Poplars & Willows, Sustainable Livelihoods & Rural Development

International Poplar Commission Side Event, FAO, Rome, Italy

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IPC Executive Committee Member
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Part I

Global Facts & Figures for Poplars & Willows
### Poplar & Willow Areas 2008-2012

<table>
<thead>
<tr>
<th></th>
<th>World (m ha)</th>
<th>China (m ha)</th>
<th>China 2012 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Forest</td>
<td>82.3 (71.1)</td>
<td>2.5 (3.1)</td>
<td>3</td>
</tr>
<tr>
<td>Planted Forest</td>
<td>9.2 (5.4)</td>
<td>8.0 (4.3)</td>
<td>87</td>
</tr>
<tr>
<td>Agroforestry</td>
<td>3.4 (2.6)</td>
<td>2.8 (2.5)</td>
<td>82</td>
</tr>
<tr>
<td>Total</td>
<td>95.0 (79.0)</td>
<td>13.3 (9.9)</td>
<td>14</td>
</tr>
</tbody>
</table>

2012 data 2008 data
Natural poplar area by country

- Canada: 40%
- Russia: 33%
- USA: 24%
- China: 3%
- Rest: 0%

Total Area: 75 Million Ha
Planted poplar: area by region

Total Area: 8.6 million ha
China: 8.0 million ha
Planted poplar: Top 10

(000 ha), excluding China

France and USA from 2008 report
Total Willow by region/country

- Russia: 89%
- China: 6%
- Europe: 2%
- India: 2%
- Argentina: 1%

Total Area: 7.4 million ha
Planted willow: by country

Total Area: 572,000 ha

- China: 79%
- Argentina: 10%
- Italy: 4%
- Romania: 3%
- Sweden: 2%
- Iran: 2%
Purpose: Poplar & Willow

Based upon area

- Industrial roundwood: 42%
- Protection: 49%
- Fuel/Biomass: 9%
Poplar Wood Products

- Veneer/Plywood: 63%
- Woodpulp: 24%
- Industrial r/wood: 5%
- Reconstituted Panels: 3%
- Sawn timber: 3%
- Fuel/chips: 2%

Total: 70.4 m3 million m3 (r/wood)
**Poplar Wood Products: Top 10 countries**

Total Production: 70.4 million m³ (r/wood)
Part II
Salicaceae Model Family

• Tree Breeding
• Investment (growing, end-use)
• Environmental, Social & Economic Benefits
• Different Scale of Enterprises
Model for Tree Breeding

• Ease of Clonal propagation
• Ease of hybridization
• Pioneer of genetic mapping of DNA markers along chromosomes & DNA sequencing of each chromosome
• Pioneer of genetic improvement
Model for Investment

• No need for major nursery infrastructure
• Fast growing, high productivity, short rotation
• Resilient to different soil & site conditions
• Integration with agriculture & other land-uses
• Response to silviculture (density, prune, thin)
• Straight, long clean bole, small crown
• Odourless, tasteless, colourless, few defects
• Extensive range of wood, fibre, fuel & NWFPs
• Extensive range of ecosystem services
Environmental, Social & Economic Benefits
Combating Desertification
Fixing Sand Dunes
Shelterbelts in Arid & Montane Lands
Erosion & Landscape Restoration,
Phytoremediation
Agroforestry: Animals
Agroforestry: Trees & Cash Crops
Agroforestry: Cash Crops
Urban Amenity
Aquaculture
Biodiversity
Varying Scales of Investment in Poplar & Willow Industries
Village Based Wood Industries
Village Based Industries: Poplar
Village Based Industries: Willow
Small Private Industries: Poplar
Corporate Industries: Poplar Plywood
Corporate Industries: Willow Bio-energy
IPC Website: http://www.fao.org/forestry/ipc/en/

Thank you