

Impact of the 2015 Drought on Rural Livelihood - a Case Study of Masurdi Village in Latur District of Maharashtra, India

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Abstract : Drought is a global phenomenon. It has a huge impact on agriculture and allied sector activities. Agriculture plays a substantial role in the economy of developing countries, which mainly depends on rainfall. The present study illustrates the drought conditions in Masurdi village of Latur district in the Marathwada region, Maharashtra. This paper is based on both primary as well as secondary data sources. The multistage sample method was used for primary data collection. The 100 households sample survey data has been collected from the village through a semi-structured questionnaire. The crop production data is collected from the Department of Agriculture, Government of Maharashtra. The rainfall data is obtained from the Department of Revenue, Office of Divisional Commissioner, Aurangabad for the period from 1988 to 2018. This paper examines the severity of drought consequences of the 2015 drought on domestic water supply, crop production, and the effect on children's schooling, livestock assets, bank credit, and migration. The study also analyzed climate variables' impact on the Latur district's total food grain production for 19 years from 2000 to 2018. This study applied multiple regression analysis to check the relationship between climatic variables and the Latur district's total food grain production. The climate variables are annual rainfall, maximum temperature and minimum temperature. The study considered that climatic variables are independent variables and total food grain as the dependent variable. It shows there is a significant relationship between rainfall and maximum temperature. The study also calculated rainfall deviations to find out the drought and normal years. According to drought manual 2016, the rainfall deviation calculated using the following formula. $RF\ dev = \{(RF_i - RF_n) / RF_n\} * 100$. Approximately 27.43 % of the workforce migrated from rural to urban areas for searching jobs, and crop production decreased tremendously due to inadequate rainfall in the drought year 2015. Many farm and non-farm labor, some marginal and small cultivators, migrated from rural to urban areas (like Pune, Mumbai, and Western Maharashtra). About 48 % of the households' children faced education difficulties; in the drought period, children were not going to school. They left their school and joined to bring water with their mother and fathers, sometimes they fetched water on their head or using a bicycle, near about 2 km from the village. In their school-going days, drinking water was not available in their schools, so the government declared holidays early in the academic education year 2015-16 compared to another academic year. Some college and 10th class students left their education due to financial problems. Many households benefited from state government schemes, like drought subsidies, crop insurance, and bank loans. Out of 100 households, about 50 (50 %) have obtained financial support from the state government's subsidy scheme, 58 (58 %) have got crop insurance, and 41(41 %) irrigated households have got bank loans from national banks; besides that, only two families have obtained loans from their relatives and moneylenders.

Keywords : agriculture, drought, household, rainfall

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