TREE PLANTATIONS IN THE LANDSCAPE

Chile Field Dialogue

Background Paper

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TPL Chile Field Dialogue: the context
Scoping this TPL Field Dialogue

- TPL in context – Global development agenda
- Integrated landscape approach
- Good governance and inclusive development
- Identifying key externalities w/TPL mgmt.
- Diversification, sustainability & access/use of new technologies
Relevant & related global initiatives

- NEW GENERATION PLANTATIONS platform
- PEFC
- FSC
- IUFRO

[Links]
Chile TPL Dialogue Objectives

- Experiences from Chile, discussion on key themes
- Participatory methodology, common vision
- How TPL contributes to sustainability
- Explore forms of coexistence
- Share experiences on impacts mgmt.

Chile’s forests

- **Chile**: 750,000 km²
- Forests are concentrated in southern Chile
- Native forests: 13,424,000 ha (84.5%), state & private
- Plantation forests: 2,447,592 ha (15.5%), private
- No forest concessions, all titled lands

Source: Vidal and Santibañez 2014, Figure 1
Chile’s native forests
Chile’s plantation forests

Photograph: www.corma.cl; Map: source CONAF
Importance of Chile’s tree plantations

- 3rd largest export sector
- Highly productive forests
- Large firms (63% area, 76% exports)
- International markets: pulpwood and chips, sawnwood, panel woods, wood panels and moldings, veneers, planed wood.
- US$ 4,829 m. to GDP (2014)
Increasing use of biomass and biofuel from tree plantations

- 975 MW for energy from tree plantations
- Increasing use of biofuel (firewood): 37%

Sources: INFOR & CORMA 2016; Photograph: CONAF and www.innovarauco.cl; Colegio Ingenieros Forestales 2014.
State forest governance

- Main legal instruments: DL 701 (1974-2012) and associated decrees No 259 & 193
- Decree 2374 (1937)
- 1994 General Environmental Law / Law 20283
- CONAF
- INFOR
- 2016 Forest Policy
- Commentary on policy framework

Photo: Henríquez 2008: [http://www.ub.edu/geocrit/-xcol/198.htm](http://www.ub.edu/geocrit/-xcol/198.htm)
Non-state forest governance

• Failure of state forest governance
• Forest certification: CERTFOR (PEFC) and FSC
• The National Forest Dialogue (DFN): forest industry and NGOs, civil society groups
• Substantial progress but still a long way to go…
“Promovemos la gestión forestal sustentable”
Major issues of Chile’s tree plantations

- Positive externalities

Photos: National Library, Forestal Mininco
Positive externalities

• Carbon sequestration

<table>
<thead>
<tr>
<th>Species</th>
<th>CO2 tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinus sp.</td>
<td>158,174,900</td>
</tr>
<tr>
<td>Eucalyptus globulus</td>
<td>23,030,660</td>
</tr>
<tr>
<td>Eucalyptus nittens</td>
<td>42,228,637</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>223,434,197</strong></td>
</tr>
</tbody>
</table>

• Natural ecosystems protected (c. 600,000 ha)

Source: CORMA 2011; Photo Carlos Vergara WWF Chile; http://www.wwfca.org/?222655/seminariosimpulsarandialogorestauracionecologica#
Positive social externalities

• 124,472 jobs (INFOR)
• 300,000 jobs (CORMA, U. de Chile)
• Jobs for local communities (recent)

Photos: www.bionoticias.cl
Negative environmental externalities

• Conversion of natural forests into tree plantations
• Impact of forest operations
• Clear-cuts extension, large operations
• Small/medium-sized operations
• Water consumption from plantation forests
Clear-cuts and some forest operations

Social negative externalities: contested origins

• 1930 – 1972 period, Merced titles

Photos: www.memoriachilena.cl
2nd period: 1973-1990

- Privatization of lands
- Forced displacement
- Successive land use changes
- Mapuche conflict (1990s – today)

3rd period: late 1990s - today

Photos: www.emol.cl
Forestry workers & local communities

- Substantial improvements last 15-20 years
- But some issues not solved yet – power asymmetries
- Nuisance caused by forest operations – being addressed

Photo credits: www.biobio.cl; http://ctf-chile.blogspot.cl/2011_03_01_archive.html
Possible challenges for the TPL Dialogue

The need to settle land tenure disputes so...

- Conflicts are detrimental to all parties
- Free, Prior and Informed Consent (FPIC)
Possible challenges for the TPL Dialogue

Integrated land use planning

http://newgenerationplantations.org/en/casestudies/21/
Possible challenges for the TPL Dialogue

Growing importance of tree plantations: fibre and fuel sources

http://theforestsdialogue.org/publication/tfd-review-intensively-managed-planted-forests
Relevance of Chile’s tree plantations in meeting SDGs

- Alleviation of poverty
- Investing in Locally Controlled Forestry (ILCF)
- Provision of ecosystems goods and services
- Local jobs and contribution to timber supply chains
- Social license to operate

Possible challenges for the TPL Dialogue

http://theforestsdialogue.org/initiatives/ILCF
Relevance of Chile’s tree plantations in meeting SDGs

- Opportunities for local development: NTFPs
- Integrated landscape approach
- Access to resources & NTFPs
- Gender equality issues

http://www.dialogoforestal.cl/
Possible challenges for the TPL Dialogue

Relevance of Chile’s tree plantations in meeting SDGs

- Bioenergy: to avoid pollution
- Biomass: 25% mix
- Carbon sequestration & climate change; need of stable CO2 storage sinks; e.g. carbon sequestration projects in Chile

http://www.corma.cl/
http://newgenerationplantations.org/en/casestudies/2
Relevance of Chile’s tree plantations in meeting SDGs

- Responsible investments on sustainable businesses; e.g. Equator principles

- Dealing with power asymmetries and stakeholders empowerment

http://equator-principles.com/
Relevance of Chile’s tree plantations in meeting SDGs

- Diversified forestry models; e.g. TFD 2007 smallholders & sustainability
- Forest landscape restoration in Chile: DFN
Forest certification

- Catalyst of a number of changes in forestry & forest governance
- HCVAs are still a concern
- FSC international generic indicator (IGIs), a new challenge

http://igi.fsc.org/igi-group.28.htm
Thanks!

Photo: www.conaf.cl