India’s Pulp & Paper Fiber Sources

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Forest Trends /UK Aid
Pulp and Paper Legality Validation
March 19 – 20, 2014
India: Key Forest Statistics

- India has 1.85% the world’s forest area; 17% of its population and 18% of its livestock
- Of 76 million ha classed as forest, 2005 SOF report concluded only 68 million ha had forest cover
- 41% of forest classed as “degraded”
- *There is heavy use pressure on the forest*
India: Key Forest Statistics

• 275 million people live in forest areas, including 88 million “tribals” (94%)
• 100 million cattle graze in forests, well above the sustainable level of 31 million
• 175 – 200 million tonnes of green fodder also collected from forests annually
• Fuel wood harvest = 300 million m3/yr versus industrial harvest of 23 million m3/yr
• Key sources of degradation – fuel & cattle
India: Key Industry Statistics

• Industry grew in last 20 years off small base
• Avg paper consumption was 4 kg/person/yr in 2000, versus global avg of 45 kg/person/yr
• In 2000, India produced 1.25% of world supply
• Significant proportion of pulp and paper from bagasse (33%), agri-fiber (8%), recycled (21%) and wood & bamboo (38%)
• Many small players – largest company 85-th in industry as measured by sales
• *Much of industry is traditional /inefficient*
India: Wood Supply & Demand

• Timber demand estimated at 58 - 64 million m³ circa 2000; forecast to reach 153 million m³ in 2020
• Timber supply estimated at 29 million m³ in 2000, rising to 60 million m³ in 2020
• Wood supply gap now 30 million m³, rising to 93 million m³ in 2020
• *Industry desperate for fiber*
India: Wood Supply & Demand

• Forest harvest is declining; plantations should boost harvest as they become merchantable
• Most timber is used for lumber & veneer
• Of estimated 64 million m³ timber demand, forests provided 12 M m³, other (incl imports) provided 31 M m³, remainder “missing”

• Potentially large amount of illegal felling in country, maybe unreported imports
India: Statistical Quality

- Numerous reporting gaps / shortfalls
- Some states do not report harvest
- Harvests from non-government land not reported or grossly underestimated
- Imported fiber poorly categorized - “other”
- “missing” fiber mentioned earlier
- More questionable numbers as we go
- *Poor data reporting creates opportunities*
Total Papermaking Fiber by Source

Figure 1: India’s Total Papermaking Fiber Resources: 2002-2012 (Kt pa)
Total Papermaking Fiber by Source

• Local pulp production reported as 4047 kt/yr from 2005 – 2012 – why no real data here?
• Little use of imported pulpwod at present
• Most “Imported Wastepaper” classed “Other”
• Sources with greatest potential for illegality include imported pulp and local pulp
• First (and only) natural forest in India was certified in Feb 2013
Wastepaper Sources

Figure 5: India's Wastepaper Imports by Country 2002-2012 (Mt pa)
Bleached Kraft Pulp Imports (kt)

Figure 7: India’s Bleached Kraft Pulp Imports by Country: 2002-2012 (Mt pa)
# Bleached Kraft Pulp Imports (kt)

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<td><strong>13%</strong></td>
<td><strong>100%</strong></td>
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- In 2012, suspect sources accounted for 58% of BKP imports
Main EU Importers - 48
Conclusions

• Key potential sources of illegal wood are the domestic harvest and imported pulp
• Estimate local wood based pulp production at say 33% of 4047 kt/year
• Amount of pulp from suspect source countries was 377 kt in 2012
• Estimated amount of fiber at risk of illegality is 1712 kt, or 17% of wood fibre
Conclusions

• In addition to traditional paper fiber, there is a significant import of tropical hardwoods for lumber, especially teak

• Major suppliers in 2000 were Malaysia, Indonesia, Ivory Coast, Nigeria, and Myanmar

• Chips, sawdust and other by-products may end up in supply, another potential source of illegal fiber in the pulp & paper supply chain
Questions ??