

Drought management through crop diversification and rainwater harvesting

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Abstract

During drought, actual moisture supply at a given place rather consistently falls short of the climatically expected and shortage in the appearance of natural waters with respect to normal is expected. Drought generally results from anomalies in large-scale circulation of the atmosphere and oceans. Impact of drought can be minimized through several technologies like crop diversification, rainwater harvesting, multiple use of water, watershed management etc. There are several drought indices that measure how much precipitation for a given period of time has deviated from historically established normal. Drought indices are normally continuous functions of rainfall and/or temperature, river discharge or other measurable variable. In this study, drought has been characterized with standardized precipitation index and related with rice crop production in Odisha, India. Several technological options for mitigating drought have also been discussed in this paper.