LEADS DEVELOPMENT MODEL

Sustainable Livelihood Promotion Initiative

Promotion of Boribandh for Sustainable Livelihood Promotion

Background

Jharkhand is abundantly endowed with natural resources particularly Jal Jungle and Jamin (Water, forests and land). The state has numerous rivers, rivulets, ponds, dobhas and perennial water sources at various locations because of the green hills and mountains present here. With proper planning and management, these water resources can be effectively utilized at large scale and for a longer period. To harness this potential of the available resources, LEADS has encouraged communities to construct Boribandhs across seasonal streams and perennial water channels during and after the monsoon. The boribandhs help in conserving water and extend the irrigation period by retaining surface water in Rivulets. The promotion and construction of Boribandhs has become a regular component of LEADS community-based interventions. Implemented with active participation from local communities, this initiative strengthens water resource management and facilitates the large scale cultivation of various crops including high value crops. This not only enhances agricultural productivity but also improves household nutrition, while also ensuring economic well-being of farmers.

Steps of Boribandh Promotion:

Steps: 1 The site is selected within the purview of the revenue village based on field assessment conducted prior to selection. Priority is given to Boribandh, where relatively low investment would be needed and the site is such that it can hold large scale water. The expectation is that, the Boribandh being constructed should be able to support at least 25 to 30 farmers with land in the nearby area.

Step 2: Community is mobilised and input is given about cost involvement and benefits of the boribandh. Once community get convinced than water users groups is formed under the leadership of the gram sabha. In one village more than one boribandh can be promoted depending on the possible opportuinities and interest of the community.

Steps 3: The formation of a Water users groups is facilitated for constant support. This group is actively involved from the initial stage of construction and continue to play a key role in its operation and management. The User Group also acts a body that resolves any conflict of interest that may arise in the due course of usage and management of Boribandh. Additionally, they are responsible for collecting the nominal user fee charged to farmers who utilize Boribandh water for irrigation.

Step 4: Cropping Plan: A comprehensive cropping plan is developed by LEADS professionals in collaboration with community/Gram Sabha. The plan identifies suitable crops for different category of land and location based on seasonal conditions and agro-climatic suitability. Crop seasonality is mapped using the Participatory Rural Appraisal approach. The plan includes cultivation of staple crops like paddy, wheat, maize, Bajra etc. It also promotes vegetable cultivation and other high-value cash crop cultivation. This diversified cropping strategy aims to enhance the income of the involved families.

Step 5: Plantation and crop cultivation: Plantation activities along with intercropping, are undertaken wherever site conditions are suitable. Intercropping enhances opportunities of yielding additional income and provide sustained support to the communities for improved livelihood opportunities

Step 6: **Benefits enlisted**: The documented benefits of Boribandh are substantial. A single Boribandh typically irrigates 15 to 20 acres of land benefitting more than 35 farmers during one cropping season. The construction cost is relatively low, as it primarily involves cement bags and small quantity of stone bolders. The construction cost excludes the labour costs as local communities involved contribute by offering physical labour without charging. Hence, the total expenditure incurred approximates 25 to 30 thousand depending on the site conditions. Active utilization of the Boribandh by a farmers can help him potentially earn an additional income of over 25000 in a single season. For a group of 30 farmers this translates into a cumulative incremental income of approximately 7,50,000 (30 farmers x 25000 = 750000). Considering the modest investment required and the significant economic returns generated, Boribandh construction represents a highly cost-effective and financially rewarding intervention.

LEADS Experience:

Each year LEADS promotes 15 to 20 such Boribandh across its intervention area. As communities directly experience the benefits of improved water availability and increased agricultural production, they gradually take ownership of the initiative. In subsequent years, community members construct and maintain the Boribandhs themselves with minimal external support. This approach has the potential to be scaled up as a community campaign to encourage rainwater conservation through Boribandhs, thereby expanding opportunities for agriculture during the winter and summer seasons. Since the benefits are immediate and visible, community participation and mobilization become significantly easier in the following years, ensuring the sustainability and wider adoption of the initiative.

Sustainability

The structure is reconstructed at the same location each year using simple cement bags filled with locally available sand. As the required materials are inexpensive and readily available and accessible, the construction cost remains low and manageable. The economic and agricultural benefits generated far outweigh the investment involved. This community-led approach fosters local ownership and ensures long-term sustainability of the intervention.

Concluding Remarks

The success of Boribandh largely depends on effective community mobilization and participation. When communities are actively engaged and experience the benefits of the intervention, they are motivated to take ownership and manage its maintenance in the following years. If implemented successfully, this low-cost method can conserve significant volumes of rainwater at a large scale with minimal investment. Despite its modest construction cost, the benefits are substantial and become visible within a short period. For example, using the conserved water for watermelon cultivation can generate returns exceeding 600% of the initial investment, including the costs of construction, agricultural inputs, and other necessary resources.

Glimpse of Boribandh