



ADAPTING TO THE IMPACTS OF CLIMATE CHANGE & MITIGATION FOR SUSTAINABLE FUTURE



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Climate Change & Adaptation

- Adaptation to adverse impacts of climate change is an inevitable reality
- While most people think of low-lying islands sinking under sea level as an impact of climate change, mountainous countries like Bhutan are equally at risk.
- Warming over the Himalayas is expected to be several times higher than increases in global temperature.

Adaptation Measures

- An integrated response is required whereby the impacts of climate change must be taken into account by economic and development planning.
- Multi-Stakeholder Technical Committee on Climate Change – Broad representation of relevant agencies
- Vulnerabilities to climate change impacts are overwhelmingly higher where socio-economic development is lower
- Bhutan has taken the approach of mainstreaming environment, climate and poverty in our plans and policies.
- A framework on ECP has been developed to inform and guide users for formulation of an ECP integrated plan.

Adaptation Measures

- Short term adaptation measures are addressed in NAPAs
- One of the most dramatic effects of climate change on Bhutan is the Glacial Lake Outburst Floods
- First Bhutan NAPA project:
- Reducing climate change induced risks and vulnerabilities from GLOFs
- Artificial lowering of Thorthormi Lake in Bhutan



Adaptation Measures

- Adaptation options should cater to local impacts.
- By combining local knowledge, scientific and technical expertise, communities can reduce their risk and adapt to climate change.
- The main constraints are lack of financial support and technical expertise.





Mitigation of GHG

- Mitigation of green house gases have sustainable development benefits.

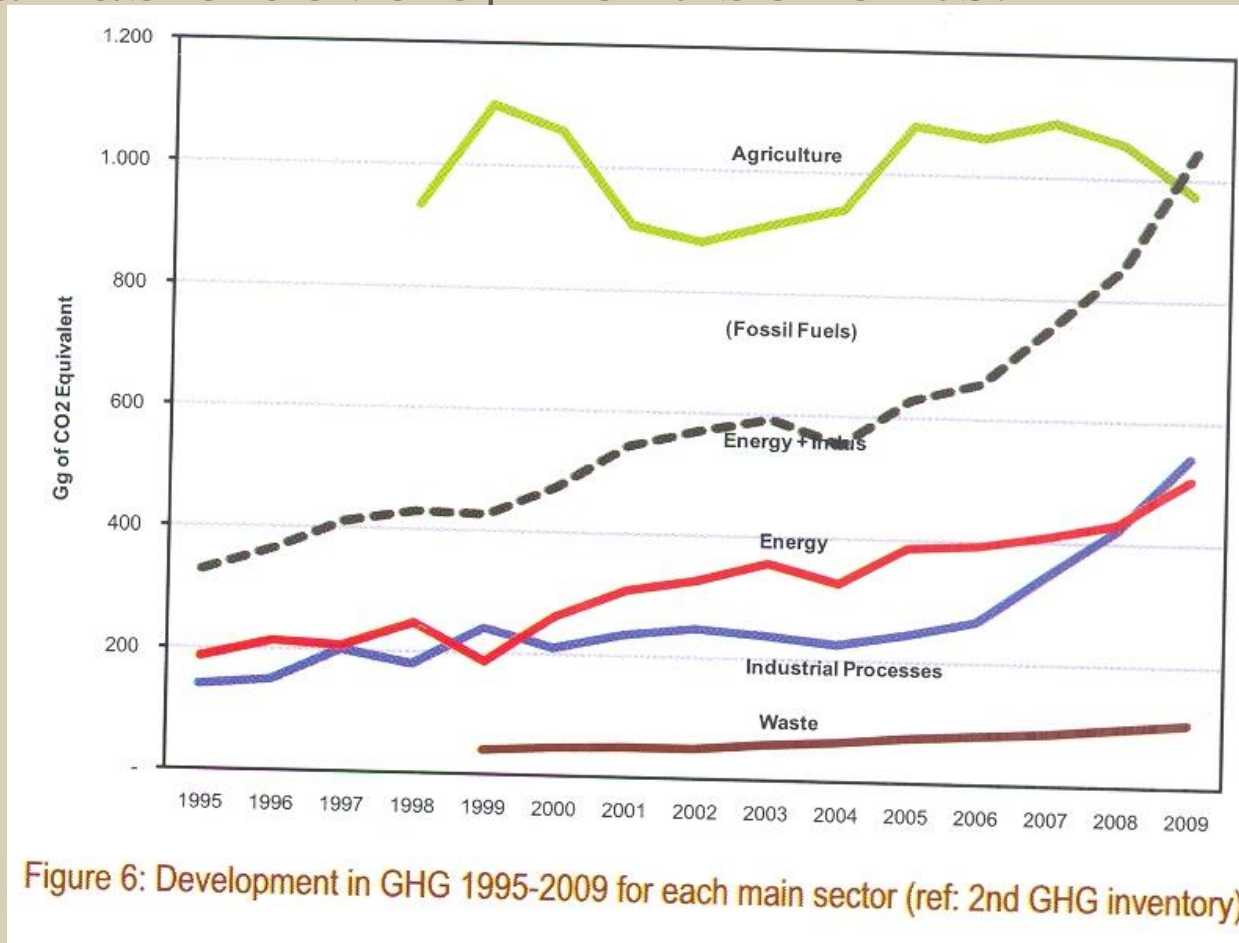


Figure 6: Development in GHG 1995-2009 for each main sector (ref: 2nd GHG inventory).



- Some of the co-benefits are
 - Cleaner production
 - Improved air quality
 - Improvement in Technological efficiency
 - Etc
- Making a commitment to mitigate GHG is crucial
- Incentives and resources must be provided to follow through on the commitment

Mitigation Measures of Bhutan

- Guided by the Development Philosophy of GNH– 4th King Jigme Singye WangchuckT
- United Nations adopted Bhutan’s proposal to include happiness as the Ninth Millennium Development Goal (MDG). The proposal was adopted unanimously by the 193 member countries at the UN headquarters in New York.
- 20th March is the International Happy declared in 2012
- All RGOB Policies – pass through GNH screening tools



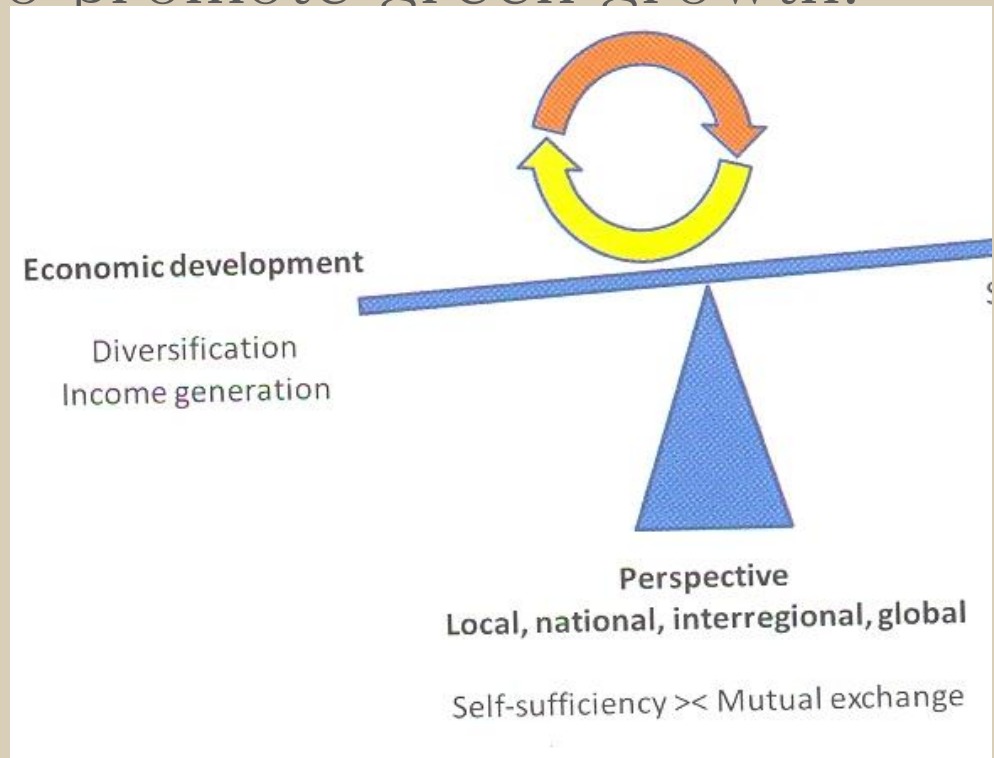
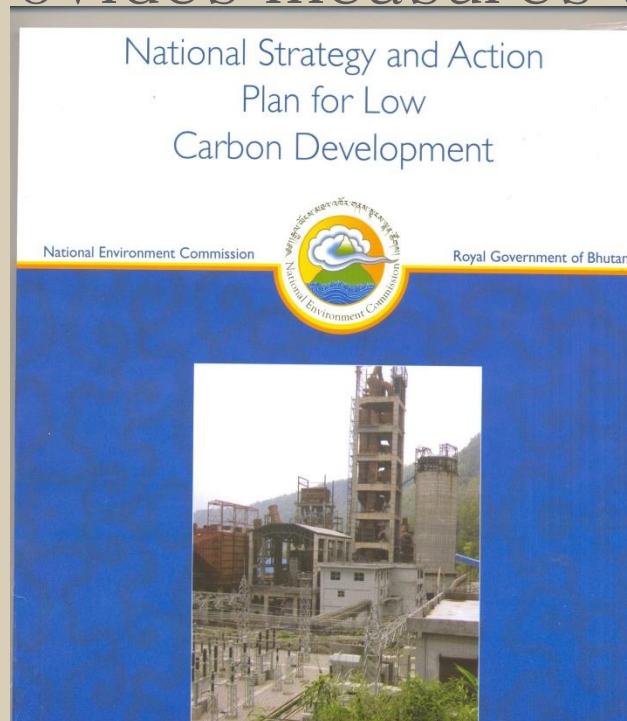
- Post-Rio + 20 “ The Future We Want”
 - New development paradigm – 25 Feb– 1st March 2013
 - 40 International Expatriates
 - Framework for Happiness
- Four pillars of GNH are
 - Equitable and sustainable socio-economic development
 - Preservation & promotion of cultural values
 - Conservation of the natural environment
 - Enhancing good governance

Mitigation Measures of Bhutan

- Commitment to maintain 60 percent of forest cover at all times as enshrined in our Constitution



- Declaration to remain carbon neutral at the 15th Session of the Conference of Parties to the UNFCCC.
- A National Strategy and Action Plan for Low Carbon Development has been prepared.
- The Economic Development Policy of 2010 also provides measures to promote green growth.



Mitigation Measures of Bhutan

- The 11th Five Year Plan of Bhutan intends to prepare a ‘Green’ plan and a ‘Green’ mindset to pursue development based on pro-poor, low carbon, eco-friendly, energy and cost efficient modalities and strategies.
- Expansion of installed hydropower capacity to 10,000 MW by 2020
- Incentives for energy saving devices and low emission vehicles

Mitigation Measures of Bhutan

- Programs in agriculture like sustainable land management, reduction of inferior livestock, promotion of improved livestock management and promotion of organic agriculture.
- Sustainable forest management, reforestation plans and efforts to reduce fuel wood consumption.
- Declared the first Sunday of every month as Pedestrian day, use of electric cars and rope ways.

Conclusion

- Although Bhutan has always been a net sequester, yet we have made challenging commitments because we believe that every effort counts and every effort should be recognized by the global community.



Thank you

