

Farm Women in Hills

Sowing Seeds of Empowerment

Kushagra Joshi¹, B M Pandey² and Lakshmi Kant³

ICAR Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora, Uttarakhand 263 601

ICAR VPKAS geared up to change behaviours related to health and nutrition across mid-hills, believing that nutritional security of rural areas especially of women is a matter of concern. The intervention introduced eight improved locally available and nutrient-rich varieties of vegetables suitable for home garden cultivation. Women learned to build homestead nutrition gardens filled with fenugreek, spinach, carrots, and other crops, and practice improved health and nutritional behaviour to ensure good occupational health of their own and their families. Homestead nutrition gardens helped increase household income either by the sale of the food products grown in the gardens or by the consumption of the same food items that the families would have otherwise purchased from markets using a significant portion of the family income. Apart from addressing the hidden hunger, it curbs the possibilities of suffering from diseases caused by micro-nutrient deficiency by ensuring a small but continuous flow of subsistence food products in the daily household diet. Women have taken the charge of these gardens and are themselves deciding on vegetables to be grown and ask their queries on the social media platform.

Key words: Farm women, ICAR-VPKAS, Nutritional security

The Problem

In hills of Uttarakhand, one out of every two children suffer from chronic malnutrition, leading to high levels of stunting and poor cognitive development. In rural areas of Almora district of Uttarakhand, 14% women have Body Mass Index below normal, 7% are overweight and 32.7% women of age 15-49 years are

anaemic (NFHS 2015-16). It shows that the nutritional security of rural areas especially of women is a matter of concern. Food security for a household means access by all members at all times to enough food for an active and healthy life. The Food and Agriculture Organization of the UN reports that “if women in rural areas had the same access to

land, technology, financial services, education and markets as men, agricultural production could be increased and the number of hungry people reduced by 100-150 million.” In the country’s rural, North-Western highlands, however, rural hill farm-women are beginning to empower their families and themselves to grow and sell their own



Fig. 1. Distribution of vegetable seed kits to women



Fig. 2. On-farm trainings on vegetable cultivation

foods and prepare healthy, and nutritious meals to improve the well-being of their families, but the efforts are not enough to sustain the nutritional well-being of the entire farm households. The nutritional security can only be attained when along with the accessibility to dietary diversity, their behaviour is reinforced in a way that the nutritional sensitivity becomes internalised by these families.

The Intervention

ICAR-VPKAS geared up to change behaviours related to health and nutrition across mid hills through a project on 'Women's drudgery and nutrition' aiming to target the occupational health of farmwomen in hills. Women learnt to build homestead nutrition gardens filled with fenugreek, spinach, carrot and other crops, and practice improved health and nutritional behaviour to ensure good occupational health of their own and their families. Homestead nutrition gardens or *Poshan Vatika* are cost-effective, practical and easily meet the balanced dietary requirements of rural households as well as add substantially to the family income. Crops are selected considering the prevailing food habits and climatic conditions of the implementation areas, and with the larger goal of ensuring availability of wholesome and nutritious food.

The intervention introduced eight improved locally available and

nutrient-rich varieties of vegetables suitable for home garden cultivation, but households were free to grow any other vegetables or fruits as well. After nutritional and dietary diversity screening, women were given a 1-day off-campus intensive training initially which centred on nutrition and home garden establishment. Through the women farm schools on nutrition and health practices, women learned the role of nutrition in preventing diseases, functions of various nutrients in the human body, nutritional value of commonly consumed vegetables, disease-combating features of different colours of vegetables, value addition and nutrient preserving cooking practices.

Economic Benefits

For rural resource-poor families, the economic benefits of kitchen gardens are beyond simple food production and subsistence. Homestead nutrition gardens helped increase household income either by sale of the food products grown in the gardens or by the consumption of the same food items that the families would have otherwise purchased from markets using a significant portion of the family income. The plants in the kitchen garden harvested for approximately 70 days, saving ₹ 50 per day for each family on an average. This ultimately led to a saving of approximately ₹ 3,500 per family. Apart from income generation and household economic welfare, this

I came in contact of ICAR-VPKAS, Almora in year 2017 in a programme on Women farmers in which we learnt establishing Nutrition gardens in our backyards and tools for saving time and energy. Other women in the village, who were not a part of the programme earlier, they also showed interest in home gardens and established their own. Even men in the village also wanted their wives to be a part of the programme. I am connected with ICAR-VPKAS, Almora over WhatsApp under "Swasth Kisaan, Unnat Kisaan" theme in which we discuss our progress of 'Poshan Vatika', the problems we face and seek solutions. I, being a leader of the group, also demonstrated to other women how to cultivate a home garden and I shared my remaining seeds with them as they were asking me to establish a garden of their own. I understand that nutrition is important for our health and different vegetables contribute to good health of the family. I know what, when and how to cultivate so that we get variety of seasonal vegetables throughout the year. Regular intake of nutrient rich vegetables like Bhindi, Lauki, Beetroot and Kheera increase energy levels and efficiency in work. I am regularly being invited by other organisations as a progressive women farmer to motivate other farm women".

Leela Devi, Women SHG Leader, Kotyura village, Almora



Fig. 3. Low cost nutrition/home gardens

initiative also inculcated entrepreneurial skills, especially among women. The women were able to sell the surplus vegetables in their nearby villages and neighbourhoods and earned about ₹ 50-75 per day. The women were also able to save ₹ 40-45 per day which they used to buy vegetables from outside. The earnings from the sale of kitchen garden products and the savings from consuming home-grown food products create an increased amount of disposable income for the beneficiary families, who invest the surplus income to fulfil other domestic requirements including purchase of additional food items other than vegetables, greater investment in education of children, and others. The garden harvests acted as ATM for women for quickly accessing money when required. A few women also managed to sell the vegetables in a resort at a place

Sirkot, at a distance of 6 km, on daily basis.

Social benefits

Homestead nutrition gardens directly contribute to household food security by increasing availability, accessibility, and utilisation of food products. Food items produced in home gardens added to the family nutrition substantially, which directly leads to reduction of food insecurity. Apart from addressing the hidden hunger, it curbs the possibilities of suffering from diseases caused by micro-nutrient deficiency by ensuring a small but continuous flow of subsistence food products in the daily household diet. Adequate nutrition is not only dependent on the quantity of food available. The seeds provided to farmers ensured a range of essential micro-nutrients like proteins, carbohydrates, vitamins, magnesium, iron, folate, manganese,

zinc, potassium, sodium, calcium, fibre, phosphorous among others for the beneficiary families. Homestead nutrition gardens also aided in increased production and intake of micro-nutrient rich foods in 60 households, apart from diversifying the household diet and making it more interesting and palatable.

Drivers of Women Empowerment and Sustainable Development Goals

By distribution of seeds to 60 households in two villages namely Kotyura in Takula block and Daal in Hawalbagh block of Almora district, VPKAS encouraged its women farmer leaders to be actively involved in homestead nutrition gardening for ensuring food and nutritional securities of their families (Figs. 1-4). As a result, the contribution of women in household food production has increased manifold, at times even making them the sole care



Fig. 4. Women farmers attending women farm schools on Good nutrition practices

takers of these gardens. It is seen that with time, homestead gardening activities commensurate with their daily domestic chores, subsequently generating hopes for their socio-economic enhancement. In pandemic time also, the women farmers were able to cultivate safe and nutritious food for their families.

However, the vegetables produced in homestead gardens; developed by women farmers, act as a supplement to the actual food consumption of their households. These gardens improved women's social status as well as their awareness with regard to the importance of a nutritional diet for their families. For some of these women, sale of their garden products in the local markets is a remarkable source of income as well. After the

programme, women have taken the charge of these gardens and are themselves deciding vegetables to be grown and ask their queries in the social media platform accessible.

Homestead gardening helped women to develop proficiency in vegetable cultivation to some extent, which in turn helps them become better home and environment managers and meet the needs of their families more easily and economically. This enhances their status within the family and in the society at large as well. The women themselves keep updating about their nutrition gardens through WhatsApp group based on theme "Sawasth Kisan, Unnat Kisan" and are learning on good nutrition practices to be practiced in their households.

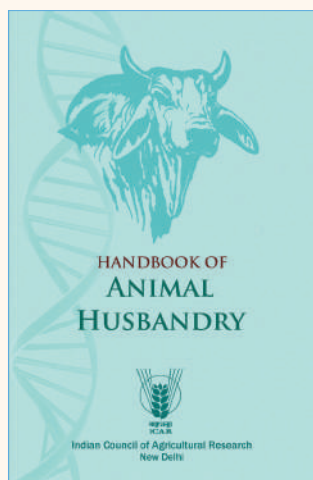
WAY FORWARD

Providing good quality vegetable seeds, scientific information on vegetable cultivation and technological backstopping, facilitates a path to empowerment, income, and nutrition. By gaining access to these resources, women gain more power over their lives and can change the lives of their families and the entire community. The effectiveness and sustainability of such interventions is crucial for their contribution to the attainment of the Sustainable Development Goals aiming at achieving food security, bringing gender equality and alleviating poverty.

¹Kushagra Joshi, Scientist, ²B M Pandey, Pr. Scientist, ³Lakshmi Kant, Director, ICAR VPKAS, Almora

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TECHNICAL SPECIFICATIONS

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