

## CSV 18 performed better with improved technology than local sorghum

*AICRP-Sorghum, Dharwad, Karnataka*

A frontline demonstration (FLD) on *rabi* sorghum with aim to introduce latest *rabi* sorghum cultivar CSV 18R and compartmental bunding as a soil and moisture conservation measure was conducted in the field of the farmer Shri Manjunath Kenganur in Marewada village of Dharwad tehsil. The farmer was selected with the help of the Krishi Vigyana Kendra, University of Agricultural Sciences (UAS), Dharwad. This technology was compared with the farmer's practice which included local *rabi* sorghum (M 35-1) sown on flat land since last several years. The area of demonstration was 0.4 ha having medium black soil. The area belongs to traditional tract of assured rainfall. Total rainfall received was 1082 mm, out of which 488 mm rainfall was received during *rabi* season, which helped better germination and good growth of the crop.

Both the genotypes were sown in October at optimum soil moisture with 45 cm rows spacing. The complex fertilizer (19:19:19 of NPK) @ 62.50 kg /ha was applied at sowing. The compartment bunds (5 m x 5 m size) were formed with the help of a wooden plough by passing in opposite directions after sowing. Carbofuran granules were applied for the control of shoot fly in both the plots. Inter cultivations were carried out twice for the control of weeds and to avoid soil cracks. The compartmental bunds damaged due to inter-cultivation were corrected immediately after inter-cultivation. There was negligible incidence of pests and diseases during the crop growth.



Sorghum crop on compartment bunding



The crop with farmer's practice

The grain yield of 1.23 t /ha and the fodder yield of 4.0 t /ha were recorded from demonstrated plot while 1.00 t /ha and 3.8 t /ha in farmers practice, respectively. From the demonstration field, cost of cultivation of Rs. 6,475 /ha, gross returns of Rs. 17,900 /ha, net returns of Rs. 11,275 /ha and B:C (2.76) were registered which was higher than the farmers practice (Rs. 6,198 /ha, Rs. 14,922 /ha , Rs. 8,724 /ha and 2.45, respectively). Thus, the improved technology proved economically superior over the farmer's practice. This was mainly due to the merits of the compartment bunding in conserving excess soil moisture, which helped in better crop yield. Further the cost towards the laying out of compartment bunds was also minimum and easy for implementation. The farmer Shri Kenganur including his family members were happy about the performance of the improved variety and new technologies. The neighboring farmers visited the field and realized the impact of the new technology. They expressed their wish to adopt the technologies in their fields.