

4th World Congress on

CLIMATE CHANGE AND GLOBAL WARMING

August 06-07, 2018 Osaka, Japan

Impact and social vulnerability among farmers to climate change: Evidence from coastal Odisha, India

Sahoo Dibakar and Sridevi G

School of Economics-University of Hyderabad, India

The study attempts to understand the rationale behind why (or how) different groups of farmers within a community are disproportionately vulnerable (or impacted) by climatic change and variability. Primary data were collected using structured household interview schedule from a random sample of 310 males headed farm households across four categories of farmers such as marginal (≤ 2.50 acres of land), small (2.51-5.00), medium (5.01-10.00) and large (>10.00) in Chamakhandi and Mandipalli villages of Gajam district, Odisha. Indexing approach and focused group discussions are applied to understand the social vulnerability of different farm groups which comprises of geographical, economic and social factors respectively. The impact assessment results suggested that the productions of cereal crops (paddy and wheat), pulses crops (green gram and black gram) and oilseeds across different groups of farmers have been negatively affected due to climate change and variability in Mandiapalli village, whereas it has the similar impact except for the production of black gram and oilseeds in case of the marginal farmers in Chamakhandi village. Whereas, the medium and large farmers, on the average, confronted the greater reduction in cereal and pulses incomes compared to the marginal and small farmers in both study areas. In sharp contrast to these findings, the marginal and small farmers are socially more vulnerable to climate change than the medium and large farmers. This is attributed to the fact that the marginal and small farmers performed are abysmally on the geographical indicator (educational level), economic indicators (diversified sources of income, access to formal credit, percent of households having debt, changing paddy crop varieties, using early-maturing varieties of paddy and crop insurance) and social indicators (membership in community-level decision-making, farmer-based organization and political organization) as compared to the medium and large farmers.

dibakarresearch3@gmail.com