Wheels GSF Case Study

Problem Statement

The rural farmer generally depends on a single crop during the season and ends up working odd jobs in the other months. Crop diversification can help farmers to sustain themselves financially all through the year and reduce the risk of crop failure, increasing their income. The adoption of natural farming practices and their effect on crop yield enables farmers to have better livelihood options.

Background-GSF

The Gram Samriddhi Foundation (GSF) is an **Integrated Rural Development Initiative** that works towards building a sustainable rural livelihood, through a multi-dimensional approach that combines infrastructure development, capacity building and entrepreneurship support. By harnessing the collective efforts of local communities, the GSF is redefining the future of rural India with focus on all five dimensions of development JAL-Water, JAMEEN-Land-Soil, JUNGLE-Forest-Tree, JAANWAR-Animal & JAN-Human, unlocking the true potential of its villages. Some of these areas also resonate with what Wheels does and explore impactful initiatives to enhance the economic status of the rural farmers. GSF works with a mission to promote sustainable prosperity of farmers and betterment of the environment by:



- Empowering Farmers
- Chemical-Free Food for all
- Improved Environment
- Combating Malnutrition
- Youth Empowerment and Economic Opportunities
- Preventing Farmers' Suicides

To achieve the above, GSF focuses on an integrated approach:

- Farmer Training
- Fruit Tree Plantation
- Biogas Generation
- Rainwater Harvesting
- Farming Co-Operatives, FPOs and Self-Help Groups
- Rural Youth Skill Training

Evolved Model

GSF started in the year 2019 in Keshiary block near IIT Kharagpur, covering 100 villages and 800 farmers. On an average 50 trees were planted per farmer covering 6000 Sq Ft, totalling 40,000 trees. Tree plantation trips are planned to Kharagpur on alternate days from Kolkata viz., 12 trips with 10-20 participants per trip. One to two villages are covered in every trip with a tree plantation photo with every member.

In the last 4 years GSF reached 8 blocks, 900 villages, 11,000 farmers planting 4,25,000 trees. Approx 75% of the trees survived and giving fruits. 3287 farmers were trained creating 95 biogas plants and 600 rainwater harvesting ponds. The steps that are followed:

1. Select 10 farmers per village
2. Each farmer will plant 100 trees
3. Registration with proper documentation
4. Train them before tree plantation
5. Scientific site plan on planting specific plants as per the condition of the soil
6. Regular follow-up and monitoring
7. Concentrated approach with focus on organic farming
8. E-Certificate to all farmers participating in tree planting

Proper documentation is maintained. Farmer contributes Rs. 600/- and 6000-8000 Sq Ft of land and commits to dig a rain water harvesting pond (20x20x10) on his land to ensure enhanced water availability. A small compost pit of 12x4x3 is also planned. Proper layout planning is done and the plants selected (15 varieties) depending on the soil, climactic zones and availability other resources. The feedback and knowledge from the local farmers and the scientists from Vidyalay help in identifying correct plants.

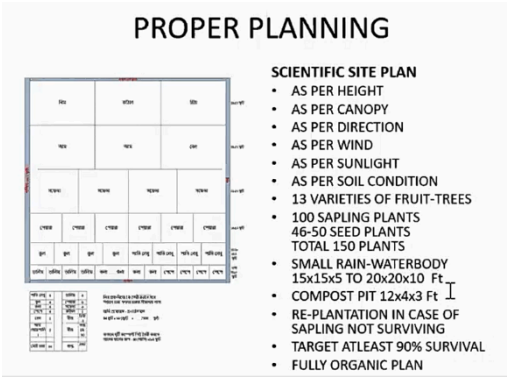




*Figure SEQ Figure * ARABIC 1 People who donate the trees are given a certificate*

The yield and the benefits after planting the trees depends on the tenure and when the specific type tree gives results.

Once the other farmers see the benefits in the fields of the selected farmers, it creates positive interest for others to join the initiative.

Diversifying into other solutions like bio-gas, vegetable farming, rainwater ponds, zero cost natural farming, Panch Gavya health care will add to the income stream.

Currently GSF has 17 full time paid volunteers in 17 blocks and team of 50 part time volunteers in Kolkata. Additionally, people from SHGs, Farmer groups, local institutes, NGOs, Clubs, social workers are associated with programs. This is a very good resource and can be expanded with good efforts. The average pay for the volunteer is 15k per month.

Donors/organizations/NGOs can associate with one or more clusters of 60 farmers each and support in one of these activities:

- Sapling and seed cost per farmer = Rs. 5600 (Farmer contribution = Rs. 600; Farmer sponsorship Rs. 5000 per farmer)
- Rain Water Harvesting Pond Rs. 5000 per farmer (20x20x10ft)
- Village sponsorship of 10 farmers = Rs. 1,00,000
- Farmer sponsorship = Rs. 10,000 (Saplings + Rainwater Pit)
- E-Certificate is sent to all contributors
- Training to the farmers and family members on various vocational topics with regular follow up and sustained engagement



For example, IIT Kharagpur Alumni Foundation adopted one village and sponsors can choose other subcategories as well.

Target

- Reach 2500 villages
- Training 20000 farmers – 4 days training
- Installing 1000 Gobar Gas plants
- Creating 1000 Rainwater Harvesting Ponds
- Planting 20 lakhs fruit trees – 5000 acres of fruit tree garden across 20,000 farmers
- Promoting Self-Help Groups, Farmers' Club, FPCs, etc
- Setup micro food processing units
- Setup skill development facilities
- Annual revenue generation for each farmer (100 trees) of Rs. 500 per tree; Rs 50,000 per year

Replicability and Geographical Scope

- Primary focus is on rural West Bengal with some initiatives in neighbouring Odisha and Jharkhand
- Can start immediately in the adjoining districts of Odisha and then expand to other areas, also need to build a local team
- Keep getting support from Rotary, IIT Kharagpur, Lions Club, Dept of Horticulture and other local institutions to mobilise resources
- Can establish link with IIT-Bhubaneswar
- Prof Damodaracharya from Odisha, Prof SN Panda from IIT Kharagpur, can continue to be mentors and show direction to expand
- Dr Varun Vidyarthi from Lucknow, IIT Kharagpur Alumni, conducts training for young people interested in social work. He can be one of the resources to train the resources of GSF.

How WGF can help?

- Bring in the technology aspect to the solutions

- Connect to the partners who are already working this space (Connect Sarpanch Rekha Rao near Chennai, School by an IIT Alumni near Hyderabad with tailoring as an option, Mukti Foundation to introduce RuKart Subji Coolers, Grameen Vikaas Kendram from AP, Laterite based solution for Arsenic contamination of water from IIT Kharagpur, Water expert RK Malhotra's advice and best practices)
- Can help in piloting a Paid Forward Model where the champion farmers contribute in kind or cash creating a sustainable and replicable model.
- Nirmal Agarwala can speak to one Alumni group at a time

Scale of Opportunity

To expand and serve rural populations across India. There are about 160 million farmers in India, including 80 million small farmers holding less than 1 acre land. Most of them are stuck in a vicious poverty cycle, in need of interventions that are mentioned above to improve their living conditions and alleviate poverty.

Increase in income 5-fold compared to paddy cultivation in 2 years; Forward integration from Farm to plate; organic fruits/vegetables for cities increasing the market

Call to Action

The organisation invites contributions in the following ways:

- SPREAD the word about the organisation's activities among your contacts
- INVEST and contribute towards the organisation's mission
- SHARE your knowledge or expertise on any of the following: tree plantation, gobar gas plants, rainwater harvesting, farmer training, cooperatives or skill development
- VOLUNTEER with any of the organisation's activities
- WRITE about the organisation's work to share among external audience
- BUILD teams in other states

Contribute

To contribute to Gram Samriddhi Foundation's activities, please visit their website: *https://gramsamriddhi.org/#contribute*

Page on the WGF site: Gram Samriddhi Foundation - WHEELS Global Foundation

Recording of the meeting:
https://drive.google.com/file/d/1H_sPSKg-7sVBY0AFXzHmkGjwLQjpFkQJ/view?usp=drive_link