


Genetic resources conservation - scientific and social challenges
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Session III - Restitution of species and forest ecosystem restoration

Genetic considerations in forest restoration: the role of forest genebanks and seed centres

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Genetic considerations in ecosystem restoration using native tree species



www.fao.org/3/a-i3938e.pdf

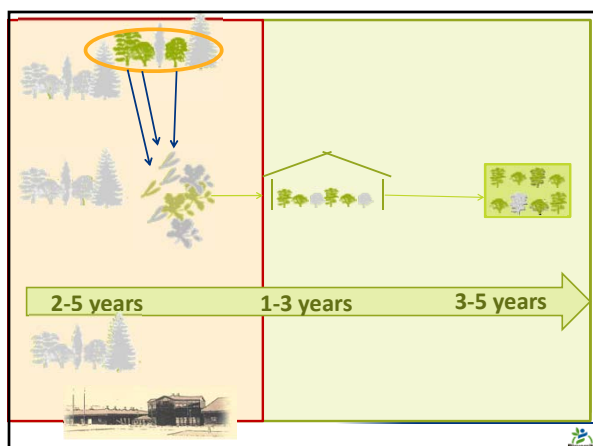
Bozzano, M., Jalonien, R., Thomas, E., Boshier, D., Gallo, L., Cavers, S., Bordács, S., Smith, P. & Loo, J., eds. 2014. *Genetic considerations in ecosystem restoration using native tree species*. State of the World's Forest Genetic Resources – Thematic Study. Rome, FAO and Biodiversity International.

Why are genetic considerations important in forest and landscape restoration?



- To restore adaptive capacity
- To increase long-term success of restoration over generations
- To conserve local populations and species
- To provide ecosystem services in short and long term
- To define appropriate provenances

Why are genetic considerations often neglected?



Role of Forest Genebanks and Seed Centres



National programmes need to recognize genebanks and seed centres as **the** key players in ensuring adequate genetic diversity in forest ecosystem restoration

Success Evaluation



A more holistic approach is needed to **evaluate** the **success** of restoration projects in restoring ecosystem adaptive capacity in the long term.



Restoration Chain



all relevant stakeholders in the restoration chain **from source identification to evaluation** need to be involved



Timeframe



The timeframe of restoration projects needs to be adequately long to allow **all key decisions to be taken within the project period**



20th anniversary of the Kostrzyca Forest Gene Bank



October 2002

October 2013



Thank you

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