#### Overview

Since last 2 months we are working the HDFC-HRDP Project has been working actively to uplift the communities in Narnoor Block, Adilabad district. The HRDP project worked with the 15 Grama Panchayths villages in Narnoor block of Adilabad district in Telangana state with the tribal and along with the rural backward families. Approximately we are covering around a 4500+ families got directly and indirectly and covered by community level interventions, while approximately 2500 marginalized and poor households in the project villages are covered through activities. A community-based strategy will be used for the three-year initiative, which runs from December 2024 to March 2027. With an emphasis on sustainability, this method looks for ways to effectively interact with communities and apply several kinds of solutions to satisfy the needs of both individuals and families.

The HDFC-Houlastic Rural Development Project (HDFC-HRDP) is one of the initiatives undertaken by BAIF Development Research Foundation, an organization that works on promoting rural development, agriculture, and animal husbandry across India. BAIF's projects are focused on improving the livelihoods of rural communities through sustainable development models, integrating technology, education, and community empowerment.

By expanding rural families' access to resources, markets, and best practices, the Houlastic Rural Development Project, like many of BAIF's other programs, contributes to raising their income levels and general well-being. It also promotes actions that aid in the preservation of natural resources, which helps to maintain environmental sustainability.

The project is an example of integrated rural development since its all-encompassing strategy contributes to the development of a self-sufficient and balanced ecosystem in rural areas.

# **Objective**

Solving the main issues that rural communities face, especially with regard to agriculture, animal husbandry, and sustainable livelihood practices, is the goal of the Houlastic Rural Development Project (HRDP).

Theme	Activities
Agri. and Horticulture crops (3 Tier farming and millet cultivation)	Agriculture (Millet cultivation), Horticulture (WADI) and Take plants, Inter cropping system (Vegetables cultivation).
Natural Resource Management	Farm Pond's and Check dam's installation, Trench Cum Bunds (TCB's) installation to preserve the water in summer time.
Use of Bio fertilizers	Bio fertilizer distribution like Phosphate Solubilizing Bacteria (PSB), Trichoderma, Azoto bacteria, Rizobium, Neem oil.
Drip System	To provide drip system to save the water and directs water will provide to the plant roots.
Providing free of cost electricity	Solar Street Light Installation in Tribal areas.

Skill Development & Livelihood	Training Programmes on Vermicompost Unit and WADI Cultivation.
School Development Activities	Infrastructure Development (Smart Digital Class room), Awareness Generation Events, Basic needs (Library, U.V Water plant, Indoor and Outdoor Sport kit), Plantation in school, Urinary's and Toilet's.

# Millet cultivation



Millets are drought-tolerant and resilient crops. They are grown in warm climates worldwide and are important food crops in many parts of the world. Sorghum grows in areas with minimal rainfall or water stress because it is incredibly drought-tolerant and can grow in hot, dry climates. Millets are incredibly nutrient-dense. They are high in proteins, fiber, minerals including calcium, magnesium, and iron, and vitamins, particularly B vitamins. They are therefore

an excellent option for enhancing food security and health, particularly in areas where malnutrition is prevalent. Due to their comparatively low input requirements for pesticides and fertilizers, millets contribute to the preservation of soil health. By adding organic matter, they can help increase the fertility of the soil. Because millets typically grow faster than other cereals, farmers can grow more than one harvest in a year. Overall productivity and income may rise as a result. Smallholder farmers can save money by growing millets. They are a wonderful choice for local markets and subsistence farming because of their great resilience and inexpensive input requirements. Since millets don't contain gluten, they're a great substitute for those who have celiac disease or gluten sensitivity. Additionally, they have a glycemic index that is low, which can aid in blood sugar regulation.

#### Millet

- ✓ To develop the 150+ farmers millet income
- ✓  $1^{st}$  year -30 acr
- $\checkmark$  2<sup>nd</sup> year 60 acr
- $\checkmark$  3<sup>rd</sup> year 60 acr

### WADI: AGRI-HORTI Model

To increase 150+ farmers income

#### **WADI**

- $1^{st}$  year -30 acr,
- ✓ 2<sup>nd</sup> year 60 acr, ✓ 3<sup>rd</sup> year 60 acr,
- ✓ Total: 150 acr

Over all 30 farmers both i.e. tribal farmers and small land holders are mainly develop and improve their income and socio economic activity and they converted to barren land to cultivable land and also they can cultivate agriculture crops like Millets, Cotton, Sweet corn and Vegetable crops like Palak, Bendi, Carrot, Laddies finger and Tomato etc,.

By integrating fruit trees like mango plantation, vegetable crops, and occasionally even animal husbandry on a small plot of land, wadi cultivation is a traditional farming method that is mostly used in India. Its goals are to maximize resource utilization, improve food security, and improve the socioeconomic conditions of small-scale farmers, particularly in arid and semiarid regions, by promoting sustainable land management and a variety of revenue sources through intercropping and agroforestry techniques. In essence, wadi cultivation is a comprehensive approach to dryland farming that integrates horticulture, agriculture, and forestry on a single plot of land to maximize production and environmental sustainability.





### **Bio fertilizers**

Living microorganisms found in biofertilizers aid in the growth of plants. They are an environmentally responsible and renewable substitute for chemical fertilizers. Nitrogen-fixing bacteria: These microorganisms, which include Acetobacter and Azospirilium, make more Nitrogen (N) available to plants. Azotobacter and other phosphorus-solubilizing bacteria emit organic acids or enzymes that break down Phosphorus (P). By using these bio fertilizers soil will be fertility, promote many elements of plant growth and development, increase mineral and water uptake, encourage root proliferation, rootlet density, and branching.



Biofertilizers are an excellent tool for promoting sustainable agricultural practices, improving soil fertility, and increasing crop productivity. They provide an eco-friendly alternative to chemical fertilizers, reduce costs, and contribute to better environmental health.

By enhancing plant nutrition, promoting soil microbial health, controlling diseases, and improving resilience to environmental stresses, biofertilizers offer numerous benefits for farmers and the planet. Their use is crucial for the future of agriculture, supporting the transition toward more sustainable, resource-efficient farming practices.

# **Verimicompost Unit**

In organic farming and gardening, vermicompost is utilized as a soil conditioner and fertilizer. Sewage can also be treated with it. Vermicompost is a method of recycling household and agricultural waste. It also improves crop quality, increases plant development, improves soil health, and lessens the need for synthetic fertilizers. A vermicompost unit is a great investment for communities, farmers, and gardeners who want to recycle waste, increase soil fertility, and produce organic fertilizer in an environmentally responsible manner. Among the many advantages that these units provide are increased agricultural yields, better soil health, less environmental impact, and cost savings through the conversion of organic waste into nutrient-rich vermicompost.



A healthier earth is achieved through the use of vermicompost in agriculture, which promotes sustainable practices, improves food security, and lessens reliance on chemical fertilizers.

# Solar insect traps

An environmentally friendly tool that attracts, captures, and kills insects using solar energy is a solar insect trap. These traps are frequently employed to manage pest populations in urban, agricultural, and gardening settings without endangering the environment. They are sustainable and energy-efficient since they run on the sun's inherent power. In a number of contexts, it can offer an environmentally beneficial, energy-efficient, and sustainable pest management solution. In addition to lowering dependency on dangerous chemicals and saving energy, they are successful in lowering pest populations, increasing crop yields, and establishing comfortable living spaces for people. These solar-powered traps provide a secure, economical, and eco-friendly substitute for controlling insects in public, residential, and agricultural settings.

- $ightharpoonup 1^{st} year 60 acr$
- $\triangleright$  2<sup>nd</sup> year 120 acr
- $\rightarrow$  3<sup>rd</sup> year 120 acr





### **Solar street lights**



Tribal communities benefit greatly from the sustainable, free of cost we provided and dependable lighting that solar street lights provide. They promote economic activity, increase social welfare, improve safety, and aid in environmental preservation. Some areas lighting facilities are not there especially in tribal areas during summer time womens are went to bring the drinking water in forest areas in that area we provide solar street lights in rural areas. Remote communities are empowered by solar street lights, which provide an offgrid clean energy option that enhances their quality of life and enables them to maintain their traditional ways of living while adjusting to contemporary difficulties.

These solar street lights can have a major positive impact on the development of tribal areas.

# **Drip irrigation system**

A very effective method of conserving water is drip irrigation, which slowly and carefully delivers water to plant roots. It is particularly helpful in places with limited water supplies or when conventional irrigation techniques such as flood irrigation are ineffective. By increasing agricultural yields while preserving water, drip irrigation can have a revolutionary effect in tribal regions where agriculture is frequently the main source of income and water supplies can be scarce.

Water conservation and efficient use, increased crop yields and quality, decreased soil erosion and



improved soil health, adaptation to climate change and droughts, and assistance for smallholder farmers in tribal areas are all made possible by the drip method used by tribal peoples and small land holders. By increasing crop yields, decreasing soil erosion, promoting environmental sustainability, and improving water efficiency, drip irrigation has the potential to completely transform farming in tribal communities. Drip irrigation offers a clever, economical option in areas with limited water resources where conventional irrigation techniques are impractical. Additionally, it supports agricultural diversity, enhances food security, and aids tribal farmers in adapting to climate change.

This approach can empower women and boost local economy by cutting down on the time and effort required for irrigation, which will ultimately aid in the general development of tribal communities.

It refers to the use of drip irrigation technology, which accurately directs water to plant roots, in areas where tribal communities reside. These areas are frequently characterized by water scarcity and difficult terrain, enabling them to grow crops more efficiently with less water usage.

# Trench Cum Bunds (TCB's):

Trench cum bunds (TCB's) are a common farming practice that conserves soil and water, particularly in regions with uneven terrain, water scarcity, or soil erosion. They manage water flow, reduce soil erosion, and improve soil fertility by combining the advantages of trenches and bunds. This approach works best in areas with erratic rainfall, steep terrain, and dryland farming.

### Trench Cum Bunds (TCB's)

- $\checkmark$  1<sup>st</sup> year 110
- $\checkmark$  2<sup>nd</sup> year 165
- $\checkmark$  3<sup>rd</sup> year 165
- $\checkmark$  4<sup>th</sup> year 385
- ✓ Total: 825 acr.





### **Farm Ponds**

Farm ponds provide a variety of functions, such as irrigation, wildlife habitat, aquaculture, and water storage.

- ✓ Farm ponds -10x10x1.5m = 110 CMT
- ✓  $1^{st}$  year 10 hr 10 acr.
- ✓  $2^{nd}$  year 50 hr 50 acr.
- ✓  $3^{\text{rd}}$  year -50 hr -50 acr.
- ✓ Total: 150 acr.



**Harvesting rainwater:** gathers extra water during the wet season. Rainwater can soak into the ground thanks to groundwater recharge.

**Watering**: Supplies crops with water during dry spells. Supplies irrigation water even in the absence of precipitation. It gathers extra runoff during the wet season. Crops can receive additional irrigation from stored water. Cattle can utilize it as drinking water when there is a drought. Pesticides can be sprayed with it.

#### **Check dams**

In order to manage water supplies, increase agricultural output, and strengthen rural communities' resilience, check dams are an essential tool. Water conservation, flood mitigation, soil erosion control, and improved access to water for household and agricultural uses are just a few advantages they offer. Check dams promote rural development, enhance livelihoods, and assist communities with adjusting to the problems presented by climate change by guaranteeing sustainable water management. They are a crucial remedy for rural regions that struggle with water scarcity and require long-term, reasonably priced infrastructure to improve their water security.

To change the uncultivated land to cultivated land -120 acr.

- $\checkmark$  Check dam (10 13m)
- ✓  $1^{st}$  year 1 check dam 20 acr,
- ✓  $2^{\text{nd}}$  year 3 check dam's 60 acr,
- ✓  $3^{rd}$  year 2 check dam's 40 acr





### **School Renovation: Creating a Better Future for Students**



We are taking an initiate to develop the tribal welfare schools. Smart classrooms, which use technology in many kinds of ways to improve the educational experience, have revolutionized the traditional learning environment. Key applications for smart classrooms include the Access Online Resources, Multimedia Enhanced Presentations,

Communication and etc. Simple outdoor and indoor sports equipment is necessary for a range of competitive, fitness, and leisure pursuits. Ranging from fostering skill development and physical fitness to fostering collaboration, community service, and mental health. These kits facilitate participation in a wide range of physical activities that are good for the body and the mind. Libraries are important places that benefit people, communities, and society at large in many ways. Libraries are vital community resources that assist education, individual growth, cultural preservation, and community involvement. There are several advantages to using a UV water plant in schools, but the main one is that it guarantees that the drinking water for faculty, staff, and students is safe, clean, and healthy. Enhancing the taste and quality of water while promoting health and hygiene. It lowers the danger of waterborne illnesses, promotes economical and sustainable water management, and enhances the general health of employees and pupils. Schools may create a more wholesome and comfortable learning atmosphere by making sure that children have access to clean drinking water. Both functional and environmental goals are served by the use of urinals and plantations in schools, which enhances the general wellbeing of the community, employees, and pupils. In cities where air pollution may be an issue, this is especially crucial.

- ✓ Smart class room's
- ✓ No. of class room's -1
- ✓ Plantation's

- ✓ Game's (Cricket kit, Volley ball, Football and etc).
- ✓ Library (To provide all new books & study tables).
- ✓ Water plant & station (Benificiary's: students and facultys).
- ✓ Boys Toilets (To build a new wash room for the boys).
- ✓ Wash basin (To hand wash and cleaning of plates of students).

# Training and Visit: Framers Knowledge Development

Farmers are important contributors to agricultural growth because they offer expertise, abilities, and real-world perspectives that can greatly enhance farming methods. The purpose of these activities is to assist farmers in exploring new markets and technology, as well as in learning new skills and comprehending novel agricultural practices. Farmers can improve productivity, sustainability, and overall farm profitability by attending training sessions and seeing other prosperous farms or agricultural models.

**Real-World Examples:** Farmers can observe and practice new methods directly by participating in on-site training at government agricultural extension centers, demonstration plots, or agricultural research farms.

Workshops and seminars: These give farmers business skills, financial literacy, and theoretical information about new agricultural techniques that they can use in their businesses.

**Farm Visits & Field Tours:** Farmers have the opportunity to see model farms that highlight industry best practices. These farms might be utilizing cutting-edge methods like agroforestry, precision agriculture, or organic farming. Farmers can engage with specialists and learn about the most recent farming systems, policies, and research by going on field visits to research institutions, agricultural universities, or model agricultural projects.

Visits for exposure and training are effective instruments for farmers' growth. They provide the chance to broaden their expertise, advance farming methods, and boost farm output and profitability. Farmers may build more resilient, effective, and lucrative farms by learning about new technologies, improved farm management techniques, market access, and sustainability practices. Peer learning, teamwork, and empowerment are also encouraged by these programs, particularly for young people and women in agriculture. In the end, they assist farmers in overcoming obstacles, enhancing their standard of living, and supporting sustainable farming methods.