

Climate Change, Food Insecurity and Sustainable Livelihoods

Towards understanding micro level impacts

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Macro variables impacted by Climate change

- Agricultural production
- Institutions in the rural areas
- Labour mobility and migration patterns
- Limited options for sustainable livelihoods

Micro perspectives: NRM & Food security

- Improving rainfed agriculture through
 - SWC measures
 - Facilitating adoption of better /stable varieties
- Community level limited access to commons
- Identifying the adversely affected groups
- Evidences from some rainfed regions in India – the case of landless households; disinvestment of livestock assets

Micro perspectives: Irrigated agriculture

- Declining water availability - declining productivity
- Emergence of new institutions as a coping mechanism (the case of *shaamlaat* land – to begin with poor quality land)
- Composition of lessees – marginal farmers
- Income maximisation being the key implies
 - no investments to improve soil fertility
 - increased usage of inorganic fertilisers
 - more dependence on scarce water resources,
 - Reduced productivity (from 10-12 qtls per acre of basmati to 6-8 qtls per care within a decade)
 - Land market has become active – distress sale of low productivity land

Micro perspectives: Contract Farming

- Projected as a panacea for zones threatened by ecological survival and sustaining natural resources (use of organic fertiliser and measures that use less water)
- Entry of private players (MNCs) connotes a global interest and rent-seeking behaviour
- Increasing mechanisation, implying reducing labour –intensity
- Reduced wages for workers engaged in contract farming
- Challenges for adherence to global environmental standards – protection of livelihoods

Micro perspectives: Labour Migration

- Adversely affected by
 - Falling demand in the wake of declining productivity in irrigated agricultural zones
 - Falling agricultural wages
- Weakening of pull factors enhances the already high vulnerability of households
- Food insecurity of labour migrating households further aggravated