China: Trade Scenarios for Forest and Forest Products

Steven Northway and Gary Bull 20 September 2006 University of British Columbia, Vancouver, Canada China's State Forest Administration FEDRC, Peking University, Forest Trends, Rights and Resources Group (RRG) and the Center for International Forestry Research (CIFOR)

Towards a Sustainable Chinese Forest Sector:Reforming trade and Stregthening Domestic Policy

Overview

- Rationale for project
- Project objectives
- Data acquisition
- Model development
- Results

Rationale

- Dramatic rise in imports of forest products and logs (Ms. Canby's presentation).
- The world became aware that China is now a global player in the consumption, production and trade in forest products.
- China's strategic direction will be influenced by its own forest management policies.

Objective

 To develop a modeling tool that allows us to explore scenarios that are relevant to public policy.

Under the overall direction of Dr. Chris Barr at CIFOR, we examined scenarios in China and Indonesia.

Date sources

- Chinese State Forestry Administration inventory reports
- International Forestry Review 2004
- CIFOR studies
- FAO
- Various other sources

Model development

- There are other trade models available but they are either costly, somewhat outdated or have some theoretical shortcomings.
- In model development we strived for:
 - ✓ Transparency
 - ✓ Collaboration
 - √ Flexible
 - ✓ Embed forest estate model
 - ✓ Parameterized easily

Methodology

 Define the structure of the model through products and processes (e.g. sawlog to plywood)

Initial Intermediate Final Products Products

Forest by type Recycled pulp Non-wood fibre Sawlogs, Pulplogs, Pulp

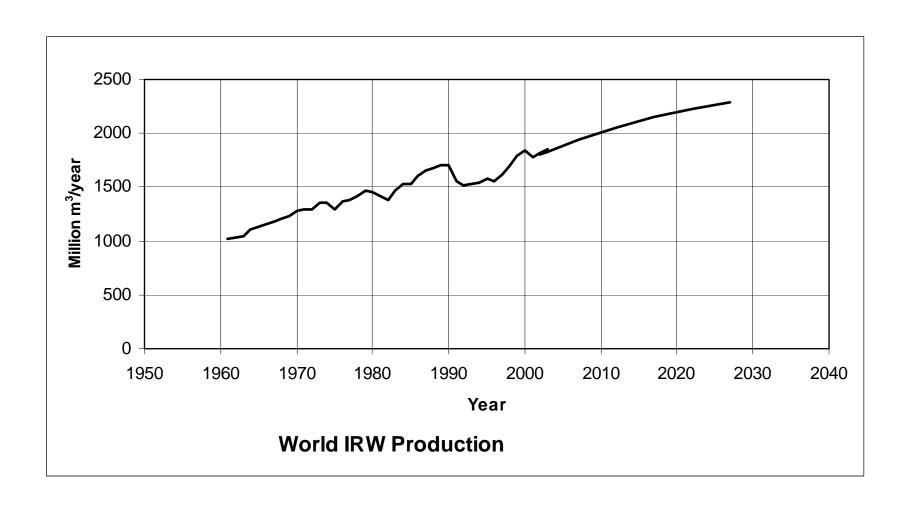
Plywood, panels sawntimber, newsprint Paper and paperboard

Parameters

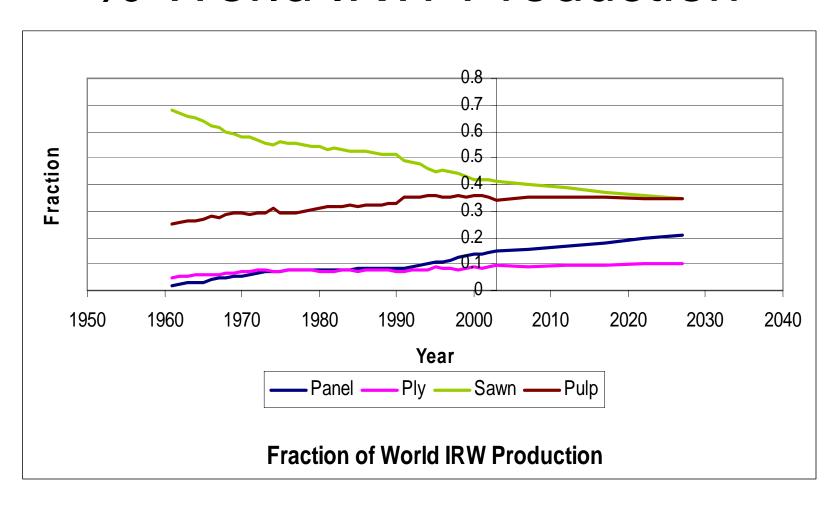
- Manufacturing capacity and production
- Fibre source (e.g. forest by country by forest type)
- **≻**Consumption

We start by developing our assessment of the world's production, manufacturing capacity, fibre sources and consumption

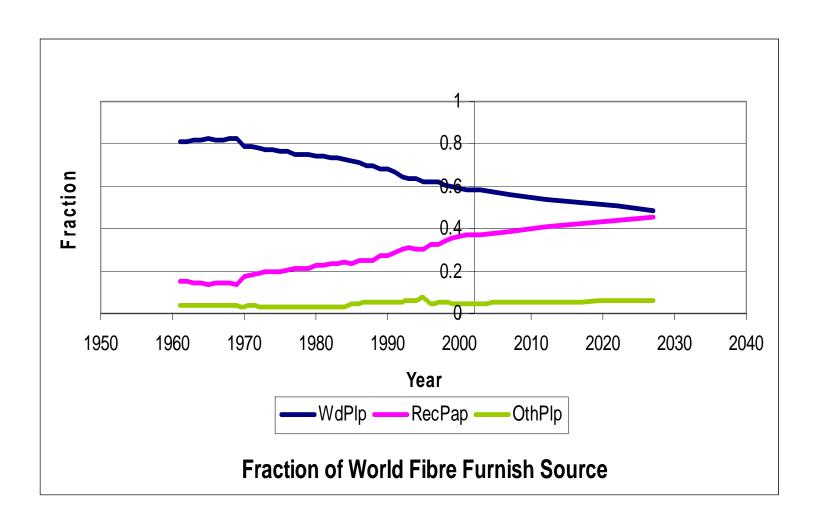
World IRW Production



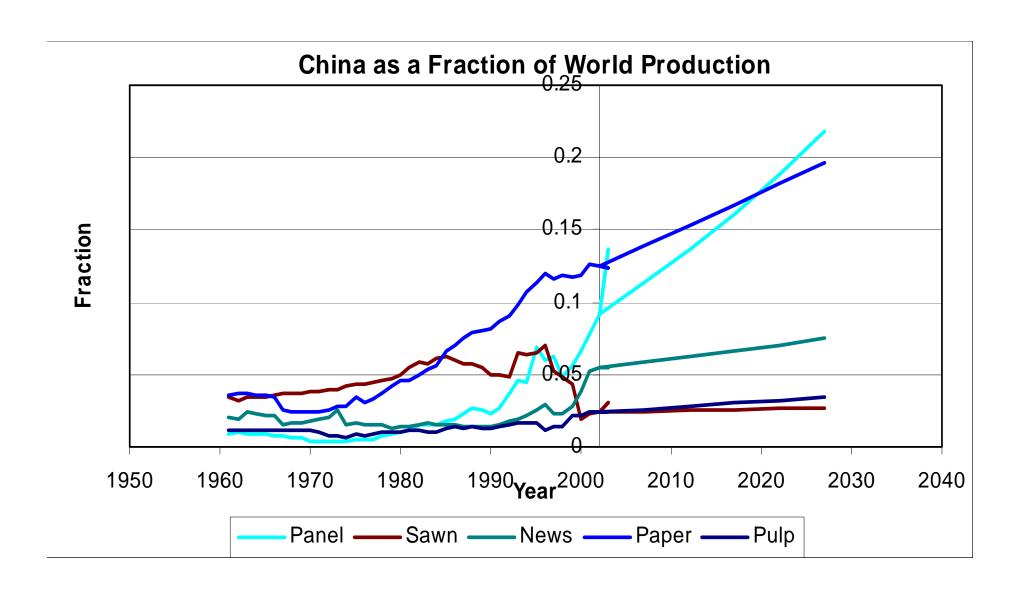
% World IRW Production



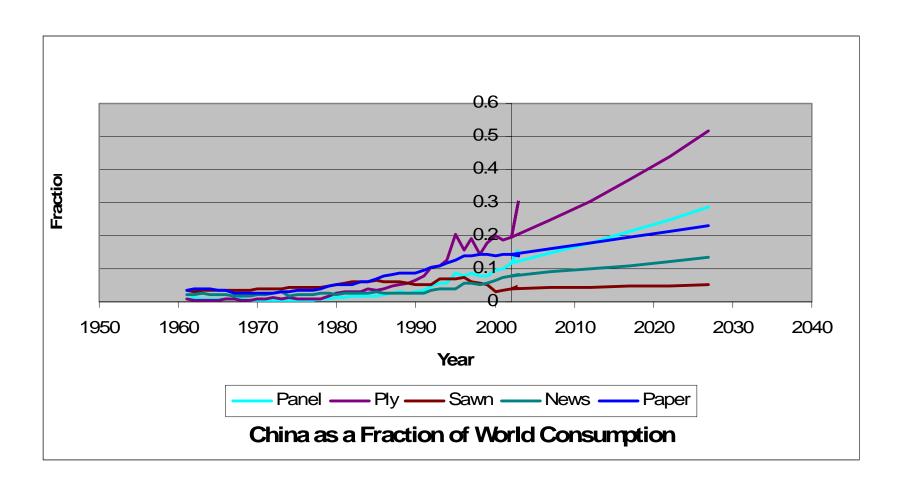
World Fibre Source



China's in IRW Production



China's IRW Consumption



Fiber source – China's Forest:

- Forest Type
 - Fast plantations
 - Slow plantationsForest
 - Deciduous forest
 - Coniferous forest

- Forest Condition
 - Non-forest
 - High cost forest

Scenarios and Results

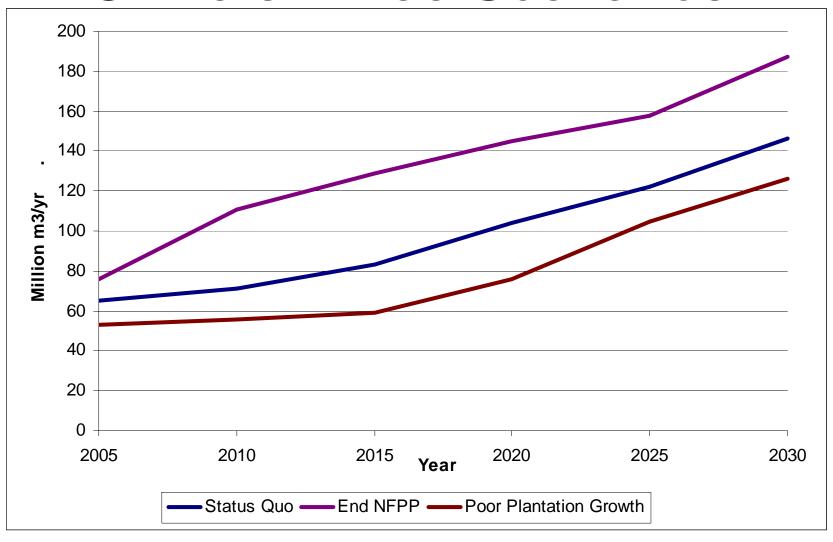
Scenarios: supply shocks

- China's NFPP
- China's plantation success
- Indonesia's illegal logging

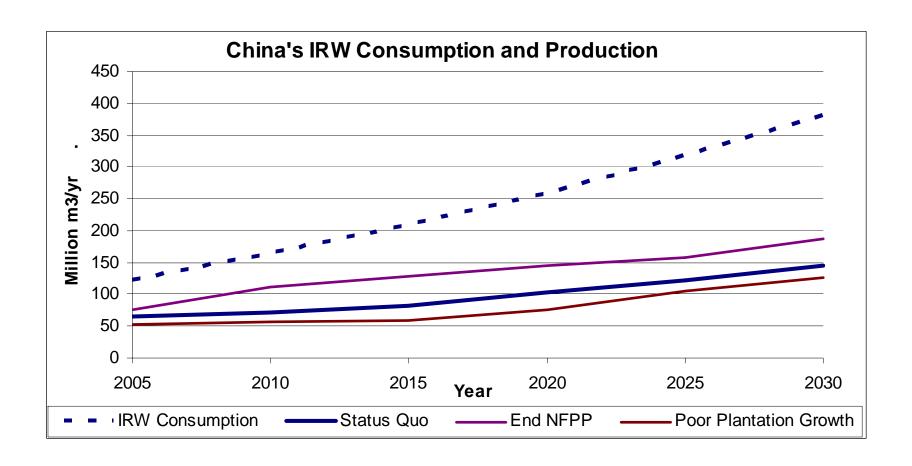
Result

Forest self-sufficiency ?

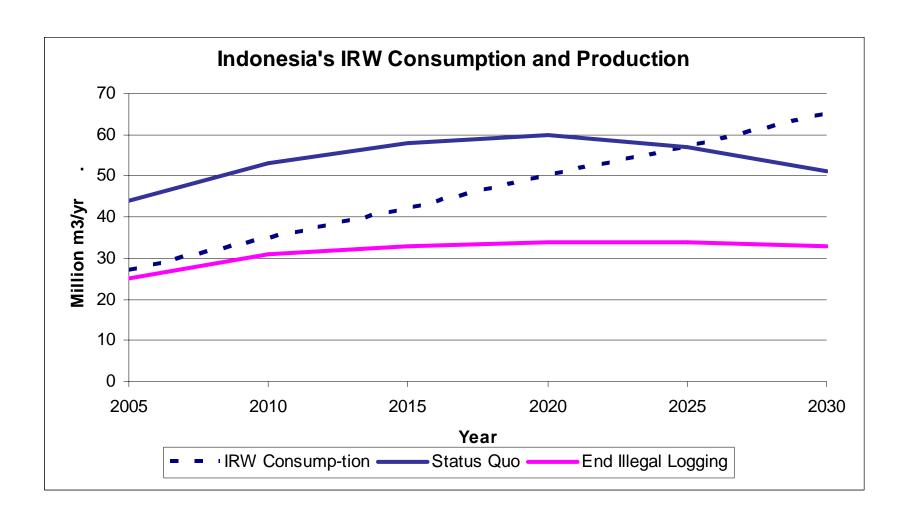
China's Three Scenarios



China's Three Scenarios



Indonesia's Scenarios



Concluding comments

- Trade models help us understand the worldwide implications of individual country's forest and industrial policies
- If China's consumption grows as forecasted, there will be a challenge with finding the wood domestically.
- If Indonesia implements an illegal logging ban their domestic consumption will absorb their production.