Regional multifunctional Forest Landscape Restoration planning

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Case Study Central Chile

Extent: 13.175 km²
- about 30% of Chile’s population
- important share of Chile’s agricultural production: wine, fruits
  → High pressure on forests, about 42% forest loss since 1975
- international biodiversity hotspot

Where are suitable forest restoration areas and where is natural regeneration likely?

Landsat based land cover maps for the years 1985, 1999 & 2008 (Schulz et al. 2010)

Where would forest restoration effectively enhance several functions simultaneously?

Habitat function
Erosion prevention
Carbon sequestration

Potential multifunctional hotspots

Take home messages:
- Transparent planning approach contributing to the operationalization of the main goals of the Bonn Challenge: a) Potential habitat function: Aichi Target 15, b) Potential carbon storage: UNFCCC REDD+, c) Potential erosion prevention: Rio+20 land degradation neutrality
- The method facilitates the identification of spatial synergies for multifunctional benefits on suitable restoration and regeneration areas
- It supports an increase in efficiency of restoration through guiding the placement of site-based multifunctional restoration within a regional context