

# Evaluation of growth and yield parameters of Sorghum under compartmental bunding in rainfed situation

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■ **ABSTRACT** : In order to take full advantage of annual precipitation in dry land agriculture, harvesting entire runoff is essential. In a two-year farmer's field demonstration at Vijayapur (Karnataka), moisture conservation practices (compartmental bunding, tied ridging and conventional method) were evaluated for sorghum grown under rainfed conditions. The results indicated that compartmental bunding conserved 15.5 and 24.07 per cent for 2018-19 and 14.07 and 30.55 per cent for 2019-20 more soil moisture as compared to tied ridging and farmer's practice treatments. Compartmental bunding showed better performance in plant height, grain yield, fodder yield, gross return, net return and B:C ratio over tied ridging and farmer's practice. Compartmental bunding practice also exhibited higher grain yield of sorghum 2740 kg ha<sup>-1</sup> and 2894 kg ha<sup>-1</sup> (for 2018-19 and 2019-20), fodder yield 5621 kg ha<sup>-1</sup> and 5883 kg ha<sup>-1</sup> (for 2018-19 and 2019-20), gross return Rs. 35100 and Rs. 358870 (for 2018-19 and 2019-20), net return Rs. 22700 and Rs. 23580 (for 2018-19 and 2019-20) and B:C ratio 2.79 and 2.87 (for 2018-19 and 2019-20).

■ **KEY WORDS** : Sorghum, Compartmental bunding, Tied ridging, Rainfed situation

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