

# Forest Sector Responses

## Report of Working Group 3

Chair: Jean-michel Carnus

Rapporteur: Mark Broadmeadow

Sandra Brown, Peter Holmgren, Paul Jarvis,

Sune Linder, Justin Mundy,

Alan Solomen

# Sustainable forest management and climate change

- Environmental services will vary in different parts of the world. 7% of forest area producing more than half of the world's timber.
- Problem in many parts of the world in not stopping deforestation is the lack of integrated forest policy – it is the economic impact of policy integration that is important.
- SFM is part of overall sustainability policy and within it can provide adaptation measures to climate change.
- Foresters already make management decisions in the absence of knowledge – all about risk management.
- \$50 billion has been invested around the world in forestry – long term investment looking at future scarcity and hedging bets. Investment is not just monetarisation of carbon – covers property, water, timber etc.
- Forests are being sold round the world, rather than growing the timber. This is only sustainable if the SFM policy framework is in place.

# Climate change adaptation

- Helsinki Accord and KP state native species – a barrier. We are already ‘committed’ to 15 to 40% biodiversity loss (Stern). Just a communication and education issues and will flow with time.
  - Range of views : conservation vs preservation
  - Monetisation of maintaining native species
- Need to know extent of policy barriers the specifics.
  - Environmental requirements over non-natives in South Africa
  - Baseline in Iceland is 1946 – anything planted before that date counted as ‘native’
- Silvicultural systems and landscape should be the over-riding issues, not species at the management level.
- Evidence and timescale.
- Proactive adaptation
  - Landscape
  - Management decisions

# Species migration - are natural processes enough?

- Not fast enough
- But what is the timescale?
- Dependent on location
- Total or local extinction?

# Soil management and climate change

- Residue removal for bioenergy an issue for SOM.
- Fertilisers can enhance SOM but enhance N<sub>2</sub>O emissions.
- Site specific.
- Much more information in forestry than in other sectors.
- Information very variable between biomes – clearcut vs non-clearcut (temperate vs tropics).
- Continuously use the information we have what we know but continue to update. We can never know enough!

# Should forests be managed for mitigation objectives alone?

- Never and always – also needs to be managed for sustainable growth.
- Carbon should be the co-benefit.
  - Trees are being planted for climate change objectives alone, however
- Need to look at wider sustainability issues (water, biodiversity) rather than carbon alone, so the answer is no.
  - What about bioenergy crops? Energy, economics and fuel security are other policy objectives in this instance

# Inter-sector integration

- The forest sector needs to integrate and clarify its position first; forestry woodchain analysis is required.
- A need to integrate across sectors to as great an extent and as rapidly as possible.
- But, poor understanding of the economic benefits, opportunity costs and replacement costs when looking across the other sectors:
  - agriculture
  - water
  - material substitution
  - energy
  - rural land management

# Certification

- Certification is working to some extent, but not throughout the world.
- Effectiveness of certification (in ensuring the maintenance of environmental integrity) is not being measured.
- Has worked to some extent for awareness raising.
- Needs to be a pre-condition for market entry.
- Issue of traceability.



# Optimising the response of the sector

- There is no ‘strategic response’ of the sector to climate change, at present.
- Some environmental bodies are resisting change that would contribute to CC mitigation and adaptation.
- In some countries climate change plays second fiddle to conservation concerns, so barriers do exist.
- More importantly, climate change may be the vehicle for optimising the wider environmental services that the forestry sector can provide.

# Conclusions and recommendations

- SFM needs to be set in the context of a wider sustainability agenda.
- Consider pro-active landscape adaptation.
- Consider ecosystem or environmental services rather than just carbon in developing adaptation/mitigation strategies.
- Come out of the shadows - we know (in most cases) what is needed.
- Strategic response of the sector to climate change is required - requiring the development of integrated forestry policy.
- See the glass as half full, not half empty:
  - **use climate change as the vehicle for optimising the wider environmental services that the forestry sector can provide.**