

Green Economy for Climate Change Adaptation and Sustainable Mountain Development

International Centre for Integrated Mountain Development

Kathmandu, Nepal

Outline

1. Introduction and concepts
2. Role of mountains in low carbon economy
3. Challenges
4. Opportunities
5. Policies and insitutional measures suggested
6. Conclusion and way forward

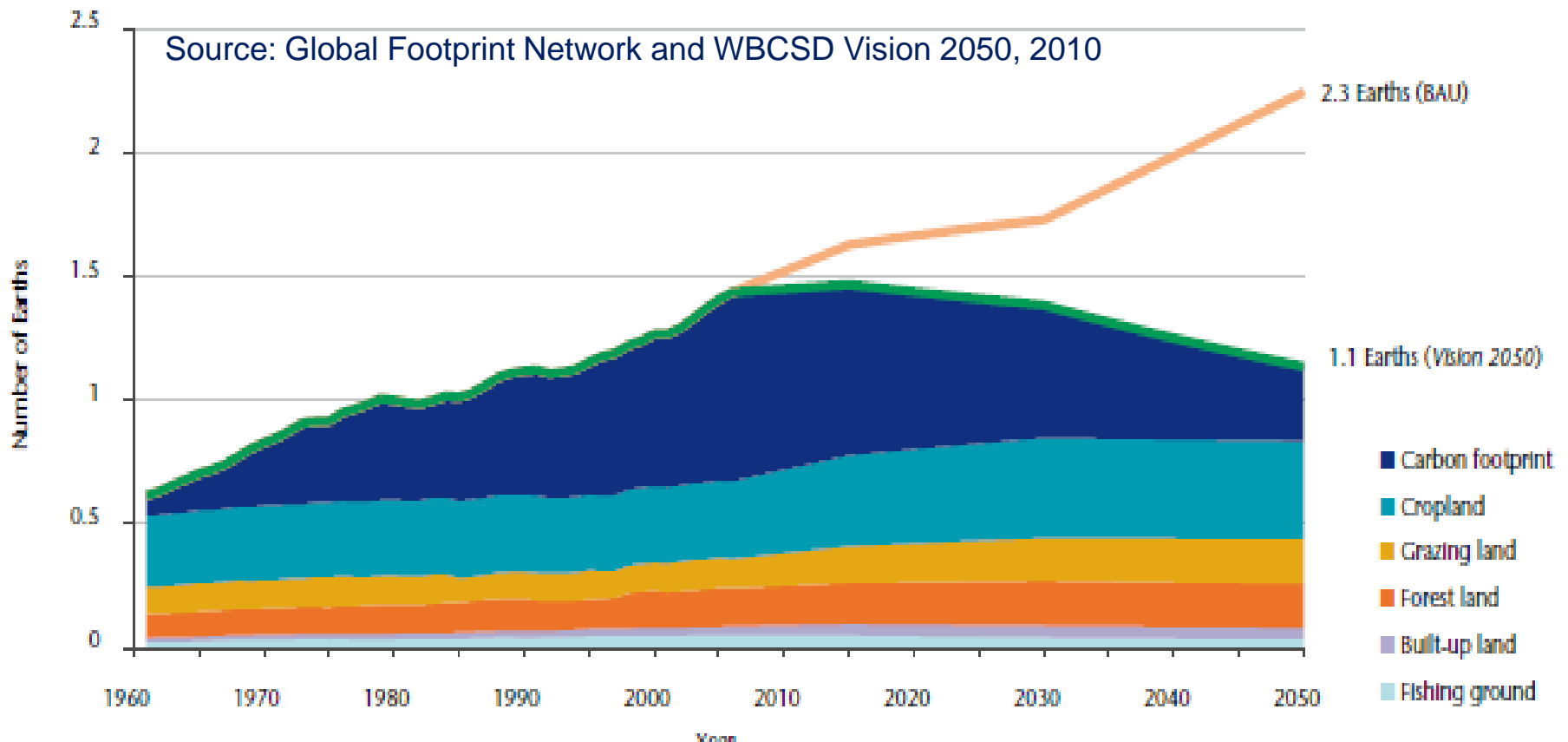
Introduction

- Conventional economic model has led to:
 - Decline in quantity or quality of *natural resources*
 - Food insecurity, persistent poverty
 - Degradation of ecosystem processes
 - High carbon emissions, climatic variability



Introduction

- **Global ecological footprint already exceeds the Earth's capacity**
- **We need 2.3 earth to support 9 billion people in 2050**



- Addresses alarming impacts of global climate change
- Reduces environmental risks and ecological scarcities
- Low carbon approaches are green approaches:
 - Protect world's ecosystems and conserve biological diversity
 - Make adaption to climate change sustainable and successful reducing carbon footprints

Role of mountain ecosystems in adaptation

- **Hydropower can contribute to reduce CO₂**
 - Mountains provides more than 15% of the world's energy – all clean
- **Mountains can store water and recharge ground water**
- **Mountains are critical to provide **energy security****



Role of mountain ecosystems in adpatation

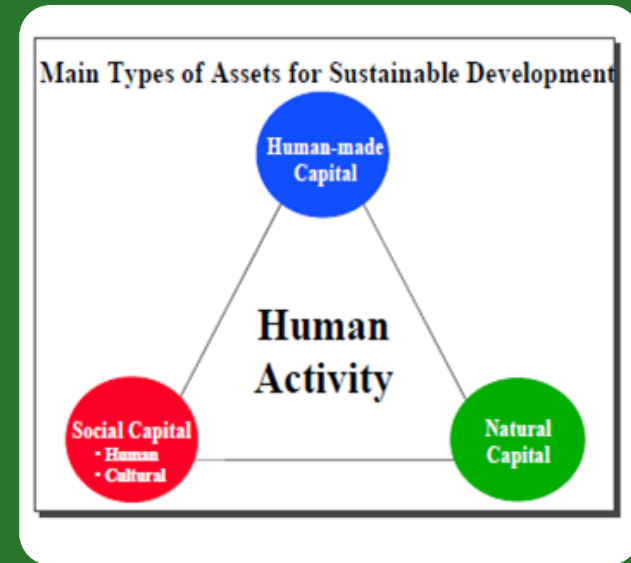
Mountain systems moderate & regualte regional & global climate

- Mountain ecosystems mediate carbon, energy, and water balance at the land surface
- The HKH influence the two rainfall patterns of the region – monsoon and westerly.



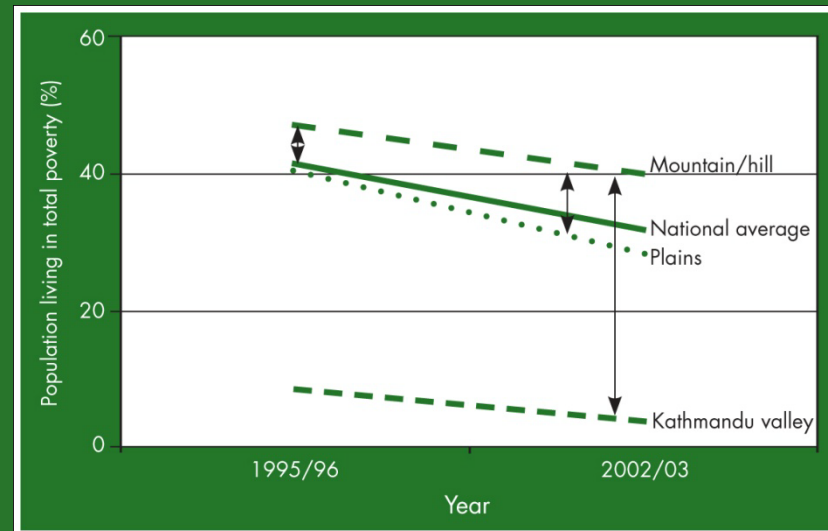
Low carbon potentials of Mountains

- Mountains can help achieve global sustainability:
- Diversification of livelihoods requires high natural capital base and rich biodiversity - mountains have both.



Challenges to mainstream low carbon economy in adaptation

- Poor market for mountain ecosystem services.
- Complex procedures in promoting market-based CDM, and REDD+
- Unclear property rights
- Persistent poverty, inequality and marginalisation



Trend of people living under the poverty line in different regions of Nepal (%)

Promoting Green Economy for sustainable adaptation

- Green economy recognises the value of ecosystem goods and services
- GE helps in capturing value of ecosystem services
- Needed: innovative policies and enabling institutional frameworks

- Instruments: REDD+, PES, green certification, green marketing, eco-labelling, access & benefit sharing initiatives, ecotourism, policy support
- New investment opportunities in green infrastructure
- Alternative energy technology to reduce carbon footprints

Policies & insitutional measures that can provide tripple dividend

- Mountain specific REDD+; PES, and other Green Economy instruments
- Mountain specific adaptation guidelines and funding windows
 - Incentive mechanisms for sustainable use of ecosystem services
 - Specific funding, technology transfer and capacity building support
 - Global market for environmental services
 - More synergy in different conventions

Key messages

- Recognize the global environmental and economic significance of mountain natural capital,
- Remove trade barriers & price distortions on green goods & services of mountain regions.
- Promote trans-boundary approaches global funding and incentive mechanisms
- Strengthen green national accounting in GDP estimates

Thank you

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