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# **Original Research Article**

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Constraints Experienced and Suggestions by Farming Community in Adaptation to Climate Change in Karnataka: An Economic Analysis

Ravi Dupdal<sup>1\*</sup> and B.L. Patil<sup>2</sup>

<sup>1</sup>ICAR-Indian Institute of Soil and Water Conservation, Research Centre, Ballari-583 104, India <sup>2</sup>Department of Agricultural Economics, College of Agriculture, University of Agricultural Sciences, Dharwad - 580 005, Karnataka, India

\*Corresponding author

## ABSTRACT

Climatic variability has the potential to affect countries highly dependent upon agriculture, resulting in food shortages, among other consequences. Therefore, people who depend on farming will require a myriad of adaptation strategies to mitigate adverse effects of climate change and maintain the livelihoods of farm families. Farmers practice variety of adaptability measures to mitigate and preclude the effect of climate change in agriculture. However, farmers come across varieties of constraints in adaptation in response to climate change. The paper reported the results of 240 farmers of northern Karnataka who are experiencing various constraints in adaptation in response to climate change and also enlisted various suggestions in order to negate the barriers to climate change. Descriptive statistics and Garrett ranking technique were employed for analyzing various socio-economic characteristics and constraints experienced by farmers in adaptation in response to climate change. The results shows that demographic composition was predominantly dominated by old age groups constituting 50.42 % of surveyed farmers followed by middle aged category (29.58%) and rest are young age groups (20.00%). Higher proportions of farmers (58.33%) were members of various social group participation. Little more than 1/3<sup>rd</sup> of farmers involved in off-farm employment in the region. The main barriers to adaptation includes lack of knowledge and information about climate change and adaptation strategies (GS: 78.09), lack of access to timely weather forecast information (GS: 72.88) and timely availability of farm inputs (GS: 65.44) are attained I, II and III ranks respectively. Majority of the respondents (75.00 %) suggested that weather forecast should be accurate and available in time, whereas 69.58 per cent and 68.33 per cent of farmers suggests that Government support during natural calamities and timely supply of farm inputs on subsidized rate is necessary in order to mitigate negative impact of climate change.

### Keywords

Climate change, Constraints in adaptation, Descriptive statistics, Garrett ranking technique, Adaptability measures

#### Article Info

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