

A Brief Report on the Technology Advisory Group and Stakeholder Meetings for the Farming System for Nutrition Initiative at Koraput and Wardha under the project on Leveraging Agriculture for Nutrition in South Asia (LANSA)

The Farming System for Nutrition Initiative is being piloted by MSSRF in a cluster of villages in Koraput district of Odisha and Wardha district of Maharashtra. With a view to leverage the technical expertise available on the ground at the two locations as well as learn from and build on the experience of organisations and agencies operating at the grassroots level in these areas, Technology and Stakeholder Platforms have been constituted at both sites. The platforms comprise both ‘knowledge partners’ who guide the initiative and ‘intervention partners’ who work with us at the field level in on-farm demonstrations and provide support services.

The technology platform has representatives from research institutions, agricultural and veterinary university and the private sector. The stakeholder platform comprises members from the district administration, banks (district lead bank, NABARD), farmers’ associations, NGOs, civil society, and farm men and women.

At Wardha, the Central Institute of Cotton Research (CICR), National Bureau of Soil Survey and Land Use Planning (NBSSLUP), National Research Centre for Citrus and the Maharashtra Animal and Fishery Sciences University (MAFSU) at Nagpur and the agriculture university - *Panjabrao Deshmukh Krishi Vishwadalaya* (PKV) at Akola, Mahatma Gandhi Institute of Medical Sciences and Siksha Mandal from Wardha, and Jain Irrigation and Nirmal Seeds from the private sector are members of the Technology Platform.

Members of the Stakeholder Platform at Wardha comprise the Project Director, District Rural Development Agency, Wardha, other district government officials, Lead Bank Officer, NABARD, local institutes, NGOs and farmers’ groups.

The Technology Platform in Koraput comprises the Central Rice Research Institute, Cuttack, the Regional Centres of the Central Tuber Crops Research Institute and the Indian Council of Medical Research at Bhubaneswar, Liaison Office of the International Potato Centre (CIP), Central Institute of Freshwater Aquaculture, Centre for Water Management, Directorate for Research on Women in Agriculture (DWRA), and Odisha University of Agriculture and Technology (OUAT) at Bhubaneswar and Jain Irrigation from the private sector are members.

The Stakeholder Platform for the FSN initiative at Koraput comprises NGOs, NABARD and government officials.

One meeting each of the technology platform and the stakeholder platform for both Wardha and Koraput was held in 2013. The second round of meetings of the platforms at Wardha was held on 4-5 February 2014. All the meetings were chaired by Professor M S Swaminathan. At each meeting, following an introduction, a presentation was made on what was proposed under the Farming System for Nutrition (FSN) initiative and the work done so far at each site; the meeting was then thrown open for discussion and suggestions.

The meetings have been very productive and are proving to be a useful forum for leveraging assurances of support and forging collaborations.

Nirmal Seeds, PDKV Akola and CRRI have extended seed support for on-farm demonstrations. CICR provided seeds of Suraj variety of cotton, guided cultivation under high density planting system and facilitated training in insect resistance management. Jain Irrigation is guiding demonstration of drip irrigation at the nutrition garden demonstrations.

The two tables in the Annex give details of the meetings held so far and the key outcomes.

Table I: Technology Platform Meetings of FSN Initiative

Wardha
<p>1. Dt. of Meeting: 11 July 2013; Venue: CICR, Nagpur; No. of Participants: 18</p> <p>Key Outcomes</p> <ul style="list-style-type: none"> • Assurance of training and assistance in livestock & fisheries management from MAFSU • Assistance in soil health monitoring from NBSSLUP • Seed support and guidance to farmers on cultivating cotton variety from CICR • Seed support and guidance from PDKV • Demonstration of technologies to improve water use efficiency and shade net cultivation of vegetables by Jain Irrigation • Bio-fortified seed varieties from Nirmal Seeds and guidance to farmers • Need for attention to fodder; explore cluster approach for fodder cultivation • Examine scope for integrated poultry unit with industry support • Need to understanding farming system and dietary practices • Anthropometric and bio-chemic methods to assess level of nutrition deficiency • Collate relevant available material in local language
<p>2. Dt. of Meeting: 5 Feb 2014; Venue: PDKV, Akola; No. of Participants: 50, largely PDKV faculty</p> <p>Key Outcomes</p> <ul style="list-style-type: none"> • PDKV would like to actively collaborate; will discuss how to make FSN part of university mandate and reach out through network of KVKs • CPR available in these villages should be assessed and strategies for their use drawn up, for e.g. as pastureland with improved fodder grass; promote small ruminants • Given the nutritional status of the community and the deficiency to be addressed, plant breeders can work on developing nutrient rich breeds to address specific requirements; nutrition awareness for outreach and uptake of the improved varieties is very crucial • Besides pigeon pea, a combination of other pulses like black gram and green gram should also be promoted during both kharif and rabi; • Bring back millets through cultivation as inter-crop • MAFSU will work toward making farm ponds ready by end of summer for initiation of pisciculture activity; they will also assist in promotion of community based fodder cultivation activity and ensuring availability of animal feed. • Crops and vegetable traditionally consumed by the people should be encouraged and promoted and not foreign varieties; e.g. red spinach, ragi etc. • Nutrition awareness programmes are very important

Koraput

1. **Dt. of Meeting:** 22 Dec 2013; **Venue:** Hotel Swosti, Bhubaneswar; **No. of Participants:** 22

Key Outcomes

- Link with KVKs and extension department of OUAT
- Need for efficient water management
- Offer of demonstration of water use efficiency and vegetable cultivation by Jain Irrigation
- Nutrition awareness in local language
- Annual Health Survey of ICMR can provide baseline
- Model nutrition garden and polyhouse cultivation demonstration by DWRA
- Support for promotion of tubers as source of both food and micronutrients from CTCRI and CIP
- Guidance and support from CIFA for promotion of fisheries
- Creation of nutri-village model
- Partner with CSISA for QPM promotion
- Collaboration under Tribal Sub-Plan with DWRA, CRRI
- Sharing of ‘Jain Good Agricultural Practices (GAP)’ devised for small and marginal farmers and approved by global GAP authority

Table II: Stakeholder Platform Meetings of FSN Initiative
Wardha

1. **Dt. of Meeting:** 11 July 2013; **Venue:** CICR, Nagpur; **No. of Participants:** 10

Key Outcomes

- Assistance in conducting survey and FGD, from students and faculty of Rural College of Siksha Mandal, Wardha
- Model nutrition garden and fodder cafeteria demonstration at Agriculture College under Siksha Mandal, Wardha
- Examine gender differential in nutrition intake across caste and class groups
- Gendering of processes and having proper monitoring indicators
- Study the existing farming systems and gender roles
- Building on social capital already mobilised in the villages under earlier interventions

2. **Dt. of Meeting:** 4 Feb 2014; **Venue:** Bajaj Science Education Centre, Wardha; **No. of Participants:** 32

Key Outcomes

- Scope for linking FSN with ongoing government initiatives like water conservation and vegetable production for greater leverage
- Promote linseed and sesame as summer crops; will also help ward off animal attack
- Promoting animal husbandry in non-irrigated agriculture areas will help recharge soil.
- Support must be given for bringing back sorghum cultivation in kharif.

- Agriculture price and policy are important elements to address, for FSN to succeed.
- Globalisation and greater market dependency had led to ‘forced malnutrition’;
- Unless we work on proper forest planning and forest policies, the problems in agriculture will persist.
- We need to think of measures like plantation of nutritive vegetables and trees on common land; grow grasses and plants in the proximity of common water bodies;
- pay attention to weeds that feed and not eliminate through indiscriminate use of weedicide
- A holistic approach targeting the entire household and community is called for to bring about change in the desired direction.
- The media should be harnessed for proactive use.
- Attention should be paid to fisheries, indigenous vegetables and local breeds of livestock also, as part of FSN.
- Demonstrations on soil enrichment measures, vermin-composting, use of organic pesticide, seasonal calendar of vegetables and fruits can provide good examples, for the community
- Community mobilisation, People’s organisations and structures are needed to ensure sustainability of the initiative. Socially excluded groups should be addressed.
- There should be thrust on Nutrition Literacy and nutrition awareness;
- Based on an understanding of the requirements, need based agriculture implements and processing equipments can be designed or brought to use if already available; for instance, there was a solar dryer that could be promoted for preserving vegetables.

Koraput

1. **Dt. of Meeting:** 23 Dec 2013; **Venue:** OUAT, Bhubaneswar; **No. of Participants:** 34

Key Outcomes

- Assurance of support from State Agriculture Minister to take forward implementable recommendations
- Need to replicate and scale up for wider outreach
- Sustainability of initiative has to be factored in right from the beginning; nurture people owned and managed institutions
- Promotion of local poultry maybe explored instead of introducing varieties from outside
- Study existing land use pattern and scope for bringing fallow land into use
- NABARD support can be availed for capacity building and exposure trips
- Examine existing NABARD models – wadi / integrated fish-duckery-poultry-vegetables / forestry on fallow land;
- Attention to entire value chain of a commodity
- Policy support for millet cultivation like that given for maize
- Nutrition literacy is crucial
- Attention to food safety
- Allocation of wasteland/fallow land to landless
- Ensure availability of quality seeds; Regional centre for pulse research required
- Link local nutrition to local production