

# A policy perspective

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# Issues

1. Role of biodiversity in adaptation and mitigation strategies
2. Opportunities for co-ordination of policy and science
3. Communication



# 1. Biodiversity, adaptation and mitigation

- Protection of biodiversity often shares common objectives with adaptation and mitigation and promotes human well-being (e.g. avoided deforestation and peatland restoration).
- Need to identify, promote and test such *win-win-win* situations.
- Advantages in solutions that are decentralised, community based, market focused (eg local wood production, biodiversity production and eco-tourism).

## Biodiversity - Climate Interactions: Adaptation, Mitigation and Human Livelihoods

- Not always possible to find *win-win-wins* so need to deal with trade-offs (e.g often discussed with biofuels feedstock production).
- Need transparent decision-making frameworks and processes to be clear about winners and losers – seek to minimise negative impacts and internalise all relevant externalities
- Good governance critical for delivery of multiple objectives across different sectors.



## Biodiversity - Climate Interactions: Adaptation, Mitigation and Human Livelihoods

- Responsive approach to biodiversity management needed to enhance ecosystem resilience and capacity to accommodate change
- Approaches include networks of protected areas and broader land- and sea-scape management – ie cross-sectoral
- Evaluation of risks - need to know when to stop investing in protection of particular species – more research



## 2. Opportunities for co-ordination of policy and science

- Need to improve evidence and tools available to support decision-making – for example:

Ecosystem type	Climate regulation role	Biodiversity values	Mitigation potential	Adaptation potential	Benefits for human well-being	Co-benefits
Peat/wetland	Carbon store	High	Variable	High	Medium	High
Tropical forest	Carbon store, water cycling, albedo	Very high	Variable	High	High	Very high
Arable farmland	Below ground carbon store,	Low	Variable	High	High	Medium

## Biodiversity - Climate Interactions: Adaptation, Mitigation and Human Livelihoods

- Need for effective cooperation between the international conventions and their scientific bodies, and effective mechanisms for scientific input.
- Need effective capacity for implementation of international conventions at both strategic and grass-root levels – share best practice.
- Very important that national experts coordinate effectively – highly cost effective (and potentially expensive not to do so)



## 3. Communication

- Simple messages:
  - Evidence for climate change is unequivocal
  - Adaptation is necessary to cope with inevitable changes
  - Mitigation is essential to avoid dangerous climate change
  - Biodiversity is fundamental to human well-being and is protected by climate regulation – clearly a central concern of sustainable development





## Biodiversity - Climate Interactions: Adaptation, Mitigation and Human Livelihoods

- Efficient response facilitated by simple indicators - climate change has benefited from reducing complexity to some key metrics (e.g GWP), can the same be done for biodiversity?
- Impacts, and benefits of taking action, and the costs of in-action need to be communicated effectively to those immediately affected. Need to generate responses at local levels because this is where ecosystems are managed.



## Biodiversity - Climate Interactions: Adaptation, Mitigation and Human Livelihoods

- Decision-makers look at the bottom line – how much does it cost.
- German Initiative to undertake a ‘Stern-type’ review of the economics of biodiversity loss.



# What can Conventions do?

- Leadership role to embed biodiversity into activities on adaptation and mitigation
- Ensure that REDD and adaptation fully reflect the multiple benefits for biodiversity and human livelihoods
- Develop stronger cooperation between Rio Conventions (UNFCCC, CBD, UNCCD), both via JLG and at the national level
- Draw on IPCC outcomes to underpin evidence for biodiversity–climate interactions in policy development



# What can Governments do?

- Work across departments to ensure biodiversity – climate – human livelihood policy is consistent and mutually supportive
- Ask conventions / IPCC to provide evidence base for win-win-win situations, such as decision-making framework to enable assessment of appropriate land use priorities
- Communicate the policy relevance of interlinkages (within government and externally)



# What can Research Community do?

- Develop research framework for international conventions to integrate science and technology development
- Develop policy-relevant research
- Address priority science gaps e.g.:
  - Role and function of biodiversity in ecosystem services
  - Effect of climate and biodiversity policy on human livelihoods
  - Impacts of climate change and increased CO<sub>2</sub> on biodiversity
  - Carbon storage of different ecosystems
  - Role of biodiversity in regulating climate at larger spatial scales
  - Integration of biodiversity in climate modelling



Thank you for listening :D