# Challenges to local communities to cope with Climate Change impacts

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## 1. The Climate Change challenge

- Climate change is a global problem that requires a global response
- Developing countries less capacity to cope with the impacts due to limited financial resources, skills and technologies and high levels of poverty
- Climate change threatens to reverse the gains of development
- Addressing this challenge requires unprecedented mobilization of financial resources and diffusion of appropriate technologies.

#### 2. Impacts on local communities

- Local communities in developing countries are vulnerable to the adverse effects of climate change and variability
- They have limited coping capacity due to poverty and the subsistence nature of their activities
- With the growing impacts of CC, existing threats are being significantly exacerbated thereby increasing the vulnerability of those already at risk
- Indigenous coping mechanisms have become weak to withstand climate change impacts – technological support

## 3. Examples from Ethiopia

- Ethiopia is one of the most vulnerable countries of the world to climate change and variability
- Severe droughts, flooding, wildfire, and diseases hit the country over the past years - increase in frequency of occurrence and intensity
- Agriculture, water and human health are the most vulnerable sectors a result of which the country's strive to development is being severely challenged
- The disasters undermined agricultural production, caused the degradation of water resources, and damage basic infrastructure

- Specifically, the disasters have caused
  - loss of productive household assets, degradation of cropland and pastures because of the encroachment of invasive species
  - drying up of springs and streams
  - damage to basic infrastructure such as roads and bridges
- Local communities employ a range of mechanisms to cope with these challenges though increased intensity of the disasters has limited the capacity of local strategies

- Government response focuses more on emergency responses instead of enhancing coping capacities
- NGOs limited capacity and collaboration, interventions are not in line with CC mitigation and adaptation, and most of the activities are short-lived and project oriented.
- Major challenges local communities in Ethiopia face:
  - Poverty, limited technical knowledge and capacity
  - Market access and absence of market linkages
  - Weak enabling policy environment and institutional arrangement
  - Absence of effective capacity building and appropriate advisory services

## 4. Technological solutions?

- Technologies are already available or can be made available, but not much accessible for poor communities
- Financial constraint limited the diffusion of technological solutions
- Challenges to developing countries when planning climate change mitigation and adaptation strategies
  - access to new and innovative climate finance sources
  - practical links between climate change strategies and national development objectives
  - a functional institutional arrangement for effective and equitable use of climate finance

- While the diffusion of technologies is vital, issues of technology appropriateness and equity should gain the required attention
- There are doubts also that market-based sources of climate finance might not work well in poor countries

## 5. Facilitating finance for the diffusion of appropriate technologies

- Tangible progress at the Copenhagen COP meeting to provide new finance in support of climate change actions in developing countries
- Cancun Agreements come up with a variety of decisions

   the Technology Mechanism, Adaptation Committee
   and Green Climate Fund.
- But continued doubt on the effective and timely implementation of the commitments related to financial resources and transfer of technology
- The distribution climate finance should be handled in an equitable manner, responding to the specific social and economic realities of recipients.

- Developing countries need to put in place appropriate institutional and regulatory frameworks - capacity building to access, absorb and manage climate finance
- Timely action to support mitigation and adaptation projects in developing countries as the impacts of climate change on local communities is intensifying
- The Derban meeting is expected to address operationalizion of the Technology Mechanism and Green Climate Fund - instrumental in facilitating the diffusion of appropriate technologies

#### Impacts of climate change impacts in Ethiopia



Effects of drought and diseases – loss of productive assets



Water scarcity – a challenge particularly for women







Development interventions

Proliferation of invasive species – degradation of cropland and grazing areas



Prosopsis Juliflora on grazing areas

Partinium on cropland



Basic infrastructure?



