PROMOTING FOOD AND FARMING SYSTEMS TO FIGHT MALNUTRITION USING NUTRITION-SENSITIVE AGRICULTURE
The Nutrition in Mountain Agro-ecosystems (NMA) project aims to replicate and scale up sustainable agriculture practices to promote improved nutrition and resilience in mountain regions of Nepal, Pakistan, Kyrgyzstan, Ethiopia and Peru. Funded by Swiss Agency for Development and Cooperation (SDC), Section Global Programme Food Security (GPFS) and working with local partners, we are building the capacity of 125 Rural Service Providers (RSPs) who can improve the lives of 500,000 people by facilitating the diversification and implementation of proven agro-ecological and other nutrition-sensitive practices in rural villages and remote communities.
My name is Alisher Yuldashev. I work with the villagers of the Ala-Buka district in Kyrgyzstan to build low-cost fruit and vegetable drying facilities and raise awareness on the importance of nutrition-sensitive diets.

Following our training session, we organized focus group discussions on increasing awareness of the importance of nutrition in daily diets. On surveying a group of women, we found significant nutritional gaps in their diets, particularly in wintertime when either no fresh fruit & veg are available or only at prices few can afford.

Yet, I often see unsold produce left to spoil at markets. With no other solution at hand, good food gets thrown away as neither producer nor seller has access to the knowledge and resources needed to extend its shelf life by drying it.

With this in mind, we began the construction of drying facilities using locally available materials and also shared information about the nutritional value of dried fruit and the vital role it can play in achieving a balanced healthy diet.

Food that could have been lost post harvest is preserved in a nutrition-sensitive process. Families can include nourishing dried fruit in their daily diets particularly important when access to fresh fruit and vegetables is difficult and also sell surplus at the local market.

Food wastage is one of the main drivers of food insecurity as well as the third largest source of global greenhouse gas emissions. In Kyrgyzstan, nutritional deficiencies cause stunted growth in 18% of children under 5 and 33% of women in their reproductive years are anemic.
LOW TUNNEL FARMING
To improve dietary intake Particularly women & children in Mountain Agro-Eco System
Supported by: IFOAM International and Inter-Coop
Organized by: Rural Service Provider (RSP)
The Sustainable Development Goal of Zero Hunger aims to end hunger, achieve food security, improve nutrition and promote sustainable agriculture. Empowering rural communities, particularly women, to sustainably grow nutritious fruit and vegetables will be instrumental in achieving this goal.

My name is Syed Abdul Majeed Shah. I work as a Rural Service Provider in the Beer village of Pakistan where I raise awareness of how tunnel farming can help provide farmer families with fresh vegetables in winter months and why this is essential for a well-balanced diet.

About 20 men and women came to my first session where I gave a brief overview of tunnel farming, a technique used to grow off-season crops. I showed how “quick hoops” can protect plants throughout the winter. I spoke about the multiple health benefits of vegetables, and how they are a good source of vitamins, minerals, anti-oxidants and dietary fiber.

Interest in adopting this practice was high particularly as it can be used in home gardens to ensure family access to home grown fresh vegetables throughout the year, without having to pay high prices at the market. What’s more, by showing farmers how to grow organically, they do not have to purchase expensive synthetic inputs, their fruit and vegetables will be free of harmful toxins and they are protecting the soil and biodiversity.

The village is now deciding where the best place is to start with low tunnel farming and we are sourcing seeds. Once up and running, we will invite neighboring villages to see for themselves the benefits of low-tunnel farming.
Promoting the cultivation of indigenous crops and linking farmers to markets has multiple benefits for both the farmer and consumer. These include increasing farmer income and meeting consumer demand for locally grown, nutritious food.

My name is Ghanashyam Nagarkoti and I working on the “Promotion of Local Beans for Nutrition Improvement” with Mr. Jaya Shresth in Jumla, Nepal.

While working with 60 households in Jumla, we discovered that local crops such as highly nutritional black bean are often perceived as poor people’s food. There was little interest in their cultivation or consumption, however high demand for them outside the Jumla area.

We reacted by consulting a food technologist on how best to promote the nutritional value of the beans in Jumla and came up with various easy to make recepies. Also, in cooperation with the District Agriculture Development, we gave trainings on cultivation, processing and post-harvest handling to the farmers. Women (22 out of 27 total participants) learned how to market the produce and we developed links to markets outside the Jumla region.

High consumer demand for the black bean at markets outside Jumla increased farmer interest in its cultivation. Improved farming methods e.g. making use of stakes to let beans trail, which avoids fungal diseases, production of organic pesticides, implementation of nutrient cycling methods and climate adaption methods have led to yield increase of up to 100%.

Now thanks to the new recipe ideas, the beans found their way into farmer meals. Surplus beans are sold at the Nagma market not only providing farmers’ income to spend on other household expenses such as cooking oil or school materials but also meeting local demand for nutritious food thus helping achieve food security in the entire community.
To support the RSPs in their work, the Mountain Agro-ecosystem Action Network (MAAN) platform was established to facilitate the exchange of experiences and knowledge both within and across all five countries involved.

Members to get to know each other, share information, ask questions and generally support each other in improving the nutrition situation in their countries.

The MAAN platform and its knowledge bank are open to everyone interested in promoting food and farming systems based on nutrition-sensitive agriculture and related topics. You can visit it here: maan.ifoam.bio
**CONSORTIUM PARTNERS**

<table>
<thead>
<tr>
<th><strong>IFOAM ORGANICS INTERNATIONAL</strong></th>
<th>The global umbrella organization of the organic movement and a global action network for sustainability in agriculture. <a href="http://www.ifoam.bio">www.ifoam.bio</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FiBL</strong></td>
<td>An independent, non-profit, research institute with the aim of advancing cutting-edge science in the field of organic and sustainable agriculture. <a href="http://www.fibl.org">www.fibl.org</a></td>
</tr>
<tr>
<td><strong>HELVETAS</strong></td>
<td>The development organization promoting sustainable agriculture, food security and livelihood improvement in more than 30 countries. <a href="http://www.helvetas.ch">www.helvetas.ch</a></td>
</tr>
<tr>
<td><strong>WAGENINGEN UR</strong></td>
<td>A service provider to the consortium for supporting NMA in nutrition sensitive concept building, content development including monitoring and evaluation. <a href="http://www.wageningenur.nl/en">www.wageningenur.nl/en</a></td>
</tr>
</tbody>
</table>

**NATIONAL IMPLEMENTING PARTNERS**

| **NEPAL:** HELVETAS Nepal promotes gender equity, social inclusion and poverty orientation, knowledge sharing and innovations, policy dialogue, advocacy and downward accountability. [nepal.helvetas.org/en](http://nepal.helvetas.org/en) |
| **PAKISTAN:** Intercooperation (IC) Pakistan promotes Natural Resource Management (NRM) sector in Pakistan for the last 30 years. [www.helvetas.org/projects__countries/countries/pakistan.cfm](http://www.helvetas.org/projects__countries/countries/pakistan.cfm) |
| **KYRGYZSTAN:** The leading service provider in organic value chains from the farmer to the market in Central Asia [bioservice.kg](http://bioservice.kg) |
| **ETHIOPIA:** Since 1996 the Institute for Sustainable Development focuses on rural farming communities, environmental clubs in schools and self-organized out of school youth groups. [www.isd.org.et](http://www.isd.org.et) |
| **PERU:** For the past eight years the IFOAM Latin America office has been focusing on the vulnerable population of the Peruvian Andes and on networking activities with strategic allies at the national and regional levels. [www.ifoam.bio/en/our-offices/ifoam-latin-america-office](http://www.ifoam.bio/en/our-offices/ifoam-latin-america-office) |
Diversified agriculture and consumption can contribute to achieving the Sustainable Development Goals related to nutrition and health, rural development and environment. Thus, we need to take a cross-sectorial approach in order to create an enabling policy environment for nutrition-sensitive agriculture and speak with ‘one voice’ on nutrition.

POLICY RECOMMENDATIONS TO PROMOTE NUTRITION-SENSITIVE AND SUSTAINABLE AGRICULTURE:

- Interventions or policies designed to improve nutrition should have a particular focus on women.
- Support the planting of home gardens with seeds and skills to increase dietary diversity and help households reduce food costs.
- Run campaigns focusing on the importance of nutritious food, dietary diversity and its connection to nutrition-sensitive agriculture. This can play an instrumental role in stimulating sustainable and healthy diets among both farmers and consumers.
- Shape policies for schools, as they can be effective multipliers in highlighting the connection between diversified agriculture and improved nutrition. Practical examples learned in school are then brought home to the rest of the family.
- Revive traditional food varieties to strengthen local culture and also provide opportunities for marketing and tourism.
- Promote the integration of animal husbandry (e.g. poultry, goats, fish, guinea pig, honey production) in smallholder farms to enrich diets, provide additional income and close nutrient cycles.
- Improve post-harvest handling and small-scale processing (e.g. drying of fruits and vegetables) at household or village community level to reduce food waste.
- Invest in the continuous capacity development of agricultural extension and advisory services. Greater knowledge and know-how in natural resource management will lead to more diverse and prosperous farms.
- Facilitate practical training in sustainable and diversified production systems (e.g. compost and organic manure production, mulching, rain water harvesting or drip irrigation) to provide the basic skills farmers need to improve nutrition. Farmer-to-farmer demonstrations and knowledge exchange are a credible way to spread such knowledge.