Many Elements of Adaptation Strategies to Climate Change Need to be Practiced Even Today at the Global and Local Levels

Investment in research on 'climate proofing'
Action for management of climatic stresses in normal climate years

- Early warning systems for drought, flood and heat
- Weather based agro-advisories and crop outlooks
- Food, feed, fodder and seed banks



## **Future research priorities**

- Impacts on crops, livestock, fisheries, pests, and microbes
- Evolving 'adverse climate tolerant' genotypes and land use systems
- Value-added weather management services: contingency plans; applications of weather forecasts for reducing production risks, pest forecasting systems
- Compendium of indigenous, traditional knowledge for adaptation
- Water and fertilizer management for adaptation and mitigation
- Optimal livestock population considering milk requirement, diet, GHGs, and social issues
- Decision support systems

(Aggarwal)



## Strengthening developmental projects

Surveillance of pests and diseases

- Weather based insurance products to increasing number of farmers
- Community partnerships in food and forage banks to manage scarcity during increased periods of stress.



## **Policy considerations**

 Mainstreaming adaptation perspectives in current policy considerations

- Financial incentives to farmers and agri-industry for resource (carbon, water, energy) conservation
- Enhance investment in water harvesting and efficient water use technologies
- Increased budget allocation for research on 'climateproofing' agriculture
- Explore international partnerships for joint food security
- Payments to farmers for carbon sequestration should be included in international negotiations

(Aggarwal)