



# **Report**

## Workshop on Nutrition Gardens and Nutrition Awareness to address Malnutrition

#### Venue: Zilla Parishad Hall, Wardha

#### Date: Tuesday, May 23, 2017

A district level workshop on "Leveraging Agriculture for Nutrition through Nutrition Gardens" was organised by M S Swaminathan Research Foundation (MSSRF) under the aegis of the Wardha District Council – 'ZILLA PARISHAD', Wardha on Tuesday, 23 May 2017. The meeting was organised to share and discuss the experience and insights on promotion of nutrition gardens and generating nutrition awareness as part of the ongoing Farming System for Nutrition (FSN) study under the consortium research programme 'Leveraging Agriculture for Nutrition in South Asia (LANSA)'. The Agenda is in Annex I.

A total of 105 participants from different government departments in the district viz. Integrated Child Development Service (ICDS), Health, Education and Agriculture, community members from the villages where MSSRF is working and MSSRF staff participated.

Anjali Baraee, and Pranali Halge, Project Assistants working on the FSN Study welcomed the gathering.

## Keynote Address by Nayna Gunde, CEO, ZP, Wardha:

Gunde inaugurated the workshop and highlighted the importance of nutrition awareness programmes in context of maintaining health and hygiene in both rural and urban communities. She highlighted the utility of nutrition gardens at institutional levels like Anganwadis (ICDS Centres) and schools where the fresh produce can be used to nutritionally enrich the Midday Meal for children. She insisted that apart from growing nutrition gardens at these institutional levels, it is also essential to assess the change in the nutritional status of the children who consume the produce from the nutrition gardens. As these initiatives i.e. nutrition garden and nutrition awareness were needful and important to address the nutrition issues among children and women, she appreciated the efforts of MSSRF under LANSA in implementing as well as sharing the experiences with others working in the same line including government line departments. She requested MSSRF for technical support and capacity building programmes in the area.



Nayna Gunde, CEO, ZP, Wardha addressing the gathering

**Dr. R.V. Bhavani, Programme Manager, LANSA MSSRF** gave an overview of MSSRF work in Vidarbha starting with an education support programme for children of school going age in farmer suicide affected families in Wardha district and a network of Village Knowledge Centres in 2006. This work had started following a visit by Professor Swaminathan, Chairman of the National Commission on Farmers and other members to understand the agrarian distress situation in the region in late 2005. Gradually, the work expanded to provide livelihood support to the widows of the farmers who had committed suicide; women farmers' groups were formed in villages and a programme for empowerment of women farmers - Mahila Kisan Sashaktikaran Pariyojana (MKSP) was initiated. 3265 women farmers from across in 60 villages in Wardha and Deoli blocks of Wardha district and Ralegaon block of Yavatmal district were now members of these groups and a federation had been formed in each block. Under the initiative to use ICT for rural development, village knowledge centres provide need based information. They conduct regular phone-in programmes, provide knowledge advisories and conduct Plant Health Clinics for pest diagnosis and management.

In the context of the prevalence of high levels of malnutrition in South Asian countries including India, and the large population dependent on agriculture, she explained the Farming System for Nutrition (FSN) study initiated in five villages in Arvi and Karanja blocks of Wardha district in mid 2013. The study endeavors to demonstrate a farming system approach to nutritional maladies. Nutrition Gardens and nutrition awareness to leverage agriculture for nutrition were important components of the study.



Brief overview of MSSRF in Vidarbha, by R.V. Bhavani

**Prashant Deokar, Coordinator, FSN Study in Wardha** made a brief presentation on the farming system approach to address malnutrition. He explained the core objectives of the FSN approach, the demographic, socioeconomic characteristics and agriculture and nutrition status in the study villages:

- 63% of the people are involved in cultivation, 33% are agriculture labourers, 4% are engaged in non agriculture labour.
- 39% are small and marginal farmers; 32% are landless and 29% are medium farmers.

- Key challenges identified in the area were negligence in usage of biofortified crops, poor seed replacement, low production and lack of crop diversification.
- With regard to nutrition status, 43 per cent of children under age five reported underweight (low weight for age), 40 per cent stunted (low height for age) and about 27 percent wasted (low weight for height).
- About 30 % of school-age children (5-9 years) and about 52% and 57% of adolescents (10-14 and 15-17 years) were undernourished.
- About 83% of children under age five and around 80 % of girls in the age groups of 12-14 and 15-17 years were anaemic.
- About 35% of children under age five were having vitamin A deficiency (VAD)
- He further explained the disconnects of agriculture and nutrition among the community and explained how the planning and implementation of location specific FSN interventions were done in participation with the community.



Prashant Deokar presenting overview of FSN Study under LANSA in Wardha

Rupal Wagh, Nutritionist, FSN Study gave a detailed presentation on the nutrition garden intervention and nutrition awareness strategies undertaken as part of the study. Her presentation focused on awareness programmes for including various groups of vegetables and fruits in the household consumption to address malnutrition as well as cultivation of those vegetables and fruits in backyard and community nutrition gardens to address specific nutritional deficiencies. She explained the different types of nutrition garden models introduced, viz., household nutrition garden, community nutrition garden and school nutrition garden. A Genetic Garden comprising different biofortified plants has also been established in Heti village which serves as an educational tool for creating nutrition awareness to promote nutrition security among different stakeholders besides also multiplying planting material for cultivation. She explained the types of vegetables and plants grown in the gardens across different seasons along with recent data on produce and its utilisation. She also emphasized on how certain vegetables like pumpkin and green leafy vegetables as well as orange flesh sweet potato were encouraged to be grown in anaemic and Vit A deficient households, to address these problems. Community Nutrition Gardens (CNG), she explained were managed by households who were willing to grow vegetables but were not able to do so due to lack of land. There were three community nutrition gardens one each in Saheli, Heti and Borgaon where a group of about 10 women members were maintaining and managing the garden and the produce was being equally shared by them. Excess produce from these CNGs were distributed to their relatives, neighbours and to the schools in the respective villages for the Midday meal. Nutrition gardens in schools in Bitpur, Susund and Borgaon villages were established with the support of school staff and students and were mainly managed by the cook and older students. The produce was being used in Midday meal for the students. The Nutrition Gardens also helped students know about the nutritional importance of various vegetables and their importance in the diet. She further mentioned the challenges faced such as limited land availability; difficulties to grow vegetables in summer due to water scarcity, damage by animals etc. Ms Wagh stated that community seed banks had now been formed in three villages to ensure availability of seeds on a sustained basis.

She then went on to describe the different nutrition awareness programmes at various levels like community, schools and adolescent girls viz., importance of balanced diet, demonstration programmes on nutritious recipes, rallies, field visits etc. A drawing competition on nutrition in schools was followed up with development of a calendar with selected drawings and messages and distributed to all households in the FSN villages for spreading awareness. She further explained that 15 representatives from the FSN villages (8 men and 7 women) were being trained as community resource persons and given trainings on nutrition and agriculture related programmes for their further diffusion in the villages.



Detailed Presentation on Nutrition Gardens and nutrition awareness programmes by Rupal Wagh

#### **Experience shared by community members:**

After the presentations on the study, members of the community from the study villages shared their experiences on adoption of different initiatives.

**Kousal Borje, Saheli village,** one of the active members of Community Nutrition Garden at Saheli shared how she got help under LANSA in implementing the community nutrition garden in her village (conducting village meeting, identifying the land), and seeds and technical inputs over the last three years. She further expressed that they are growing different types of vegetables and some of them such as green sorrel, amaranthus, roots and tubers (beet root) they got to know and grow for the first time. Upon harvest, after fulfilling the household requirement of all the members, instead of selling or allowing to waste they were sharing it with local school where it was used in the Mid Day Meal. For sustenance of the intervention, the project had organized an exposure visit to Sakharkar in Bhilli village, who has conserved different kinds of vegetable seeds. Inspired from the visit, she and other members of community nutrition garden formed a community seed bank at her own house to conserve different types of vegetables seeds and also to provide to other members. She thanked the LANSA team for initiation and implementation of the programme.



**Mandatai Ingale from Amala village** introduced herself as the Community Resource Person in her village Amala under MKSP programme under which food security is a core component. She has been engaging with MSSRF from 2011. According to her as most of the roles related to household food security are played by women, they were encouraged to participate in the programme. It started with analyzing blood haemoglobin level of family members and families having anemic households were encouraged to grow nutritional gardens with required support from MKSP. Initially, twenty members started to grow nutrition gardens for vegetables and fruits for household consumption. Gradually, some women members helped and demonstrated to school children and concerned staff for implementing school nutrition garden and the produce was used in the Mid Day Meal. Later she shared her personal experience of improved health of her grandson due to nutrition awareness, balanced diet and nutrition garden.

Ms. Ushatai Kourati from Borgaon village, shared that in 2013, LANSA staff from MSSRF did the survey by visiting every household in the village and asked questions related to food consumption pattern, agricultural production, land type, availability of irrigation etc. The survey was also going on in four neighboring villages and at that time they were thinking about what benefit the community will get from answering those survey questionnaires. However, in 2014, implementation of nutrition garden in households started with the seed and technical inputs from the staff. Further, households not having backyard area to grow vegetables came up with the idea of community nutrition garden (CNG). For CNG, a group of eleven women including her approached Gram Panchayat (GP) to get access to the common land in the village, but as the space was not available with GP, they approached the forestry department and got the space of 25m X15 m in the village. The land was cleaned and prepared for cultivation of all groups of vegetables with fruit plants. She recalled that in the first year they had to fetch water from nearby river and also from their home in summer to irrigate the plants. All the members gave their time and effort for the cultural operations like sowing, weeding, harvesting etc. From the CNG, they harvested the produce two to three times in a week which was equally distributed among all the members. They had also shared the surplus with the local school which was included in the Mid Day Meal. She also highlighted that they are now getting most of the vegetables form CNG and are no longer dependent on market. They had also planted some fruit trees in CNG like lemon, sapota, mango, guava, moringa etc. which will provide fruits in long run. Also during awareness activities, they have learnt some recepies to be prepared from newly introduced leafy and root vegetables such as OFSP, bottle squash, coriander etc. She also shared that her daughter in law is consuming a lot of vegetables in the diet during her pregnancy and during past eight months she has not been troubled by any kind of illness.



Ushatai Kaurati, from Borgaon sharing her experience

Nalutai Sarate, from Adegaon sharing her experience

**Nalutai Sarate from Adegaon village** shared that she is working as a community resource person (CRP) in her village under MKSP programme, MSSRF. Women in her village are practicing nutrition garden, and a group of women members are also managing community nutrition garden and from it they are getting fresh, chemical free and variety of nutritious vegetables for about 6 to 8 months in the year instead of chemical applied unhealthy vegetables available in the market. She highlighted nutrition gardens as best, economical and safe options for availability of vegetables. She also explained importance of school nutrition gardens of providing nutrient rich mid day meals.

Manisha Nikude, school student studying in 9th standard, Susund village, shared that through LANSA project under MSSRF, villagers were encouraged to grow nutrition gardens in the back yard for the availability of different types of vegetables. It is also grown at her house hold. Due to these NGs they could get variety of vegetables like green leafy vegetables, root and tubers etc. for consumption. With help and guidance from the project, a nutrition garden was also implemented in her school which provides variety of vegetables to be included in Mid Day Meal. Further she told that under the agenda of health and hygiene of LANSA programme, Swachhata Diwas was also celebrated and nail cutters were distributed among students.



School Students from Susund Ms. Manisha Nikude and Ms. Sneha Gurnule sharing their experience

**Neha Gurnule, school student studying in 9th standard, Susund village,** shared that LANSA programme under MSSRF facilitated the process of establishing nutrition garden in her School to grow variety of vegetables like amaranthus, spinach, okra etc and the produce goes to the Mid Day

Meal as a result of which students were able to consume different vegetables. In her village, many households had grown nutrition gardens both in backyard and fields. She told that 20 kg of orange flesh sweet potato was harvested from her own field and it was also shared with the neighbours for consumption. Under LANSA, various competitions and awareness programmes were organized in her school to aware students about hygiene and nutrition.

### **Open Discussion Session:**

After experience sharing by community members, Deputy CEO ICDS, Mehasare was invited to moderate the session of open discussion.

**Belsare, School Teacher, Panchayat Samiti,** mentioned that as large numbers of children are suffering from malnutrition in the district and vegetables purchased from the market have a very short shelf life, nutrition gardens are the best options to get fresh, chemical free vegetables regularly as well as an economic way to save the expenditure. At village level, growing school nutrition gardens, anagawadi nutrition gardens are also proving helpful for school children and government is now emphasizing programmes regarding the same but these needs to be tagged with large support programmes for proper implementation. It is also good thing to know that social workers are encouraging it at grass root. He further expressed that the management of nutrition garden to get organic produce would had been useful for the participants to which, Mehasare replied that it was not possible to cover all aspects in an one day programme. However, his request had been noted and such programmes will be organized in future.

**Satish Atram, Eduation Officer Panchayat Samiti Deoli,** highlighted that if nutrition gardens are properly planned and managed, they will be the easy and optimum source of required vitamin A & other nutrients through the balanced diet and will help in maintaining good health.



Participation of Belsare and Satish Atram in the open discussion

**Prashant, PHC, Wasadi,** told that he also practices the nutrition garden in a small piece of land in his backyard for which he requested to get a detailed information on management of such nutrition gardens. Further he queried that there are also some other agencies like Priti Joshi's organization, Reliance Foundation who are also providing the knowledge on nutrition gardens and under such conditions it is getting difficult to follow any one's recommended package and practice. To this, LANSA staff provided feedback that location specific feasible and need based approach should be adopted and promoted. The Deputy CEO, ICDS Mehasare further stated that it is always better to

have more options but based on need and acceptability of the community, the practice should be adopted and promoted.

Milind Deshpande, Block Education Officer, Hinganghat expressed that more numbers of such kinds of programmes should be organized at block level for large scale adoption and dissemination.

**Dr. Shankar Hadole PHC,** stated that growing Nutrition Gardens in the Panchayat Helath Campus (PHC) will be helpful for the visiting patients, therefore he will try to establish it with the technical help of MSSRF. He also asked ZP officials to facilitate PHCs for regular water supply for successful establishment of nutrition garden. Mehasare appreciated the suggestion and further expressed that labeling of the vegetables grown in the nutrition garden in PHC will make the visitors/patients nutritionally aware.



**Lalita Asatkar, Supervisor ICDS department, PS Arvi** shared that she is engaged in promoting the nutrition gardens in Anganwadis of her jurisdiction, where she also facilitates programmes related to preparing and applying vermi compost, jeevamrut application etc. From the workshop she got to know about naturally fortified and biofortified plants. She appreciated efforts being taken under LANSA MSSRF as it is being implemented in the remote area.

## **Special Remarks:**

Assistant BEO, Ingole, Educational Department, ZP, the efforts taken in some of villages of the district to address the issue of malnutrition. Further, he expressed that such kinds of workshop should be organized at regular intervals to scale up and share the concept to large number of community members.



Remarks by Assistant BEO, Ingole, Educational Department, ZP and Assistant District Health Officer Dr. Dawale

Assistant District Health Officer Dr. Dawale appreciated the systematic approach of LANSA i.e. starting with baseline survey to know nutritional status of community and then execution of nutrition gardens at different levels. Also sharing this experience at district level will be helpful for further dissemination of the concept. He thanked LANSA MSSRF as well as the participants of the workshop.

## Concluding Remarks by Deputy CEO, ICDS, ZP, Wardha Mehasare:

Mehasare expressed that it was a good experience to get to know about MSSRF's systematic work being done in the district especially from the community members who are involved in this work. He further stated that if the efforts are planned properly and implemented systematically as per the need of community, then definitely the objectives will be achieved. He highlighted such type of workshops will be helpful for their concerned departments like ICDS, education, health and agriculture as they are also doing similar efforts for addressing malnutrition. Therefore he appealed his staff members to adopt these experiences in their concerned field so that 70-80 percent of household should be able to be benefited from nutrition gardens and nutrition awareness programmes and it will save their money, time as well as improve their health through fresh and safe food. He also mentioned that the respective departments can contact MSSRF for all kinds of required technical inputs and if needed, such workshops or any technical programmes can again be jointly organized with MSSRF in future.

The workshop concluded with the vote of thanks given by Manoj Sayre, Senior Technical Assistant, FSN Study, MSSRF.

Workshop on Leveraging Agriculture for Nutrition through Nutrition Gardens	
ZP Hall, ZP Wardha ! Agenda	
Topics	Responsibilities
Registration	Vikas, Pranali, Anjali: to be Supervised by
	Manoj Sayre and Mahesh Sadatpure
Welcome	Anjali Baraee, and Pranali Halage, FSN Study under LANSA in Wardha, MSSRF
Keynote Address	Nayana Gunde, CEO ZP Wardha
Brief Overview of MSSRF's work in Vidarbha	Dr. R.V. Bhavani, Programme Manager, FSN Study under LANSA, MSSRF
Brief Overview of FSN Study under LANSA	Prashant Deokar, Coordinator, FSN Study under LANSA in Wardha, MSSRF
Presentation on Leveraging Agriculture for Nutrition through Nutrition Gardens	Rupal Wagh, Nutritionist, FSN Study LANSA MSSRF Wardha
Sharing of Experience by community members on Nutrition Garden	Kausal Borje, Saheli (CNG Member)
	Manda Ingale, Amala (SNG)
	Usha Kaurati, Borgaon(G.)(CNG Member)
	Nalu Sarate, Adegaon, (CNG Member)
	Manisha Nikule, Susund (School Student)
	Neha Gurnule, Susund (School Student)
	To be moderated by Prashant Deokar
Open Discussion	To be Moderated by S. M. Mehasare
Special Remarks	Mehasare, Deputy CEO ICDS
	Dr. Chavan, DHO, Wardha
	Shende, DEO, Wardha
Concluding Remarks	Mehasare, Deputy CEO ICDS
Vote of Thanks	Manoj Sayre, LANSA, MSSRF Wardha
Lunch	MSSRF staff