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Framing questions on climate adaptive rural areas

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What are the important human factors for adaptation in rural areas?

- Exogenous factors, e.g. dietary preferences and food demand, policy intervention, societal preferences for other ecosystem services (recreation, culture, …)
- Endogenous factors, e.g. knowledge exchange, competition, diffusion of information, learning, agent evolution, inherited knowledge, …

How should policy institutions best intervene to support rural areas in adapting to climate change?

- How effective will a mixed interventionist/market-based approach be for rural areas?
- The Baakse Beek example is based on the principle of government intervention through policy (funding nature managers), but also …
- … a market-based approach (land transactions between nature managers and farmers).
- Are these mixed approaches effective in allowing rural areas to best adapt to climate change?
- Or, are there better approaches? How can we assess what is best?

What is the relative importance of climate change versus socio-economic change for rural areas?

- What are the interactions between the biophysical and socio-economic perspectives?
- Are some sectors more or less sensitive to climate or socio-economic drivers?
- If we knew what was more important, how would that knowledge affect decision making?

Relative contribution of future land use and climate change to habitat conversion (1970-2050)

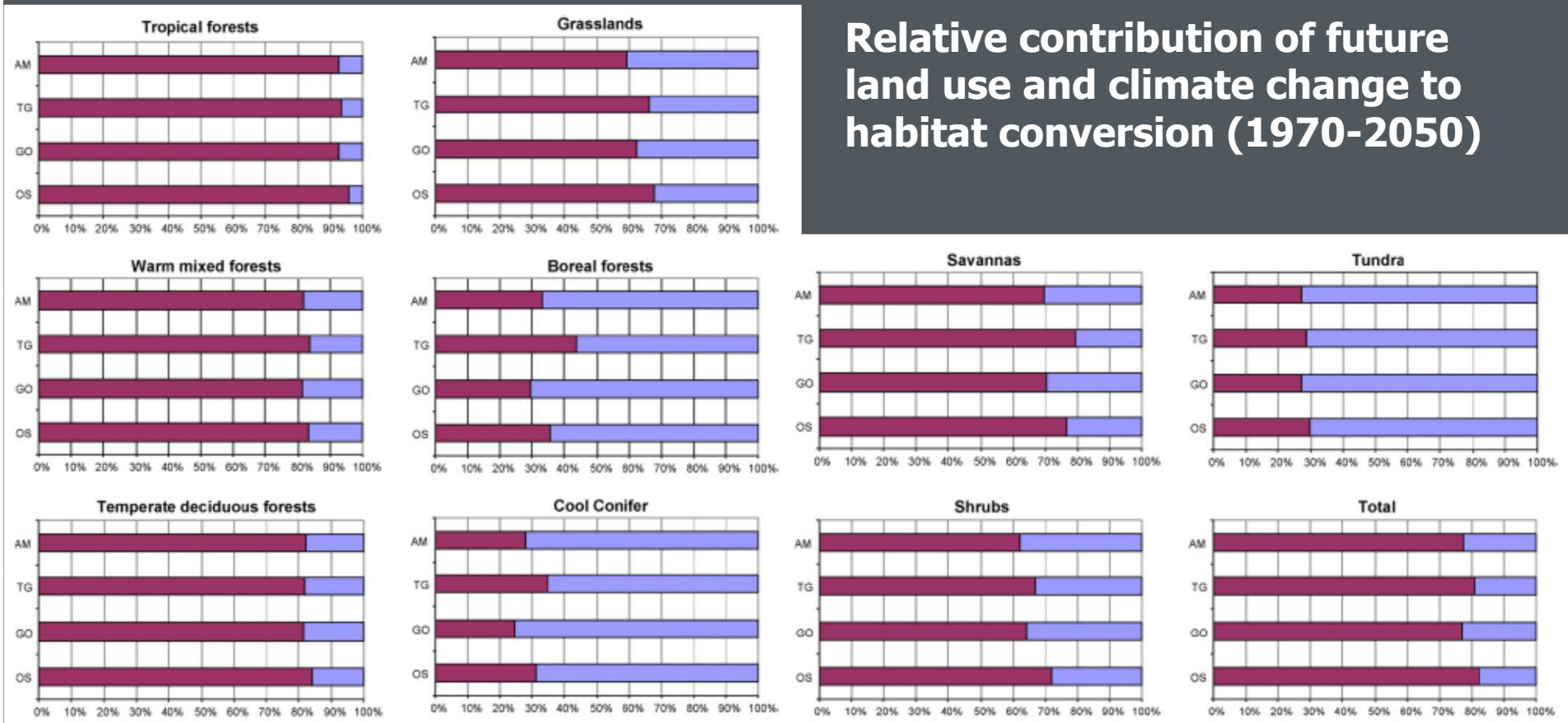
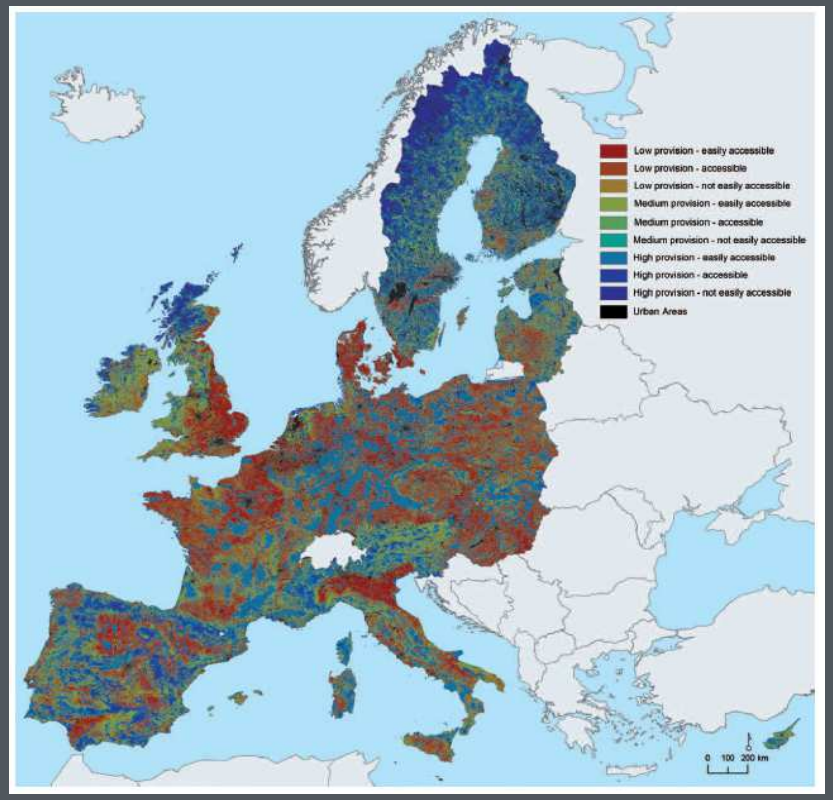


Fig. 1. (Modified from Sala et al., 2005, Fig. 10.17. Modified from Ecosystems and Human Well Being: Scenarios by the Millennium Ecosystem Assessment, published by Island Press, 2005). The relative contribution of each driver (purple = native habitat conversion to cropland or urban, blue = climate change) to projected biodiversity change due to both drivers for the period 1970–2050 under four scenarios: TG = Technogarden, AM = Adapting Mosaic, OS = Order from Strength and GO = Global Orchestration. Biomes are ordered from where habitat conversion is the most important driver through to where climate change is the most important.

After: De Chazal, J. & Rounsevell, M.D.A. (2009). Land-use and climate change within assessments of biodiversity loss: a review. *Global Environmental Change*, **19(2)**, 306-315

To what extent should rural land use become less reliant on agriculture in adapting to climate change?

- What are the implications for food imports and quality?
- What are the alternative land uses?
- Intensification versus multi-functionality



Recreation Opportunity Spectrum (ROS) classifies ecosystems into 3 classes of accessibility and 3 classes of recreation potential Source: PEER (Partnership for European Environmental Research)

Summary of questions

- What are the important human factors for adaptation in rural areas?
- How should policy institutions best intervene to support rural areas in adapting to climate change?
- What is the relative importance of climate change versus socio-economic change for rural areas?
- To what extent should rural land use become less reliant on agriculture in adapting to climate change?