

Adaptation to climate change in rural India: Evidence from Chitradurga district in Karnataka state

Abstract

The issue of climate change focuses on the adverse impacts of global warming on the livelihoods of human beings and survival of other biological communities. There is a need for adaptation to avoid such impacts. In this thesis, using Chitradurga district as a case study, we analyze the observed climatic changes and their implications to the rural communities. In a cross section study, using the concept of well-being as a proxy, we assess the contribution of four (human, physical, financial, social) capitals and an additional measure called aspirational window to household adaptation. Results indicate that the management capabilities of the head of the household, especially on financial issues, matter the most. Large families and huge physical asset base have a limited role in supporting adaptations to climate change. social capital and household aspirations have no bearing on well-being. Households were found more susceptible to other vulnerabilities than to climate change. Thereafter, we proceed to analyze secondary data to analyze the general developmental trends in the primary sector to examine as to what extent they are able to contribute to the household. we found that the PDS and MGNREGS very helpful in diffusing the pressure on the households. Social security pensions and microinsurance also offer considerable relief. They can only help the households survive but hardly offer any support for adaptations. We recognize farming gradually becoming unviable. In naturally less endowed areas, further intensification of agriculture is neither desirable nor feasible. Keeping the context in mind, we recommend refining of ongoing development programs, gap filling and convergence.