Livelihoods in Rainfed Areas and the Challenge of Climate Change

Asmita Bhardwaj, PhD
Assistant Professor
Amity School of Planning and Architecture
Amity University, NOIDA, UP
Abhardwaj3@amity.edu
9560177585

Characteristics of Rainfed Agriculture

- Practised under a wide variety of conditions- Resource poor to resource rich, arid to rain-intensive
- Crops Grown, Livestock Production, Non farm activities
- Due to high population of landless households and agricultural laborers, low land and labor productivity, poverty is concentrated in rainfed regions.
- Green Revolution, Watershed Management and Public Interventions

Map

• - Show Rainfed Areas with cropping systems

Risks and Coping Strategies

- Variable Climate and Uncertain Rainfall, high inter and intraseasonal variability, frequent occurrence of mid-season and terminal droughts
- Water Scarcity
- Land Degradation and Soil Erosion
- Poor Infrastructure and Market Linkages
- Agricultural yields are more unstable in rainfed areas than irrigated ones
- Poverty and vulnerable livelihoods, Farm Suicides
- Coping Strategies

Climate Change and Rainfed Agriculture

- Systematic studies on climate change and Indian agriculture are few and recent. Scarce for rainfed areas in India
- Yield reduction in rainfed area crops more than irrigated crops due to inadequate coping mechanisms
- Negative effects on food production
- Existing Adaptations: Crop rotations, Change in crop durations etc.
- Possible and Needed Adaptations:

Conclusion and Further Research

References