

Vineyard Vigour in the Valley



Background and Objectives

Traditionally grape cultivation in Kashmir was confined to certain villages where there was no concept of canopy management. Farmers used to make the grape vines climb over non bearing trees, fence walls and habitation structures. Proper training, pruning, shaping and canopy management was an unknown practice with them. During the rainy season frequent attaches of fungal diseases especially powdery mildew, downy mildew, Anthracnose etc. was very common in such grape vines. Such an unscientific management also resulted in under maturity of most of the produce, due to lack of proper sunlight. This ultimately resulted in poor quality fruit and poor returns to the growers.

Bird damage was also a common problem, especially on such fruit bunches which were exposed at vulnerable sites of the vines. Spraying of fungicides, thinning out of densely vegetative shoots as summer pruning, harvesting of fruits and managing such vines was a difficult task. This was largely because of unmanageable vine lengths and a proliferation of uncontrolled offshoots.

With the continuous efforts of the department of Horticulture the growers were educated about canopy management techniques. Some farmers adopted a technique of initially raising of grape vines over wooden structures as a beginning of canopy management.

Ganderbal area of J&K State, especially Lar block is known for cultivation of *Sahibi* and *Hussaini* grape cultivars. The fruit matures in the month of August, when grapes are not available in other parts of the country. Traditionally the grape vines were being raised on wooden structures. These generally used to get damaged during heavy snowfall in winter and as such, the growers had to re-install these structures every year. The collapse of such wooden structures either due to heavy snowfall or load of fruit crop and vegetative growth would generally damage the fruit plants and reduced the productivity potential of the vineyards. Moreover, these structures were not ideal to facilitate proper training and pruning of vines, which hamper quality production of grapes. Heavy infestation of diseases especially during the rainy season was a very common phenomenon in these vineyards.



Intervention

To change the scenario and give a boost to grape production, an intervention was made through Rashtriya Krishi Vigyan Yojana (RKVY) to introduce canopy management in Lar Block especially in Repora and adjoining villages of Ganderbal District. Assistance of 50% was provided to the grape growers for installing permanent canopy management systems (bower system) in replacement of traditional wooden structures.



The structures so erected under canopy management programme is permanent infrastructure which is likely to give support to the grape vines under formal training system for the entire life span of grapevines and even give support to extended rejuvenated vines as well.

Till date 414 beneficiaries have been covered under RKVY for installation of bower systems in a cluster manner in Repora and adjoining villages. An amount of about Rs.1 crore has already been paid as assistance to the farmers for an infrastructure worth about Rs.2 crores.

The intervention has greatly helped in boosting quality production of grapes. Proper canopy management has drastically reduced the disease incidence in grapes thereby resulting in significant improvement in quality.

Canopy management under RKVY is making a visible impact especially in the improvement of quality of produce, plant health, saving of labour on fruit harvest and other allied activities required for grape cultivation. Quality impact of the intervention on grapes has proved very successful in convincing the farmers to use the scientific technique of canopy management.

One of the major impacts of this intervention has been that farmer's wives have been able to harvest the fruit without any other assistance or without any additional infrastructural support, as the canopy management is a great enabler. This was not possible prior to the installation of such fabricated bower systems.

Outcome

The quality improvement has ultimately resulted in higher returns to the growers. As against about Rs.10000 per quintal prior to installation of canopy management infrastructure, the growers have started getting about Rs.25000 per quintal, thereby recording an increase of 150% on the sale realization of the crop. Besides improvement in the quality, reduction in the recurring cost for replacing wooden structures and frequent damage caused to the fruit crop is an added advantage.

The future years are expected to bring a significant increase in production and productivity as well, because proper pruning and management of the grape vines has been facilitated by installation of bower system. This is bound to improve the production of the grapes as well.

