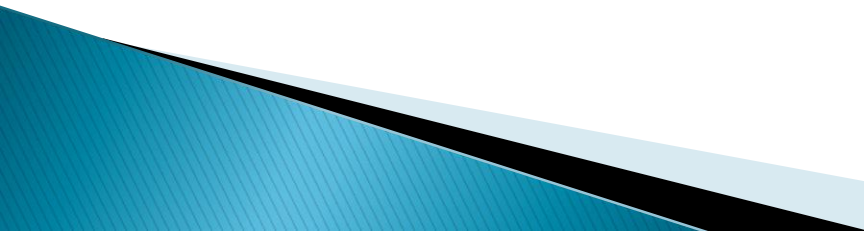


Rural India and Climate Change Challenge

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Rural India

- ▶ Rural India houses around 70% population and more than 80% poor of the country
 - ▶ Hunger and malnutrition prevalent among rural children
 - ▶ Agriculture and the exploitation of natural resources have privileged but not necessarily predominant sources of income and occupations.
 - ▶ Nearly 90% of India's rural population is dependent on biomass for meeting its cooking and heating energy requirements
 - ▶ Highly dependent on natural resources and weather-dependent activities
 - ▶ Relative lack of access to information, decision-making, investment and services.
- 

Expected climate change in India by 2030

- ▶ **Warmer**
 - Avg. temp rise: 2.0 deg C predicted
 - 1.0–4.0 deg C at extreme ranges
- ▶ **and wetter – increased annual precipitation, but**
 - lower frequency of rainy days; increased intensity
- ▶ **Cyclonic disturbances**
 - lower frequency; increased intensity
 - increased risk of storm surges
- ▶ **Sea-level rise**
 - 1.3mm/year on average

Expected effects (of expected climate change) for India: examples (INCCA 2010)

▶ **Agriculture**

- Up to 50% reduction in maize yields
- 4–35% reduction in rice yields (with some exceptions)
- Rise in coconut yields (with some exceptions); reduced apple production
- Negative impacts on livestock in all regions
- Consumption reduction for poor: 18%

▶ **Fresh water supply**

- High variability predicted in water yields (from 50% increase to 40–50% fall)
- 10–30% increased risk of floods; increased risks of droughts

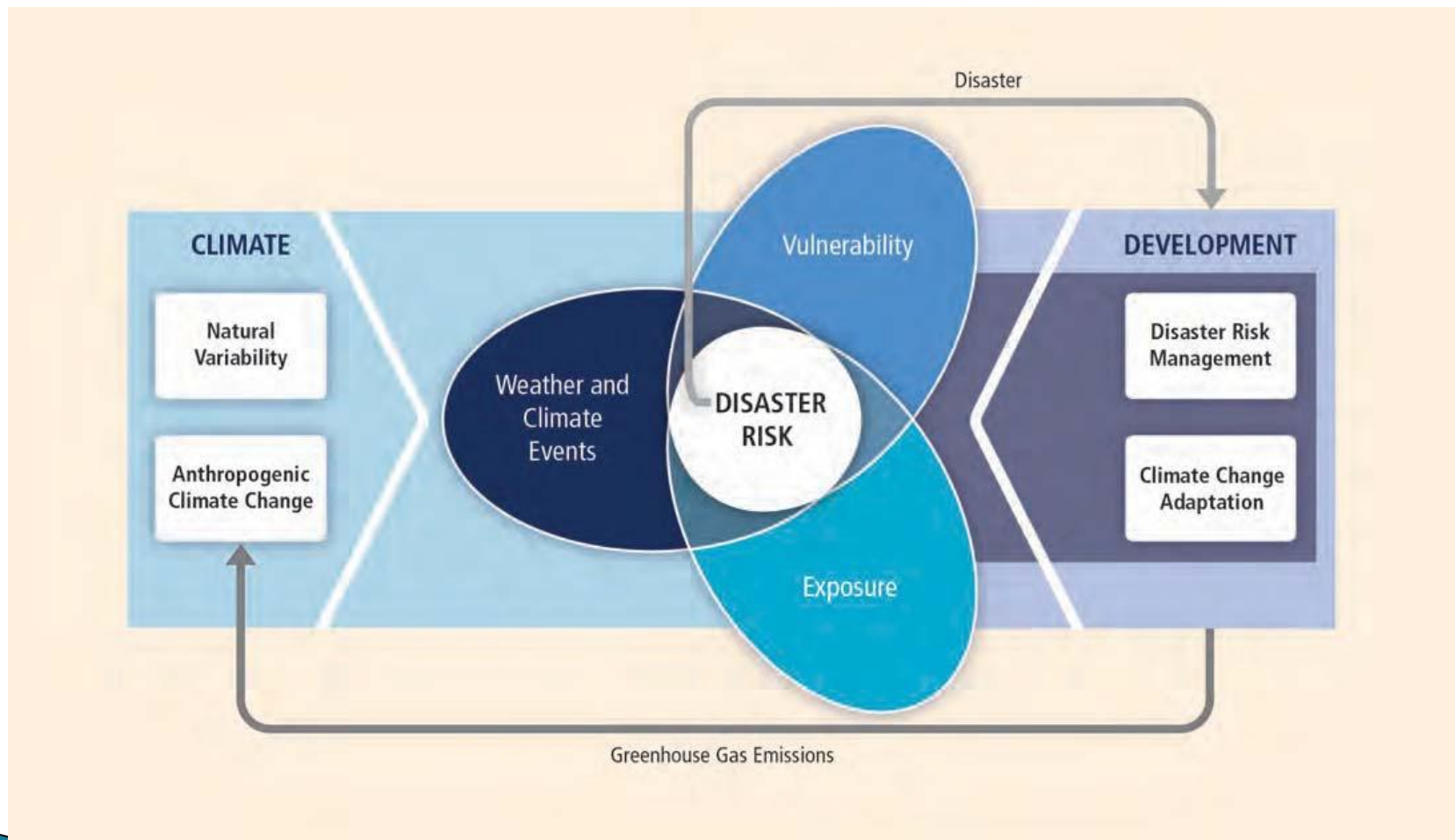
▶ **Forests and natural ecosystems**

- Shifting forest borders; species mix; negative impact on livelihoods and biodiversity

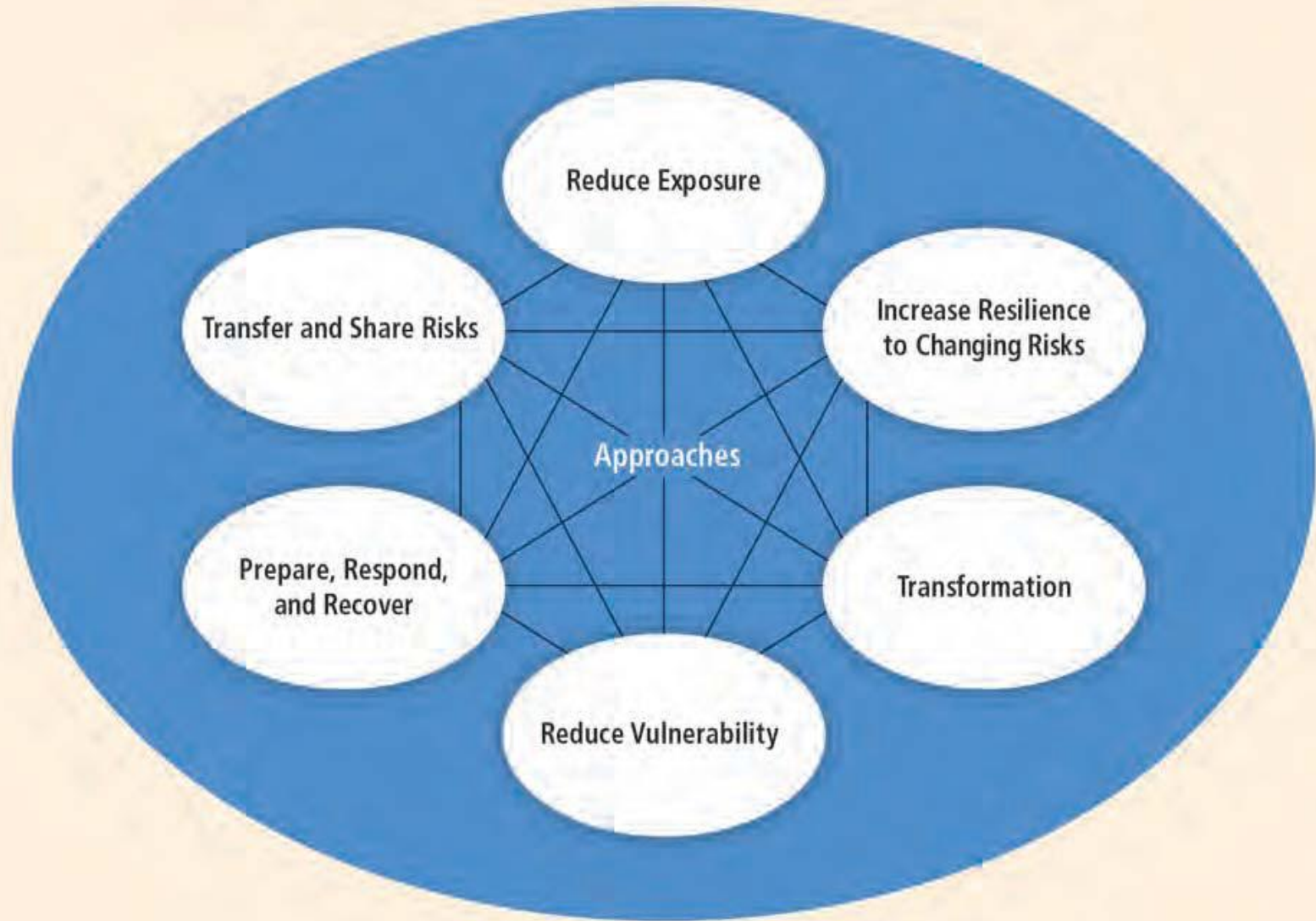
▶ **Human health**

- Higher morbidity and mortality from heat stress and vector/water-borne diseases
- Expanded transmission window for malaria

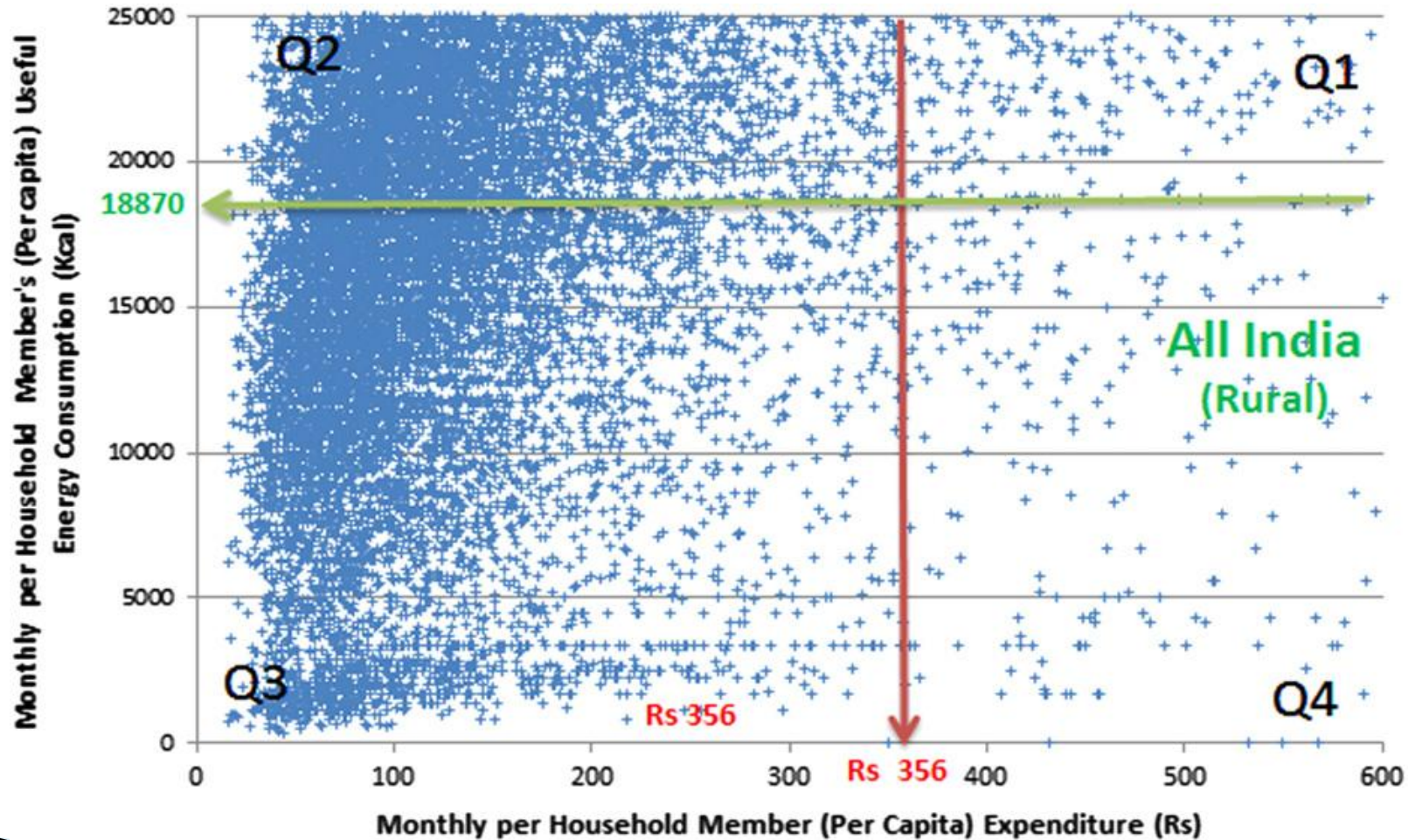
Climate Change, Disaster Risks and Sustainable Development



Adaptation and Disaster Risk Management Approaches for a Changing Climate



Income and energy poverty across rural household



Thank you very much !

Welcomes comments and feedback : surender672@gmail.com