

Agricultural development in the context of climate change: A survey of adaptations in rice farming

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Agricultural activities are very sensitive to climate and weather conditions. Global climate change is going to affect major crops like rice, wheat, maize in India. Climate is the least manageable of all resources. Hence, to avert the ill effects of climate change, more attention has to be paid to other resources and technologies viz. soil, irrigation water, nutrients, crops and their management practices, to sustain the productivity and to ensure food and environmental security to the country. Adaptive measures are to be taken in a timely fashion, both at the farmers' level (backed by strong agriculture/climate research and application oriented outputs) as well as at the policy makers' level to enable the small and marginal farmers to cope with the adversities of climate change. Various types of adaptation can be distinguished, including anticipatory and reactive adaptation, private and public adaptation, autonomous and planned adaptation. In the context of climate change, there is a need to assess the effects of climate change in the existing farming system, vulnerability of farming practices, adaptive measures, and sustainable livelihoods approaches at village level. In Indian context the studies pertaining to the climate change and farmers perception were very few. The survey focused mainly on the rice growers of two districts distinctly different for their rice ecologies. The data was collected from 100 farmers from Mahaboobnagar and Guntur districts of Andhra Pradesh. The survey tool measured the perception of the respondents towards climate change with set of relevant statements through literature review. The public R & D organisations should focus on successful adaptation through actions and active participation of the extension system along with the local authorities and community based organisations that target and reduce the vulnerabilities of poor people.

Biography

Arun Kumar. S, got his Bachelor degree in Horticulture (1999) from Tamil Nadu Agricultural University, M. Sc in Development Communication (2002) from GBPUAT, Pantnagar and Ph. D in Agricultural Extension (2008) from IARI, New Delhi. He is currently serving as a scientist at Directorate of Rice Research, Rajendranagar, Hyderabad. He is currently involved in projects like "Rice Knowledge Management Portal" funded by NAIP and his current area of research interest is in mapping and documenting various partnerships in rice Sector. Before joining ICAR, he has been associated with AVRDC, Taiwan (2007-08) and worked as Consultant with MANAGE, Hyderabad (2009).

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