

CSR Project on Promotion of Natural Farming and Millet Cultivation In the Periphery villages of JSPL, Angul.

Supported by :-



Implementation Partner :-



1. Project Title

Promotion of Natural Farming and Millet Cultivation in periphery villages of JSPL, Angul for Sustainable life and Living

2. Project Objectives

Organization intends to a) empower people and b) enrich the environment. The focus is on enabling people to gain knowledge/adopt natural farming and associated practices - that will promote their well-being in terms of income with food/nutrition security and protect environmental and ecology. Broad objectives are as below:

- ✓ To bring awareness of farmers on dangerous conventional farming based on synthetic external inputs and enable they shift from chemical practices to natural farming.
- ✓ To train farmers groups/all households on natural farming techniques/practices to:
 - a) Promote usage of indigenous cow dung, urine, organic manure and pest repellents
 - b) Adopt natural farming practices and harvest toxic free qualitative agro products
 - c) Achieve sustainability in food production and nutritional gains coupled with income gain in case of each beneficiary farmer.
- ✓ To monitor and follow up trained farmers to transfer knowledge on natural farming to replicate/scale up in possible manner.
- ✓ To promote canopy in eco-friendly manner and reclaim ecological status of the project area leading to hazard free survival.

3. Intervention Area

49 villages of Banarpal and Chhendipada block in Angul district.

4. Target Population

- a) The primary [Direct] beneficiaries (2000 farmers household)
This project primarily targets farmers and agriculture dependent households who form over 70% of the region's population and 50% of them being women.
- b) The Secondary [Indirect] beneficiaries
The community members - including
 - i) Landless households
 - ii) Agricultural labour
 - iii) Family members of targeted households
 - iv) Other stakeholders of the community as a whole.

5. Project Period

Initially for one year and to be extended to 3 years.

6. Problem Statement

JSP(L) even though intends to work in proper coordination with people and environment around – still its mining and subsequent industrial ventures have eventually caused certain backdrops in the environment around and more particularly for the people living in its peripheral area. As witnessed as off – the following issues have emerged in the villages of its peripheral areas belong to Chhendipada and Angul Block of Angul district:

- Water Pollution: mining and industrial processes contaminates ground water sources, posing risk to the life and human health.
- Soil Degradation: Soil erosion and nutrient depletion leading to reduced fertility and thus affecting plant growth.

- **Air Pollution:** Emissions from mining and industrial processes releases particulate matter, gases, and volatile organic compounds, contributing to poor air quality and negative health impacts.
- **Loss of Biodiversity:** Habitat destruction and fragmentation due to mining and industrial activities has led to loss of biodiversity, extinction of species and disruption of ecosystems in the locality.
- **Land Subsidence:** All of the aforesaid reasons have led to land subsidence and subsequent unexpected changes in land use.
- **Noise Pollution:** Mining & subsequent industrial activities have generated noise, pollution affecting to the environment and more particularly to the human population.
- **Climate Change:** Mining and industrial activities has contributed to exacerbating climatic aberration and its associated impacts.
- **Disruption of Natural Hydrological Cycles:** Mining and industrial activities have meanwhile altered natural hydrological cycles, affecting groundwater recharge, surface water flows and aquatic ecosystems - esp. found as small patches of natural wetlands.
- **Health Impacts:** a) Exposure to pollutants and environmental degradation has led to negative health impacts on local communities causing concurrence/chronicality of common health hazards including respiratory problems, skin diseases, indigestion, gastric, loss of hearing capacity, ENT issues, intestine infection etc. And b) Fluctuations in nutritional status of the community – esp. among children, pregnant women and the aged.
- **Impacts on Agro based Livelihoods**
 Agro-based livelihood of peripheral areas are affected due to
 - ✓ Change in soil quality [Soil Degradation/contamination]
 - ✓ Water scarcity [pollution and over-extraction of groundwater leading to reduced availability for irrigation, affecting crop growth and productivity]
 - ✓ Air pollution [toxic emissions damage crops/affect crop growth and reduce yields]
 - ✓ Loss of arable land [land acquisition for mining and industrial activities leading to reduced cultivable land, affecting agricultural productivity]
 - ✓ Disruption of ecological balance [changes in land use and pollution alter local ecosystems, affecting pollinators, soil microorganisms and other beneficial organisms]
 - ✓ Increased pest and disease pressure [environmental changes favour pest and disease proliferation, further reducing crop yields]
 - ✓ Livestock Health Impacts [pollution and environmental degradation has affected life longevity of livestock directly affecting their health, reducing productivity and income]
 - ✓ Market Fluctuations [reduced agricultural productivity and quality lead to market fluctuations, affecting farmers' income and livelihoods]
 - ✓ Food Security [decreased agricultural productivity compromises local food security, particularly for vulnerable communities]
- **Migration and Social Impacts:** Environmental degradation and livelihood losses have led to migration, social disruption, and cultural impacts.

7. Rationale

AS A WHOLE - These impacts can have far-reaching consequences for agro-based livelihoods, emphasizing need for sustainable/responsible practices that can protect/cope to environmental and social impacts. No doubt these environmental issues can have long-lasting and far-reaching consequences, emphasizing the need for sustainable/responsible practices.

Keeping in view the aforesaid eye-catching aspects of environmental as well as habitat degradation coupled with loss of human well being – the organization, on the basis of its

long standing experience intends to focus on certain definite aspects that will not only have direct impact on environment and human beings but also promote congeniality in terms of environment protection/regeneration as well as well being of habitants of the peripheral villages. So far the process of ensuring environmental security as well as promoting food and nutritional security – the promotion of millet farming along with the process of environmental revival through canopy development very well spells the projection of an integrated development in the concerned areas through various tasks along with other viable tasks. In fact, it wants to intervene in terms of Natural Farming, Canopy Development and Backyard Gardening that can be part of the viable solution to address environmental degradation and promote sustainable livelihoods for the affected population in the peripheral areas. Here's how:

8. Major activity & Justification

Sl.	Major activity	Justification [Proposed Benefits]
1	Natural Farming	<ul style="list-style-type: none"> Promotes soil health and fertility Reduces chemical usage and pollution Enhances biodiversity and ecosystem services Supports climate change mitigation and adaptation
2.	Canopy Development	<ul style="list-style-type: none"> Restores degraded lands and promotes reforestation Enhances biodiversity and ecosystem services Supports soil conservation and reduces erosion Provides shade, improving microclimates for agriculture
3.	Backyard Gardening	<ul style="list-style-type: none"> Promotes food security/sovereignty and nutrition support Supports rural agriculture with reduced dependence on chemical fertilizers/manures and pesticides etc. Enhances community engagement and social cohesion Provides an alternative source of fresh/quality produce for households/local communities.
4	Millet farming	<ul style="list-style-type: none"> Promotes soil health and fertility Reduces chemical usage and pollution Enhances biodiversity and ecosystem services Supports climate change mitigation and adaptation Promotes food and nutritional security Enhances natural farming practice with native varieties Reduces use of chemical fertilizer, manure and pesticide and thus reduces the risk to soil, environment and human health as a whole.

Together, these approaches can:

- Further scope for Integration with existing initiatives and practices both at domestic and community level.
- Promote community engagement and participation on a broad base
- Pursue action-learning, transform knowledge in to practice at field level and exposure
- Create scope for access to resources and markets
- Scalability and replicability
- Ensure further scope for research and partnership with line departments and create enabling environment for more transformation of technical knowhow and eco-friendly approaches leading to well being as a whole.
- Promotion of income, food and nutrition security among the people in the project.

In due course of time – especially during post project period - by combining natural farming, canopy development and backyard gardening with other sustainable practices, it

can be possible to create a comprehensive approach to address environmental degradation and promote sustainable livelihoods in peripheral areas.

9. Proposed Activity

An attempt has been made in this section of the project to pose all the aspects at a glance to pursue a wholesome approach

Proposed Activities	Particulars	Implementation Steps
Base line survey	To be conducted by covering all intervention villages to ascertain the existing status, areas of attention in context of environment/ livelihoods	<ul style="list-style-type: none"> To be conducted <ul style="list-style-type: none"> a) by third party or b) as directed by JSP authority
Awareness Generation	To be conducted at block level. Will be ensured by involving beneficiaries and stakeholders including Lead farmers and existing FPO members etc.	To be conducted in coordination with JSP CSR Wing, Volunteers of locality including SHG/Youth Club members Or as directed by JSP authority.
Natural Farming	1. Beejamrit	Seed treatment by using dung and urine of indigenous cow to protect seeds from seed born, soil borne diseases and promote healthy seed germination.
	2. Jeevamrit	Jeevamrit will be prepared out of dung and urine of indigenous cow, jaggery, pulse flour and undisturbed soil.
	3. Mulching	Mulching farm field using crop waste, organic waste or covering crops that protects topsoil from erosion, produces humus that conserves topsoil, reduces evaporation loss, improves water retention capacity, enriches soil nutrient status and controls weed growth.
	4. Waffsa Watershed Approach for Farming System and Agro Forestry	Will involve [with focus on local knowledge] soil and water management thru' terracing and contour bonding, agro forestry practice, crop diversification, rotation, use of organic manure, pest repellents, livestock integration & management, community engagement/participation.
Training, orientation and Exposure	Thematic approach based on Soil conversation, Long term soil fertility building, Eco-friendly farm management practices and Energy saving practices.	Will cover following themes <ul style="list-style-type: none"> Making and using compost and manure to provide long term soil fertility Bio Intensive gardening techniques for soil improvement Methods of Soil Conservation Crop Rotation and Farm Management Crop Diversity - Companion Planting and the Deterrents

		<ul style="list-style-type: none"> Ecological Pest Management (EPM) Agro forestry & Environment Conservation Water Harvesting and Home Technologies Animal Husbandry w.r.t. animal welfare Nutrition through the promotion of high nutritional crops and indigenous foods Farming for market and marketing process Gender equity in development Exposure visit to sites – Intra/Inter State – preferably to JSP intervention sites
Development of 5 Demo Plots on Natural Farming	Demo plot on selected crops under natural farming	<ul style="list-style-type: none"> Site selection Farmers selection for cropping vide adoption of natural farming practices including maintenance
Canopy Development	Sapling Provision through purchases Fencing , manuring	<ul style="list-style-type: none"> - Situation Analysis Assess the current status of canopy cover in the target area, Identify gaps and opportunities for canopy development, Analyze ecological, social, economic benefit of canopy development (emphasis on the area specific benefits) - Approach/Methods for Canopy development [Currently through purchase.] Will include selected tree species esp. Wind Shield, Fruit bearing, Less Water Consuming e.g. Dry land varieties - Planting, growth monitoring and maintenance. (As a whole will cover site selection and land preparation, variety selection, tree planting and maintenance, capacity building and training etc.)
Backyard Gardening	Promote at least for 1000 households	Land development Seedling and manuring / watering Training and orientation
Millet Farming	Promote 150 Acres Millet Farming in 30 villages.	300 households will be benefited through nutrition and food security. The soil fertility with revival of its naturalness through successive efforts of cultivating native varieties of millets Coordination and liaison with line departments to scale up and replicate exiting local know how along with the proposed process of improved varieties.

10. Project Strategy

The project management from the very beginning will be based on a strategy of plan for resource management i.e. man, material and money

- Appointment of Project Staff
- Field level awareness generation will be conducted followed by base line survey. Bench mark data will be collected through base line survey

- Selection of Resource Persons and Subject Matter Specialists concerning to training and orientation, on field hand holding support and management guidance.
- Selection of beneficiaries for – a) Farming b) Demo Plots [through community meetings]
- Fund support to beneficiaries on relevant aspects (as per project plan)
- Project execution [including training exposure etc.] with the support of project staff – coordinating with JSP field staff, project beneficiaries, volunteers, grass roots level cadres and FPO members etc.
- They approach from the very inspection will be participatory in nature coupled with the advanced process of improved management of cultivation and harvesting.
N.B. Activity-wise implementation steps are outlined for each activity under the caption – “Project Activity” above.
- Regular [periodic] monitoring by project staff in coordination with CSR wing of JSP and Resource Persons/Subject Matter Specialists – as relevant
- Review of activity progress with reference to deviations, if any, variance, deferments, gaps, short falls, plan for further course action and status of the beneficiaries and environment etc. will be reviewed every month vide a Monthly meeting at project office level that will be Chaired by the Secretary/ CEO of the organization. In the context, the organization may take the help/guidance/assistance of Experts/Consultants and Volunteers and Lead Farmers etc. depending upon the need and gravity of issue at the point of time.
- Mid-term evaluation will be conducted by the project team in consultation with CEO/ Secretary as well as Experts/Subject Matter Specialist/Resource Persons keeping in view the project plan and proposed deliverables of the project.
- By the fag the end of 2nd year – the project holder will consult JSP authority and will decided further course of action – as advised/directed.