was difficult to find in and around his village, forcing him to rely on uncertain daily wages.

In 2023, SWATI introduced the SPPIF program in Piserama village. During meetings on improved vegetable farming with low external inputs, Gurudev saw a new hope. Until then, he and his wife grew a few vegetables only for family consumption. Motivated by the program, he decided to cultivate vegetables for the market.

SWATI supported him with ₹12,500 worth of trellis materials, vegetable seeds, and implements. He also attended organic farming training, where he learned to prepare organic manure and pesticides using cattle manure, wild leaves, and crop residues.

Gurudev began cautiously with bitter gourd and beans on his backyard plot. The results were promising. He harvested 3 quintals of bitter gourd and 2.5 quintals of beans and sold in the local market for ₹20,000 profit

Encouraged by this success, Gurudev expanded his crop choices. In the second phase, he planted cucumber, ridge gourd, brinjal, and chilli. His harvest yielded 5 quintals of vegetables, fetching him around ₹25,000.

Today, Gurudev sees vegetable farming not just as an option, but as a sustainable livelihood. His only challenge is irrigation—he plans to apply under MGNREGA for a dug well, which would allow him to cultivate vegetables year-round.

"This program has given me confidence that I can generate employment from my own land. Now, I don't need to search for wage labour. My family and I can earn and live with dignity through farming," says Gurudev proudly.

With his new-found confidence, Gurudev is determined to expand vegetable cultivation, reduce dependency on labour work, and make farming the backbone of his family's income. His story is now inspiring other farmers in Piserama to take up organic vegetable farming as a profitable livelihood

Organic Manure Preparation by Women SHG Members of Sumitra Women's Group

Not so long ago, the farmers of Kandhamal were almost untouched by the world of chemical farming. With vast forests and livestock in every household, nature itself provided what the land needed. "We never thought of buying fertilizers from the market," recalls an elderly farmer. But with the arrival of hybrid seeds, the pressure to increase yields brought in chemical fertilizers and pesticides. Slowly, the green fields began to lose their natural vitality.

Unlike other parts of Odisha, Kandhamal still had relatively less exposure to chemicals. This gave SWATI an opportunity—through the SPPIF program—to revive the district as a hub of organic farming. The focus was clear: bring farmers back to natural methods, and empower women to lead this change.

In Kambaguda village of Raikia block, the Sumitra Women's Self-Help Group became a beacon of this movement. With ten women members, all farmers by tradition, the group had long been cultivating paddy and millets. More recently, they had turned to market vegetables like cauliflower, cabbage, and brinjal. To get higher yields, they reluctantly started using chemical fertilizers and pesticides. "We worked in the fields every day. When the chemicals were sprayed, we

could feel their effects on our bodies. But we had no choice," says one of the women.

That choice came with the SPPIF training. The women learned how to prepare compost and organic manures from simple, locally available materials—cow dung and urine, neem and karanja leaves, garlic, termite soil, and even fermented plant extracts. With eager hands, they collected these from their village, mixed them, and prepared their first batches of liquid fertilizer. They tested it not only on millets but also on vegetables. The results were promising. The crops looked healthier, the soil felt alive again. They even went a step further—preparing formulations like *Nimark* and *Magic Manure*.

The turning point came when farmers faced a severe outbreak of powdery mildew disease in their pea crops. Despite spending money on pesticides from the market, the plants continued to wither. "It was heartbreaking," remembers Hemamalini Pradhan, the group's secretary. Then, the women tried their homemade organic pesticide. Within a week, the disease began to subside. The farmers were astonished. For the first time, they felt that nature itself could fight back—without chemicals.

Today, chemical use in the village has dropped by more than 50%. Farmers rely more on compost and organic fertilizers. The Sumitra Women's Group not only prepares enough for their own fields but also supplies organic manure to other farmers at a nominal price. "The effect of organic manure is no less than chemicals," says Hemamalini proudly. "But the difference is—it costs us almost nothing, and it never harms the land or the people."

Her words capture the spirit of their journey: "Just as humans fall sick and depend on medicines when they don't eat nutritious food, chemicals are like medicines for the soil. But organic manure is real food—healthy, sustaining, and full of life. With it, the soil and crops thrive without falling sick."

Kanchan Pradhan's Seed Diversification Field – Kambaguda, Raikia

Walking into the fields of Kambaguda, one can instantly sense something unusual. Instead of the monotonous sight of a single crop stretching across acres, Kanchan Pradhan's land bursts with diversity – rows of ragi, sorghum, kodo, foxtail millet, little millet, green gram, black gram, horse gram, chickpea, groundnut, sesame and many more. Nearly 20 varieties of crops sway together in harmony, creating not just a field, but a living example of biodiversity.

Kanchan, a committed woman farmer, bends over the soil, her hands busy but her face glowing with pride. When asked about this unique field, she smiles and says, "This is not just farming, this is our tradition, our identity, and our future."

For the past five years, Kanchan has been closely associated with SWATI. As a lead farmer, she actively participates in agricultural programs, learning, sharing, and inspiring others. It was during one such training program organized by SWATI that she first heard in detail about the importance of conserving traditional seeds.

The discussion left a deep impression on her. Traditional seeds, she realized, are not just grains to be sown – they are a symbol of farmers' self-reliance and sovereignty. These seeds have been passed down for generations, carefully preserved through trials, experience, and wisdom. They are resilient to local climate, rich in taste, and full of nutrition. Yet, they are fast disappearing under the growing dominance of market and hybrid seeds.

Kanchan recalls,"If we lose our seeds, we lose our freedom. Every year, farmers will be forced to depend on the market. That is not the future I want for my children."

"My dream is to bring back every crop variety that once grew in our region. If we don't act now, these seeds will vanish. Later, when farmers search for them, they may not find them anywhere."

The reality of market seeds is harsh – expensive, uncertain, and often unsuitable for local conditions. Hybrid seeds can be grown but cannot be reused; farmers must buy them afresh each season. Germination is never guaranteed, and taste and quality remain uncertain. Without proper knowledge of pest and fertilizer management, many farmers suffer losses.

Determined to act, Kanchan sought guidance from SWATI staff. She was told that preservation is not just about storing seeds in a box – it is about cultivating, multiplying, and sharing them. Motivated, she collected a wide range of local seeds and with SWATI's support, developed her Crop Diversification Field.

Today, her field is like a living seed bank – over 20 crops grown side by side, including millets, pulses, and oilseeds. This biodiversity strengthens the soil, reduces risks of crop failure, and ensures food security for her family and community.

"My dream is to bring back every crop variety that once grew in our region. If we don't act now, these seeds will vanish. Later, when farmers search for them, they may not find them anywhere."

To encourage community participation, she follows a seed exchange system – any farmer who wants seeds from her must exchange them with another variety. This way, the cycle of sharing continues, and no farmer feels dependent. Her initiative has become a model in the village. Neighbors admire her courage and foresight, and many have started showing interest in traditional seeds once again.

In the quiet village of Musumaha under Dadingia Panchayat, Prakash Pradhan lives with his family of six. Like many small farmers in the region, Prakash depends on his tiny patch of farmland to feed the family. But it is his goats—about 30 of them—that keep the household running.

"Farming gives us food, but it is the goats that give us money for everything else," says Prakash with a smile. Each day, one member of the family takes the goats to graze in the nearby fields and forests, a routine that has become part of their lives.

Yet, behind this smile was a story of struggle. For years, Prakash could not earn the income he expected from goat rearing. The main reason—he did not have a proper goat shed. He had built a small bamboo-and-thatch shelter near his house, but it was too small, damp, and unhygienic. "During the rains, water would leak in. The goats had to stay in dung and urine. Many became sick, and some even died. The newborn kids suffered the most," he recalls with concern.

Things began to change when SWATI introduced the Special programme for Promotion of Integrated Farming in the village. As part of the initiative, goat-rearing families were supported to build improved goat sheds. At a village meeting, Prakash shared his struggles, and soon he was included in the programme. He received construction materials worth ₹12,500, and with his own labour, built a strong, well-ventilated shed right beside his house.

The new shed was a turning point. Built on stilts, it allowed dung and urine to fall beneath, keeping the floor clean. Wire mesh walls let in fresh air, and the asbestos roof protected the goats from rain. "Now my goats are healthier and more comfortable. Cleaning has become easy, and none of them fall sick anymore," says Prakash proudly.

The results spoke for themselves. In just one year, Prakash sold 10 goats and earned over ₹1 lakh—a significant boost to his family's income. For him, the improved goat shed was not just a structure, but a symbol of hope and stability.

"This support has changed my life. I can now take care of my family without worry," he says, his voice filled with gratitude.

In Dibari village of Sugadabadi Panchayat lives Binay, a determined young farmer with dreams bigger than his small farmland. Like many youths in his village, Binay once faced a question that haunted him after finishing his studies—"What next?"

With no job opportunities nearby, most of his friends had migrated to Bhubaneswar or even to faraway Kerala in search of work. Some urged him to join them. But Binay was not convinced. "I didn't want to leave my family behind and spend my life as a daily labourer in another state," he recalls. He had seen too many return empty-handed, with no permanent livelihood to sustain them back home.

That's when Binay decided—he would stay in his village and build his future right here.

In Kandhamal district, vegetable farming is a common source of income. Binay thought of combining it with another promising venture he observed around him—goat rearing. He calculated that with 30 goats, he could sell about 15 each year and earn between ₹1.5 to ₹2 lakhs annually. This became his vision.

He already owned five goats and soon bought another five. But there was a challenge. Without a proper shed, his goats had to be tied here and there around the house. "Their health suffered, and I realized I needed a better system," says Binay.

The turning point came when SWATI launched the Special programme for Promotion of Integrated Farming in the village. The programme emphasized both vegetable cultivation and goat rearing as sustainable livelihood options. Binay eagerly joined. Seeing his enthusiasm, the village committee selected him for support.

He received construction materials worth ₹12,000 to build a sturdy goat shed, ensuring his animals could live in a clean and healthy environment. Along with this, he received training on goat management, regular vaccinations for his goats, and support with seeds and agricultural tools for his vegetable farm.

"The support I received has given me confidence and strength to move towards my goal," says Binay with pride

Slowly but steadily, Binay's herd began to thrive. Today, he has 20 goats. He has made a strategic decision—not to sell the female goats yet. Instead, he is focusing on increasing his herd and selling only the males. Currently, he has five young bucks, and once they turn two years old, each can fetch between ₹12,000 and ₹15,000.

With this plan, Binay is aiming for an income of nearly ₹80,000 from goat rearing in the coming year.

For Binay, goat rearing is no longer just an activity—it is a pathway to independence, dignity, and a secure livelihood within his own village.

Ratani Runs Her Family through Goat Rearing

In the quiet village of Dibari under Sugadabadi Panchayat, lives Ratani Behera, a determined woman who turned a small beginning into a pathway of hope for her family. With six members to care for, life was never easy. Her husband, Surya, cultivated their tiny patch of farmland, but the crops were just enough to fill their plates—not their pockets. School fees, medical costs, clothes, and festival expenses often forced them into debt.

While Surya toiled in the fields, forests, and as a wage labourer, Ratani shouldered the household responsibilities. But watching the family's struggles, she resolved—"I must do something too." With no local wage opportunities for women, she looked around for an option that she could manage alongside her daily chores. That's when she decided to try her hand at goat rearing.

She began modestly, saving little by little until she could buy two goats. With care and patience, they multiplied—four goats in the first year, and within five years, her herd had grown to 20 goats. Every morning, after finishing her household work and sending the children to school, she would take her goats to graze in the nearby forest. During the dry months, Surya helped by bringing tree branches for fodder. Whenever a goat fell sick or gave birth, Ratani nursed them herself, often saying she cared for them like "my own children."

But there were challenges too. With no proper goat shed, she kept them in a makeshift shelter. "I always dreamt of building a proper shed," she recalls, "but money was never enough."

That dream took shape in 2023, when SWATI introduced the Special programme for Promotion of Integrated Farming in her village. The programme encouraged families to take up both crop cultivation and livestock rearing, with proper training and

facilities. It was observed that though many families owned goats, lack of vaccination, poor care, and inadequate sheds kept the numbers and profits low.

Ratani joined the programme with enthusiasm. She was supported with construction materials worth ₹12,000 to build a proper shed. Soon, she built a sturdy shelter near her house that could accommodate 30 goats. Her goats also received regular vaccinations, and she was trained on scientific goat management. The change was visible. Today, Ratani has 22 healthy goats. To manage her household needs—like repairing their home and educating her children—she has kept aside five well-grown goats worth over ₹60,000. With pride, she says, "These goats are my living assets. Whenever there is a need, I can depend on them."

Her confidence has grown along with her herd. She now dreams of expanding further, aiming to build her stock to 30+ goats within the next two to three years. Her goal: to earn at least ₹1.5 lakh annually through goat rearing.

In the lush valleys of Raikia, vegetables are more than just crops—they are a matter of pride. Raikia beans, cabbage, and brinjal are celebrated across Odisha for their rich flavor and unique taste. "People used to say, if it's from Raikia, it must be tasty," recall many farmers.

But in recent years, things began to change. Lured by traders and the promise of higher yields, farmers slowly shifted to hybrid seeds and chemical fertilizers. At first, the profits looked promising, but gradually, the hidden costs became clear—soaring expenses, declining soil fertility, and a fading of the very uniqueness that once made Raikia's vegetables famous.

It was at this turning point that SWATI introduced the Special programme for

Promotion of Integrated Farming, encouraging farmers to revive organic and natural practices.

One farmer who embraced this change is Narendra Pradhan, a 55-year-old from Naginaju village under Adaskupa Panchayat. Narendra owns 3 acres of land, which has been the lifeline of his family for generations. Farming is his mainstay, bringing in ₹2–3 lakh annually, enough to feed his family, educate his children, and meet other needs.

Narendra has been farming since childhood. In his early days, he cultivated turmeric, local beans, and brinjal using only compost and farmyard manure. But about 25 years ago, he expanded into high-demand vegetables—cabbage, cauliflower, beans, tomato, and peas. In the process, he too turned to chemicals. "At first, the harvests looked good," Narendra says, "but year after year, the costs climbed higher while the soil became weaker. I could see the land losing its life."

That was when SWATI's programme gave him hope. Narendra joined the training sessions where he learned how to prepare different organic manures, use crop residues effectively, and conserve local seeds. He was particularly drawn to the idea that farming could be productive and sustainable without depending on costly chemicals.

With SWATI's support, he received trellis structures for creeper vegetables. Soon, his field had bottle gourd, beans, and ridge gourd climbing skywards. He conserved seeds for brinjal, tomato, radish, okra, and chilli. From cow dung, urine, and crop waste, he began preparing his own compost and liquid fertilizers. His bullocks once again became an asset in ploughing the field naturally.

The results have been encouraging. This year, his organically grown brinjal, beans, and bottle gourd yielded well and fetched a good price. More importantly, the soil has begun to recover its natural fertility. "If I had continued chemical farming, my land would have turned barren in a few years," he admits. "Now, my costs are lower, and my vegetables taste like they used to in the old days."

Narendra now sees organic farming not as a step backward, but as a path forward. With a smile, he says, "This land has fed me all my life. By farming naturally, I am feeding the land back. That is what gives me hope for the future."

In the quiet village of Budamaha under Mandakia Panchayat, lives Shibram, a farmer whose life is deeply rooted in the soil he tills. At over sixty years of age, he carries the wisdom of generations and more than six decades of hands-on farming experience.

From his childhood days, farming has been his way of life. On his 7 acres of land, Shibram grows paddy in the lowlands, while pulses, maize, finger millet, mustard, and niger flourish in the uplands. His homestead is no less diverse—he rears cows, goats, and poultry, and tends to a fruit orchard rich with mango, guava, and litchi trees.

A Living Encyclopedia of Indigenous Knowledge

What makes Shibram special is not just his hard work, but his profound knowledge of traditional farming practices. He instinctively knows which crop suits which land, how much water each one requires, and the best time for sowing and transplanting. He can list which crops thrive together in mixed cropping, and what intercrops ensure balance and yield.

Every year, he carefully preserves local seeds of grains, vegetables, pulses, and oilseeds. He prepares his land with compost, sows at the right season, and practices a rhythmic cycle of cultivation—paddy followed by maize, green gram, black gram, arhar, niger, and mustard. In his backyard, he grows vegetables in every season, ensuring food security for his family.

"I have never gone to the market to buy farm inputs—only to sell my produce," Shibram says with quiet pride. His cows provide manure, while compost is prepared using leaves, straw, and organic residues. To him, chemical fertilizers and pesticides have no place in farming.

A Turning Point: The Lure of Chemicals

About 25 years ago, a wave of market-driven agriculture swept into Kandhamal. Hybrid paddy seeds and chemical fertilizers became the new "modern" way of farming.

Influenced by neighbors, Shibram's children too experimented with chemical-based farming.

Though Shibram warned them—"These practices won't last long; they will harm the soil and trap us in debt"—his advice went unheard. Initially, the yields seemed impressive. But soon, the soil grew weaker, needing more and more chemical inputs. The costs kept rising, profits declined, and many farmers fell into despair. Just as Shibram had predicted, young farmers began losing faith in farming.

Returning to the Roots with SWATI

Determined to protect the land, Shibram revived his traditional, eco-friendly farming practices. Around this time, SWATI introduced the Special programme for Promotion of Integrated Farming in his village, which encouraged organic farming. Shibram not only joined the programme but also became one of its strongest voices.

He began sharing his experiences in farmers' meetings, inspiring others to look back at indigenous methods. SWATI supported him with trellis structures for vegetable cultivation. Using compost and organic manure, Shibram successfully cultivated bottle gourd and beans. The results spoke for themselves—his organic crops yielded more and fetched better returns than chemically grown ones.

A Teacher for Fellow Farmers

Today, Shibram's fields are a learning ground. Farmers from neighboring villages come to see his flourishing crops and learn how compost, mixed cropping, and indigenous seeds can revive their soils. His story has become a living testimony of resilience and wisdom.

His Words of Wisdom

With the calm authority of experience, Shibram sums up his philosophy:

"Farming is a completely natural process. The more food we give the soil, the more it gives us in return. But if we feed it poison, it will die—how can it produce for us then? Compost is food for crops, while chemicals are poison."

Through his unwavering belief in the power of nature, Shibram has not only secured his own livelihood but also inspired a new generation of farmers to embrace organic farming. Truly, he stands as a champion of sustainable agriculture in Kandhamal.

In the quiet village of Pajjiar under Mandakia Panchayat, a determined farmer, Padma Charan Pradhan, is showing how innovation can change lives and protect forests.

Like most farmers in his community, Padma Charan grew paddy as his main crop, while vegetables like cabbage and beans brought in additional income. But vegetable farming came with its own struggles. For cabbage, everything—seeds, fertilizers, pesticides—had to be purchased from the market. And for beans, the challenge was even bigger.

"To grow beans, we had to depend on the forest. Every year, I would walk long distances to collect bamboo poles or creeper sticks (locally called ranja) to support the plants," recalls Padma Charan. "But with everyone in the village doing the same, bamboo became scarce. And whatever we brought would get damaged by termites, forcing us to repeat the same hard work every year."

The process consumed hours of labor, added to farming expenses, and slowly drained the forest resources that the community had always relied upon.

That's when SWATI's Special programme for Promotion of Integrated Farming stepped in with a sustainable solution. Farmers were trained to prepare and use organic manure to reduce chemical dependency. More importantly, for creeper crops like beans, bottle gourd, and cucumber, they were introduced to a trellis farming system—using durable cement poles and wires instead of fragile bamboo supports.

Padma Charan, known as one of the lead vegetable farmers in the area, embraced the idea wholeheartedly. With support from the programme, he set up a trellis on half an acre of land near his home and planted beans.

The results were transformative. He no longer had to spend days cutting bamboo from the forest. After the bean harvest, the same trellis easily supported bottle gourd

and cucumber. The strong structure not only saved him time and money but also encouraged him to expand vegetable farming with renewed confidence.

With a smile of relief, he shares, "This method has freed me from the endless cycle of collecting bamboo from the forest. Now, I can focus on farming, earn more from my land, and also do my part in protecting the forest. It gives me pride to know that my

farming is no longer harming the nature we all depend on."

In Dernaju village of Mandakia Panchayat lives Sujata Pradhan, a woman known among her neighbors as a hardworking and skilled farmer. Her family's main income comes from vegetables, which they sell in the local markets. Every year, their farming brings in more than ₹2 lakhs—a crucial support for the household.

But behind this success lies Sujata's tireless effort. From preparing seedlings to watering, transplanting, weeding, hoeing, harvesting, and even seed preservation—Sujata shoulders most of the responsibility.

"Vegetable farming is like taking care of children," she says with a smile, "it needs constant care and attention."

Her family grows two seasonal crops—monsoon vegetables during the rainy season and winter vegetables in the cold season. In summer, due to lack of irrigation, they grow only a few vegetables in their backyard for home use. Their fields are usually filled with marketable crops like cabbage, beans, bitter gourd, ridge gourd, lady's finger, cucumber, brinjal, tomato, and chili.

Among these, the creeper vegetables often gave Sujata the most trouble. For beans, bitter gourd, cucumber, ridge gourd, and bottle gourd, she had to depend on bamboo poles or sticks from the forest. Collecting these was labor-intensive and time-consuming. Even then, the results were discouraging. Heavy rains and storms would bend the creepers down, leaving fruits in contact with the soil to rot. Thick weeds grew underneath, competing with the plants for nutrients. Dense growth made the crops prone to pests and rodents, reducing both yield and quality. Despite the difficulties, Sujata and other farmers had no option but to continue this way.

Things began to change when SWATI introduced the Special programme for Promotion of Integrated Farming in the village. Farmers were encouraged to shift to trellis farming, a simple but effective solution. Cement poles and wires were provided, and Sujata received support to set up a trellis on half an acre of land.

The results were remarkable. Now, her vines grew neatly on the trellis, away from the soil. Fruits no longer rotted, and weeds were easier to manage. Sunlight and air reached the plants better, keeping them healthier. Harvesting also became less laborious.

Most importantly, Sujata's yield increased by 25%. She was overjoyed to see her hard work finally rewarded. "Earlier, so much of my crop was wasted due to disease and poor growth," she explains. "Now, with trellis farming, I get more produce, and it is of better quality."

Women Farmers of Kapaguda Village Diversify Crops

Kapguda, a small village in Sugadabadi Panchayat of Raikia block, is today witnessing a silent but powerful transformation led by its women farmers.

For generations, farming here was rooted in tradition. With very little paddy land and mostly uplands and hills, the villagers had evolved a unique system of farming. Elderly farmers recall how every patch of land was used wisely: paddy in the low-lying fields, and on the uplands, a diverse mix of maize, pulses, oilseeds, tubers, turmeric, ginger, vegetables, and millets. This diversity ensured food security for every household.

But about 25 years ago, things began to change. The lure of the market arrived with crops like cabbage, brinjal, beans, and peas. Farmers, drawn by promises of higher income, shifted to commercial vegetable cultivation. Large tracts of land were cleared for cabbage, cauliflower, tomato, and beans. Hybrid seeds, chemical fertilizers, and pesticides became the norm.

"At first, the profits were good. We thought we had found a new future," says an elderly farmer. "But slowly the soil grew weak, the pests increased, and losses became heavy."

Over time, soil fertility declined, erratic rains made farming risky, and poor-quality seeds from the market added to the farmers' woes. Many lost hope. Yet, having adapted to modern practices, they hesitated to return to their old, resilient ways.

It was in this backdrop that SWATI introduced the Special programme for Promotion of Integrated Farming in 2023. Farmers were brought together to reflect on their struggles and to reimagine farming that was both sustainable and profitable. The call was for organic and diversified farming.

While younger men remained skeptical, it was the women farmers of Kapaguda who stepped forward with determination.

With support from the program, they began cultivating a mix of groundnut, black gram, maize, and horse gram on their uplands.

They learned row planting methods, how crops complement each other in mixed systems, and how diversification spreads risk—so that if one crop failed due to drought or pests, the others would still ensure returns. They were also trained in preparing organic compost, manures, and natural pesticides.

In the first year, nearly 60 acres of upland were brought under this new system. At first, results were modest. Years of chemical use had left the soils barren and overrun with weeds. Crop growth was uneven. But with constant guidance from SWATI's field team, the women persisted.

That season, while yields were not very high, the outcome brought fresh hope: every farmer harvested at least four different crops from the same land. Some even reported excellent yields. Encouraged, more women joined hands the following year, and the results were remarkable. Yields improved, costs dropped, and the dependence on risky market crops reduced drastically. Families began to see the benefits of food diversity.

As woman farmer Suneli Nayak proudly shares:"People think only about quick profits from vegetables, but they do not see the hidden losses. With mixed and organic farming, we get steady harvests, healthy food, and almost no risk of crop failure. The cost is so low that the profit is actually more. For farming to remain a livelihood for us, this is the only way forward."

Today, the women farmers of Kapaguda stand as role models—not just for their village, but for the entire block. Their courage to embrace sustainable farming has rekindled hope in agriculture, showing that true resilience lies in diversity, cooperation, and women's leadership.

Meeting Household Expenses through Indigenous Poultry Rearing – The Story of Swapna

In the tribal belt of Raikia, poultry is not just food – it is culture. Indigenous chickens have always been part of rituals like Bil Puja and Pahad Puja, household ceremonies, and even healing practices. No festive gathering or guest visit is complete without chicken meat or eggs. That is why, for generations, every household reared a few country chickens in their backyard.

But with time, as broiler chickens flooded the market, the practice of rearing hardy indigenous chickens slowly declined. Yet, one woman proved that this traditional practice can still bring livelihood and dignity if nurtured wisely.

That woman is Swapna Nayak from Dibari village in Sugadabadi Panchayat.

A Dream Hatched from Three Chickens

Swapna, like many women farmers, juggles multiple roles – she works in the fields, tends to cows and goats, and looks after her family. Last year, she began with just three hens. When two of them laid eggs, Swapna chose not to eat them. Instead, she carefully incubated them, and one morning, she was greeted with the sound of cheep cheep as 16 tiny chicks broke out of their shells.

She dreamed that if she could rear them for four to five months, each chicken could fetch her ₹500–₹600 in the local market. With such demand, she was hopeful this would give her a steady source of income.

Dreams Shattered by Challenges

But her excitement soon turned into disappointment. Without proper knowledge of poultry management, the chicks roamed

freely in the house. Six of them were snatched away by kites, and another five died due to disease. "I was heartbroken. I felt my dream was slipping away," she says.

A Ray of Hope from SWATI

In 2022, when SWATI organization introduced the Special programme for Promotion of Integrated Farming in her village, Swapna attended a meeting where women discussed how indigenous poultry could empower them financially. She shared her struggles, and experts guided her on the importance of proper housing, vaccination, and balanced feed.

"That day gave me hope again," Swapna recalls. "I realized that I could still make this work if I did it properly."

With support from the program, she received materials to build a sturdy poultry shed, enough for 50 birds, fenced with wire mesh to keep predators away. She also received hands-on training on poultry management – from preparing homemade feed to maintaining hygiene and ensuring timely vaccination.

A New Beginning

With renewed determination, Swapna began afresh, rearing her 12 surviving chickens with care. Within a year, her small initiative started showing results. Today, she has 18 chickens, five of which are laying eggs. She has already sold eight chickens for ₹4,800, and her confidence has soared.

Looking ahead, Swapna is optimistic. "I believe I can rear at least 50 chickens in the coming year. If I sell even 25, I can earn ₹13,000–15,000. That money will help me run my household smoothly," she says proudly.

From Struggles to Self-Reliance

What began as a simple household practice has now turned into a pathway to self-reliance for Swapna. She believes that with proper guidance and support, indigenous poultry farming can become a sustainable livelihood option for many women like her.

"The project gave me courage and knowledge. Now I don't just rear chickens – I rear hope for my family's future," says Swapna with a glow of confidence.

From Savings to Success: Maa Laxmi SHG's Journey into Organic Fertilizer Production

In the quiet village of Lambadikia in Sugadabadi Panchayat, ten women once gathered with a simple dream – to stand on their own feet. They formed the Maa Laxmi Self-Help Group (SHG) eight years ago, pooling small savings each month. But despite their efforts, the group remained without a proper livelihood activity.

"Every month we would save a little and deposit it in the bank," recall the group members "but when it came to doing something with the money, we were afraid. We didn't know what business to take up."

After nearly five years, the bank sanctioned them a loan of ₹50,000. But due to inexperience, they divided the money among themselves and used it for farming, without any lasting impact. They often heard stories of other SHGs running small enterprises, but hesitation and lack of exposure held them back. "We were shy to go to offices, to talk to outsiders... most of us have studied very little," admits another member.

Everything began to change in 2022, when SWATI organization introduced the Special programme for Promotion of Integrated Farming in their village. In the meetings, the women learned about opportunities in organic farming, animal husbandry, and other allied activities. What caught their attention was the idea of preparing and selling organic fertilizers—eco-friendly, affordable, and much in demand.

They learned how to prepare Handikhata, Brahmastra, Nimashtra and other organic solutions using simple materials like cow dung, cow urine, and medicinal leaves. The training also covered dosage, benefits for crops, and marketing strategies. For the first time, the women felt a spark of confidence.

With program support of another ₹50,000, the SHG purchased drums, racks, bottles, and trays to begin production. At first, they tested the fertilizers in their own fields and distributed samples to neighbors. When crops showed healthier growth, confidence bloomed. "Farmers told us, 'This works

better than chemicals!' That gave us courage," smiles Basanti, proudly.

Soon, demand grew. They began producing in larger volumes and fixed a price of ₹20 per liter, which later rose to ₹30 as sales increased. Even the Agriculture and Horticulture Departments started procuring from them. The government's push for organic methods in millet cultivation and vegetable farming worked in their favor.

By 2023–24, the group sold 900 liters of Handikhata, earning recognition and even an award at the State-level Integrated Farming Festival. For women who once hesitated to step out, this was a proud moment. "We went to Bhubaneswar to receive the award. Standing on that stage, I felt for the first time that our work has real value," says Saraswati with a gleam in her eyes.

Today, the members of Maa Laxmi SHG prepare fertilizers alongside their daily household chores. They no longer see themselves as just homemakers, but as entrepreneurs. Their bottles of Handikhata line up neatly in racks, ready for delivery.

"We are confident now," says Basanti. "Organic farming is the future, and our products will always be in demand. This income helps us pay for our children's education and household needs. More than money, it has given us respect."

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