

# Effect of *in-situ* moisture conservation methods on growth and yield of pigeonpea in semiarid conditions of Karnataka

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■ **ABSTRACT** : Broad bed furrow (BBF) and tied ridging (TR) were evaluated in ten farmer's fields during rainy-winter (*Kharif-Rabi*) seasons of 2018-19 and 2019-20 in Vertisols at Vijayapur, Karnataka. Adopting BBF and tied ridging increased the grain yield by 24.64, 11.68 per cent for 2018-19 and 26.27, 11.21 per cent for 2019-20, respectively. The increase in grain yield indicates that BBF is effective for *in-situ* rainwater conservation and improving profile soil moisture in Vertisols. However BBF technology conserved higher soil moisture as compared to tied ridging and farmer's practice over the entire crop growth period. Higher gross and net returns with greater B:C ratio was observed with layout of farmers fields with BBF technology.

■ **KEY WORDS** : Pigeonpea, Broad bed furrow, Vertisols

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