

Countering Undernutrition through Community-based Approaches – Participatory Learning and Action, Linking Agriculture to Natural Resources (PLA-LANN).

The program included 2,000 villages, leading to improved nutritional status for more than 1,00,000 households under the Food and Agroecological Approaches to Reduce Malnutrition (FAARM) project in 2016 with funding from the Azim Premji Philanthropic Initiatives (APPI). The intervention was aimed at improving dietary diversity and nutritional outcomes of the tribal population in eight blocks of Rayagada and Kalahandi districts of Odisha. A survey conducted in the implementation districts prior to the intervention revealed a poor state of food security and nutrition status. In addition to the lack of food security and undernutrition in the program blocks, the following bottlenecks were identified in the region:

- Minimal uptake of services from social welfare schemes such as Integrated Child Development Services (ICDS) and Public Distribution System (PDS) by the people.
- Most of the people were dependent on farming, fishing, wage labour, small businesses, government employment and seasonal migration for their livelihoods. Very few people received benefits from the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA).
- Prevalence of gender inequality, whereby men were decision-makers, both at the household and community level. The men favoured cultivation of cash crops over food crops due to commercial value.
- A very small amount of the yield was being used for consumption by the villagers.

In order to address the problems identified in the survey, the intervention was designed using the PLA approach in 2011. The first phase of the program (2011-14) covered 50 villages and 2,000 families in Bissamcuttack block. During the second phase of the program (2014-17), the implementors added LANN to the existing program design. Insights from the initial stages of the program were used to scale up to include 4,000 families in 100 villages in 2015. In 2017, the project was further expanded to 2,000 villages covering more than 1,00,000 families in Rayagada and Kalahandi.

Objectives of the Intervention

The PLA-LANN intervention was designed to test a model to address undernutrition among the tribal community with a high prevalence of malnutrition in Odisha. It promoted nutrition-sensitive agriculture and natural resource management strategy with the overall goal to ensure that women and children have access to balanced and nutritious diet. The project targeted diet diversity for 1,00,000 families belonging to the tribal communities in the state.

Key Activities

The approach placed the community at the centre of the program. Design of the project linked nutrition with agriculture and natural resource management. It was implemented in four phases – (i) Orientation and Awareness; (ii) . The intervention included 17 sensitization sessions to facilitate community mobilisation and collective actions to address the immediate and underlying causes of undernutrition. The program aimed to transform agricultural practices, improve access to public services and re-establish the use of forests as a source of food through intensive community involvement.

- Community engagements and regular meetings to facilitate PLA-LANN meetings and create a space where community members could deliberate on undernutrition, its impact and ways to address it.
- Conservation and management of natural resources: facilitators held dialogues on forest regeneration to counter challenges of shrinking forest biodiversity as food producing habitat due to monoculture.
- Mixed cropping: The farmers in the region mixed short duration paddy, varieties of finger millets, little millets, foxtail millets, barnyard millet, proso-millet, sorghum, sesame, flax seeds, maize, velvet beans, tomatoes, ladyfingers, turmeric, sweet potato, yams, castor seeds, chillies and more, leading to healthier soil, a longer harvest period and greater food security.
- Nutri-gardens and nutri-fields: Young mothers and adolescent girls were trained and handheld to create nutri-gardens and nutri-fields. They were provided with seeds for crops that could be conserved and used for cultivation in subsequent years.
- Creating institutional mechanism for milling and storage of food: A community regulated mechanism at the village-level to store nutrient rich crops such as rice, millets, pulses and oil seeds was established. Under this mechanism, a nutrition security credit line was issued to the members against procurement of crops that could be encashed during food-crisis.
- Creating visibility for the health service delivery platforms
- **Convergence:** The intervention was strengthened through collaborations with the Agriculture and Horticulture Department and the Department of Women and Child Development (DWCD) in the program areas. The farmers helped to overcome barriers such as access to seeds and plants for young mothers and adolescent girls to grow nutritious produce.

Key Outcomes and Achievements

Scalability: The PLA-LANN model experimented by Living Farms was expanded to 107 blocks under a partnership between APPI and Odisha Livelihood Mission (OLM) to improve dietary diversity, nutrition knowledge and nutrition practice of women in the state. Under this intervention by OLM, 75,000 Self Help Groups (7.5 lakhs SHG members) are being trained on nutrition practices, establishing nutri-gardens, seed systems and backyard poultry in 30 districts.

Creating awareness: The women showed increased knowledge about causes of undernutrition and ways to improve nutritional intake for themselves and their children. They also displayed an improved understanding of exclusive breastfeeding period, complementary feeding and important food groups for lactating mothers and pregnant women.

Capacity building: The facilitators of the program recognized that empowering the community to take charge of their food security and nutritional requirements was key to the success of the program. They used community-based platforms to counsel the participating communities.

Improved nutrition outcomes: The nutrition outcomes improved significantly in the areas of program implementation. The endline impact evaluation report by Valid International showed significant improvement in the dietary diversity and consumption of nutrient-rich food among the participating communities.

Insights

- PLA-LANN is an effective approach to address undernutrition in tribal dominated areas that lack food and nutrition security. Deepening critical consciousness of the participating communities on malnutrition, sustained dialogue with them and collective actions enable the community to take charge of their own problems and find solutions thereof.
- Transforming agricultural practices to become more nutrition sensitive requires an in-depth understanding of the local culture, food systems, cropping patterns and practices. It helps the facilitators to adapt the program locally for desired nutrition outcomes.
- Involving adolescent girls in the program brought a new perspective to the entire intervention and provided the required impetus to creating nutri-gardens. Leveraging adolescent potential is a key learning that can be garnered from this intervention.
- Including FLWs such as AWWs and ASHAs for counselling and training of the participating communities served two purposes. It helped in building capacity of the FLWs to sustain the program and generated demand for public services among the participating communities.

Factors to Consider for Scaling-up PLA-LANN

- i. The effectiveness and efficacy of a larger scale program will depend upon the collaborative involvement of participating communities, NGOs, donors, Government departments and other resource organisations.
- ii. Strategies should be sensitive towards socio-cultural ethos of the participating communities and make the program genuinely participative in nature.
- iii. While components of the intervention should be simplified before the scale-up, it is important to ensure that the operational procedures integral to the effectiveness of the intervention are not compromised.
- iv. Scaling-up of the PLA-LANN intervention should be a consultative process with the involvement of organizations that were a part of the pilot project to provide an insight into the possible pitfalls.