Challenges for Sustainable Timber Supply
Strategies to Reduce Complexity, Increase Transparency, and Encourage Legality

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The Setting

Chinese Manufacturers

- Russia a vital wood resource
- Facing rising pressure to ensure legal wood supply
  - e.g. IKEA – No wood from Intact Natural Forests
- Limited certified forests or CoC certified companies, particularly in Eastern Russia and parts of Siberia

- How to identify immediate, cost effective approaches to securing legal wood supply?
Russian-Chinese Wood Trade Project

Four Goals

- Map supply chain configurations of two Chinese furniture manufacturers
- Build typology of Russian wood supply chains
- Identify suitable legal verification systems and technologies
- Provide recommendations to ensure supply chain transparency

Data Sources

- Supplier Case Studies: Tracking wood from ‘Forest to the Factory’
- Field research in Irkutsk, Primorsky, and Northeast China
Typical Russian-Chinese Wood Chain

#1 Timber Harvest site
#2 Sorting/Storage/Processing Area
#3 Loading/Export Depot
#4 Import Yard
#5 Storage/wood processor
#6 Flooring and Furniture Manufacturer
FSC Chain of Custody

CoC: Three pillars

- Identification
  - Hammer branding
  - Tracer paints (inc. chalk)
  - Labels: Nail-based to RFID
  - Chemical and genetic fingerprinting
- Segmentation
- Documentation
  - Key document: Logging ticket
Case Study: Sikhote-Alin Forests

Key Resource Base for Furniture and Flooring Industries
- Oak
- Ash
- Korean Pine
#1 Timber Harvest site

## Site visits
- Krasnoarmeisky Region

## Timber Harvest
- Long-term lease
- “Other cutting”
- Illegal logging

## Upper Yard
- Species and sort quality
Company office
- Lower yard
- Sawmills

No identification

No segmentation
- Timber from multiple harvest areas
- Company buy logs from other harvesters

Chinese agents purchase here

Critical ‘control’ point
Log Transport
- Logs consolidated from multiple harvesters and harvest sites
- Loaded onto rail cars
- Sold to Chinese traders or exported to China
Customs Checking

- Some Customs branches do not check for wood origin
**Major Import Points**
- Suifenhe, Manzhouli, Erlianhot
- Ship import points

**Identification**
- Species and sort

**Segmentation**
- By species not shipment

**Chinese Importers**
- Large companies have buyers in Russia

**Chinese wholesalers and traders**
- Buy for Sawmills, Manufacturers, or other traders
#6 Flooring and Furniture Manufacturer

**Purchasing**
- Most import through multiple Chinese Importers
- Semi-processed products (not just logs) from numerous vendors
- Shift frequently based on price, availability, and need

**CoC**
- Do not segment logs or identify them
- Wood often changes ‘hands’ many times before reaching Manufacturer
### Summing Up

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<th>Segmentation</th>
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<th>Conclusions</th>
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| Species and sort only| Logs are mixed at virtually every node | ‘Logging Ticket’ – Not checked at all stages
   - Often no real connection to log shipments due to lack of identification, mixing or document forgery | Weak Chain of Custody procedures
   - Only a strong identification system tied to rigorous segmentation and documentation, coupled with regular enforcement, will ensure a clear CoC. |
Conclusion: Too many ‘actors’ in the Trade

**Furniture CoC Patterns: Russia and China**

- **Node 1**: Timber Harvest Site
  - Commercial Harvest site (long-term lease)
  - Noncommercial sanitary logging site (short-term lease)
  - Illegal logging site (no lease)

- **Node 2**: Sorting/Storing/Processing
  - Large timber company
  - Small timber company
  - Trader with or without own terminal
  - Sawmills and other facilities

- **Node 3**: Loading and Export Depot
  - Export facilities of large companies
  - Railroad Yard (e.g., Vladivostok, Nakhodka)

- **Node 4**: Chinese Importer
  - Exporter
  - Smaller Importer
  - Large Importer
  - Trader
  - Timber Market (e.g., Beijing, Shanghai)
  - Wood Processing Facility

Node 5: Storage and/or wood-processor

Node 6: Chinese furniture manufacturer
Does Establishing sawmills in Russia ensure better CoC for Chinese manufacturers?

- Prefer to purchase from Chinese traders in Russia
- ‘Distance’ from harvest site remains
- Supply sources shift frequently
Strategies to Ensure Legal Wood supply:
Chinese Private Sector

Strategy #1
Build direct partnerships with stable Russian timber harvest companies and reduce reliance on intermediaries

- ‘Risk Rate’ Russian Companies
- ‘Keep It Legal’ Manual
- % from long-term concessions
- % purchased from other companies
- % from ‘HCVF’ forests
- Preference to harvesters-exporters
- Encourage Russian Partners to obtain CoC and Forest Management certification
- Numerous Russian firms interested but see no demand
Strategies to Ensure Legal Wood Supply:
Chinese Private Sector

Strategy #2
Establish document management procedures
- Lists of wood suppliers
- Copies of sales contracts
- Logging Permits, etc
- Tracking technologies (bar coding, etc) not feasible at this point.

Strategy #3
Consolidate multiple orders in large shipments
- Work with other Chinese suppliers and international retailers (e.g. IKEA)
- Shandong and Shanghai based manufacturers
- Easier to track and significant cost savings
### Strategies to Ensure Legal Wood Supply: Government and NGO sectors

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<th>Strategy #1</th>
<th>Strategy #2</th>
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<td>Develop tools to facilitate B2B partnerships</td>
<td>Develop long-term sustainability of Russian wood supply</td>
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<td>- Making timber concession Data publicly available</td>
<td>- Updating Russian forest Inventory</td>
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<td>- Internet-based public GIS system</td>
<td>- Expanding forest certification in Siberia and the Russian Far East</td>
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<td>- Lists of preferred timber harvesters and exporters</td>
<td>- Foreign investment in FSC certified timber operations in Russia</td>
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<td>- Workshops on Russian regulations and codes, corporate exchanges, etc.</td>
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**Simplification**

Supply Networks: Reconfigured

Node 1
Timber Harvest Site
- Commercial Harvest site (long-term lease)
- Noncommercial sanitary logging site (short-term lease)
- Illegal logging site (no lease)

Node 2
Sorting/Storing/Processing
- Large timber company
- Small timber company
- Trader with or without own terminal
- Sawmills and other facilities

Node 3
Exporting and Export Depot
- Export facilities of large companies

Node 4
Chinese Importer
- Railroad Yard (e.g., Manchester, Salford)
- Large Importer
- Smaller Importer
- Exporter
- Track Shipments (e.g., Taichung, Shanghai)

Node 5
Storage and/or Wood-Processor
- Importer storage/processing facility
- Timber Market (e.g., Beijing, Shanghai)
- Furnitures Manufacturer

Node 6
Chinese Furniture Manufacturer
- Wood Processing Facility
Thank You

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