

Moving towards good agricultural practices (GAPs) through more scientific information

Lakshmi Kant, Rajesh Kumar Khulbe, Kushagra Joshi*, Vijay Singh Meena*, Chaudhari Ganesh Vasudeo and Arunava Pattanayak

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

Latest agricultural technologies and information need to be taken to the door steps of all the stakeholders within agriculture domain particularly to the farmers. Proper dissemination of this information to the farmer has been the major bottleneck in boosting crop production with quality, even though numerous technologies are available. The contribution of knowledge as a factor of production is being increasingly given central importance in economic development. Indeed, agriculture has become knowledge intensive, changing rapidly, and making farm management more complex. Skills and knowledge are becoming more critical for success. At such times, the efforts of ICAR-VPKAS, Almora in bridging the information gap among farmers under Mera Gaon Mera Gaurav (MGMG) programme as a ray of hope for future success of agricultural interventions in this area.

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HILL agriculture has its inherent problems as the majority of farmers have a small and fragmented landholdings, around 90% rainfed area and subsistence farming with wheat, rainfed paddy, lentil and millet as main crops. These smallholder resource-poor hill farmers are further confronted by many challenges – the negative impact of climate change, increased frequency of natural disasters, depleting natural resources, less access to resources, dependence on rains, wild animal menace, inefficient supply chains etc. To overcome this, ICAR-Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora adopted a cluster of five villages in Dwarahaat block of Almora district under *Mera Gaon Mera Gaurav* (MGMG) programme. The farmers of these areas had limited their cropping area because of animal menace, low productivity of traditional varieties and were searching for alternate livelihood opportunities. After initial survey and baseline data of the adopted cluster,

the main hindrance observed was lack of access to information and adherence to age old practices.

In 2016, the 'International Year of Pulses', demonstrations of *urd* variety (Pant *Urd* 40) were organized in about 0.4 hectares with 23 farmers of Mujholi, Kunwali and Aina villages during *kharif* season. The farmers

were quite satisfied with the performance but had less willingness for the change. Earlier also, such circumstances were observed when the farmers were found not that much enthusiastic towards the acceptance of new technologies. A need was felt to unfreeze the attitude of farmers towards new technologies



Goshthi on improved agricultural practice



Demonstration of French Bean variety (VL Bean 2)

and motivate them to adopt good agricultural practices (GAPs). Crop intervention into small farmers' traditional cropping systems can be achieved successfully through information empowerment. It was decided that farmers' involvement will be ensured from the beginning of the program. This will give growers a sense of ownership, thus reducing the risk of the program failure. The growers should make crop selection decisions with assistance from the experts. In this direction, programmes were planned to provide the farmers the information about the improved technologies, package of practices through different media so that they have access to latest technical know-how. On the basis of adaptability to the area, maturity dates, resources needed to grow the crop, and insect-pest incidences, advisory on improved varieties along with whole package of practices were made accessible to the farmers at their doorsteps through short messaging services, published materials besides organizing several interfaces in the villages during the crop season. In the series of planned interventions, during *rabi* 2016-17, lentil variety (VL *Masoor* 126) was demonstrated in about 1 ha area in the villages. Time to time monitoring and information through messages on the basis of current field situation was provided. This time farmers appeared to be more convinced and committed towards improved pulse production.

In order to introduce crop

diversification, French bean variety (VL Bean 2) was introduced in the nutrition gardens at Mujholi (90 sqm) and Pagsa (80 sqm) village during spring 2016. The green pod yield at Mujholi was 27 kg (3,000 kg/ha) at Mujholi and at Pagsa it was 13 kg (1,625 kg/ha) in spite of unprecedented heavy and continuous rain at fruiting stage which had adversely affected the crop. Farmers were very happy with the yield and demanded for the same variety in next season.

To further improve the yields of crops, farm level planning through soil testing and following good agricultural practices (GAP) including soil test based balanced fertilization was thought to be appropriate. Though the farmers of this cluster were aware of soil health cards scheme but were not aware of the significance of soil testing and the agencies to whom to approach for getting their soils analyzed. The institute sensitized the farmers about purpose of soil testing and soil samples of about 30 farm families were collected for soil health analysis. Results suggested that most of the fields were sufficient in micronutrients except zinc, while in nitrogen low to medium, phosphorous was medium and potassium was medium to high. Now, the other farmers of the locality have become much enthusiastic to get their soil tested and obtain the Soil Health Card for recommended use of the fertilizers.

The interventions made till now

in the adopted villages under MGMG programme were initially planned with intent to sensitize farmers about Good Agricultural Practices (GAP) and information empowerment of the farmers to unfreeze their traditional attitude so that they can make informed choices and make farming a profitable venture. The perceptible change in the attitude of farmers was quite visible as the decision to raise a particular crop variety in the upcoming *rabi* season was made by the growers. Farmers themselves placed demand and purchased 3.20 quintal seed of wheat variety (VL 804). With the training and exposure of the farmers of this cluster they have become interested in undertaking quality seed production for getting higher returns. It is an excellent example of shift in the farmer's attitude from dependence upon the welfare programmes towards their self-empowerment. With enhanced access to resources and information regarding different varietal options and good agricultural practices, farmers of Mujholi cluster are much hopeful and have planned to expand their agricultural area as well. Farmers seek advisory from the concerned experts/scientists of the institute and are following improved agricultural practices.

*Corresponding author e-mail: kushagra.me@gmail.com; vijay.meena@icar.gov.in
