Economic Impact of Drought on Agricultural Society: Evidence Based on a Village Study in Maharashtra, India

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Abstract : Climate elements include surface temperatures, rainfall patterns, humidity, type and amount of cloudiness, air pressure and wind speed and direction. Change in one element can have an impact on the regional climate. The scientific predictions indicate that global climate change will increase the number of extreme events, leading to more frequent natural hazards. Global warming is likely to intensify the risk of drought in certain parts and also leading to increased rainfall in some other parts. Drought is a slow advancing disaster and creeping phenomenon- which accumulate slowly over a long period of time. Droughts are naturally linked with aridity. But droughts occur over most parts of the world (both wet and humid regions) and create severe impacts on agriculture, basic household welfare and ecosystems. Drought condition occurs at least every three years in India. India is one among the most vulnerable drought prone countries in the world. The economic impacts resulting from extreme environmental events and disasters are huge as a result of disruption in many economic activities. The focus of this paper is to develop a comprehensive understanding about the distributional impacts of disaster, especially impact of drought on agricultural production and income through a panel study (drought year and one year after the drought) in Raikhel village, Maharashtra, India. The major findings of the study indicate that cultivating area as well as the number of cultivating households reduced after the drought, indicating a shift in the livelihood- households moved from agriculture to non-agriculture. Decline in the gross cropped area and production of various crops depended on the negative income from these crops in the previous agriculture season. All the landholding categories of households except landlords had negative income in the drought year and also the income disparities between the households were higher in that year. In the drought year, the cost of cultivation was higher for all the landholding categories due to the increased cost for irrigation and input cost. In the drought year, agriculture products (50 per cent of the total products) were used for household consumption rather than selling in the market. It is evident from the study that livelihood which was based on natural resources became less attractive to the people to due to the risk involved in it and people were moving to less risk livelihood for their sustenance.

Keywords : climate change, drought, agriculture economics, disaster impact

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