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Climate Change and Its Impacts on Vulnerable Communities: A Case Study of Karnataka

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INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

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Foreword

A large proportion of the scheduled caste and scheduled tribe population is socially and economically vulnerable on the one hand and to climate change and related uncertainties that pose challenges to their lives on the other. The degree of damage caused due to climate change is not uniform across various communities for instance, as vulnerability, and adaptation to climate change vary across groups. Socio-economic indicators such as income, family size, education, access to financial resources, farmland and social status of social groups are the vital determining factors of vulnerability and adaptation to climate change. Hence, there is an urgent need to assess the impacts of climate change on the vulnerable groups, considering the fact that rising temperatures and scanty rainfall adversely affect the livelihood options of the poor and vulnerable communities. Further, climate change has adverse impacts such as loss and damage to property, low wages, unemployment and migration. There are studies on climate change at the macro level and its impacts on agricultural sector, biodiversity and forests and fisheries. However, studies of climate change impacts on vulnerable groups are scarce at the local, national and international level, Further, vulnerable communities like Scheduled Castes and Scheduled Tribes are isolated with less power, low wealth, less privileges and high insecurity.

The aim of this monograph is to assess the impacts of climate change on the Scheduled Caste and Scheduled Tribe villages in Karnataka. This study has found that out of the 305 sample households, 65 percent of the households were highly vulnerable and 30 percent of the households were less vulnerable and only 5 percent of the households were moderately vulnerable, in the study villages of Karnataka. About 65 percent of the households needed emergency help to recover from vulnerability to climate change. About 30 percent of the households were in a vulnerable situation but still able to cope with. This study has indicated that in Hyderabad-Karnataka region which is largely under rainfed condition the Yarjanthi village (Raichur district) and the canal irrigated village Boovanahalli (Mandya district) were highly vulnerable followed by ground water irrigated village Gowdathatagadde (Kolar) and heavy rainfall region village Shiriyara (Udupi) which were less vulnerable due to climate change. Overall, the respondents in the four study villages faced unpredictable weather events, water scarcity, and decline in agricultural productivity; farmers in all the study villages were highly dependent on climate sensitive agriculture, forests and fisheries. Rural livelihood projects and program inputs can improve the livelihoods of scheduled caste and scheduled tribes in highly drought prone areas.

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