

Boosting finger millet production through improved technologies

The Challenge: Small millets, particularly finger millet is the most important crop next only to rice during Kharif season in North Western Himalayan hills. In spite of this fact, its production and productivity is quite low, mainly due to non-availability of quality seeds of improved varieties, less crop management and crop care by the farmers and poor post-harvest processing technologies. The

Solution: Improved high yielding varieties developed by the institute, viz., VL Mandua 352 and VL Mandua 324 have an average yield potential of 25-30 and 25 q/ha, respectively are a boon for the hill farmers. VL Mandua 352 is highly resistant to leaf, neck and finger blast and VL Mandua 324 is especially released for organic farming conditions. Besides high yielding varieties, agronomic practices like spacing, fertilizer dose and applications are standardised by the institute besides crop protection aspects. White grubs are the major insect pests of millets, grown under rainfed conditions and thus the management practices like VL white grub beetle trap and the entomopathogen, *Bacillus cereus* WGPSB2 holds good for the management. Post harvest activities of finger millet are tedious and time consuming for which the Vivek millet thresher developed by the institute is the solution.



Demonstration and training on finger millet cultivation

The Application: The improved varieties along with crop management and protection activities are were demonstrated in 10 villages of Tipola cluster, where finger millet is being grown under large scale. With all the efforts of the institute, the average crop yield in the cluster was 18 q/ha which was 46.6% more than the base year. Vivek millet thresher was introduced in the village cluster for post harvest activities of the produce.

The Impact: Farmers realised a significant yield increase in the finger millet by growing improved varieties. The income from 1 acre of finger millet cultivation increased from Rs. 14,730 to Rs. 21,600 with net benefit of Rs. 14,923 in the improved practice. The benefit cost ratio rose from 1.09 to 2.34 with the interventions. Overall, the farmers earned additional benefit of Rs. 6,870 from additional yield and use of thresher compared to the conventional practice. The thresher saved considerable time and energy compared to manual threshing and significantly reduced drudgery involved in manual finger millet threshing.