

Effect of methods of planting, genotype options and nutrient management on agronomic traits of rainfed rice in the context of climate change AEZ-6 of FAO

Jaykrit Singh¹, Thomas Abraham¹, Sunil Simon², Valentine D. Pankaj² and Sunil Pandey²

Received April 11, 2014 and Accepted July 9, 2014

ABSTRACT : The experiment for the on farm adaptive research was conducted during the *kharif* season 2012 at Mandla district of Madhya Pradesh, under the *aegis* of an International Project (EU) through Caritas India entitled, “Building Resilience to Climate Change through Strengthening Adaptive Small Scale Farming System in Rainfed Areas in Bangladesh, India and Nepal” (SAFBIN) program, to develop appropriate model of package of practices (POP) of rice. Results indicated that among the genotypes highest grain yield, net return and B:C ratio (9.76 t/ha, `102835/ha and 3.76, respectively) was recorded in the indigenous genotype *Luchai*. Among the methods of planting highest grain yield and net return (3.30 t/ha and `18450/ha, respectively) was recorded in the system of rice intensification (SRI). However, highest B:C ratio (1.62) was observed in the beushening puddle rice (BPR). With regard to the nutrient management highest grain yield, net return and B:C ratio (5.31t/ha, `41425/ha and 2.13, respectively) was observed under lower dose of nitrogen in the treatment 50 kg N/ha through FYM + 3% *matkakhaad*.

Key Words: Adaptive research, Climate change, *Matkakhaad*, organic manures, rainfed rice.