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## Adaptation measures initiated due to climate change in southern India

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Threats on agriculture and food security are the major causalities of climate change in India and there is a need to understand the effect of climate change on agricultural sector. Analysis of meteorological data shows that there was an upward trend in mean monthly temperature and downward trend in relative humidity and number of wet days. Strategic production management is to be adopted by farmers to mitigate the ill effects of climate change. The study was conducted by interviewing 120 farmers in southern India to understand perceptions of climate change and adaptation measures initiated by them using an Ex post facto design. The results of the study revealed that, 98% of farmers had high perception of changes in rainfall. Though the actual documentation of climatic data indicated there was increase in the rainfall, but farmers perceived that there was a decrease in the rainfall. This trend of perception may be due to increased area under water intensive crops and short period of rainy days. However, 99% of farmers were having high level of perception about changes in temperature. All the farmers perceived that there was decrease in yield, income, soil nutrients and increase in cost of cultivation, pests and diseases, weed infestation due to climate change. Finally the study concludes that, the farmers were initiating adaptation measures as recommended by the UAS, Bangalore, India. Much remains to be done to create awareness and knowledge about the ill-effects of climate change. Systematic development and integrated delivery of extension programs to mitigate ill effects of climate change is needed.

### Biography

Jagadeeshwara K has completed his PhD from Gujarat Agricultural University, India. He is the Director of Extension, at University of Agricultural Sciences, Bangalore - a premier institution in the country. He is operating a prestigious project funded by Karnataka State Government on "Livelihood improvement of Scheduled Caste farm families through integrated farming system (IFS) approach". He has published more than 30 papers in reputed journals and has been serving as an Academic Council Member of reputed institutions.

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