

# **Review of Capabilities of the International Forest and Forest Products Trade Model**

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# Outline

- Objectives of the IFFP project
- Approaches used to meet objectives
- Implementation of the IFFP Framework: An example
- What does the future hold

# Objectives: General

## Model

- Transparency in how it works
- Flexibility in defining problems
- Strong link to the forest estate
- Easily parameterized

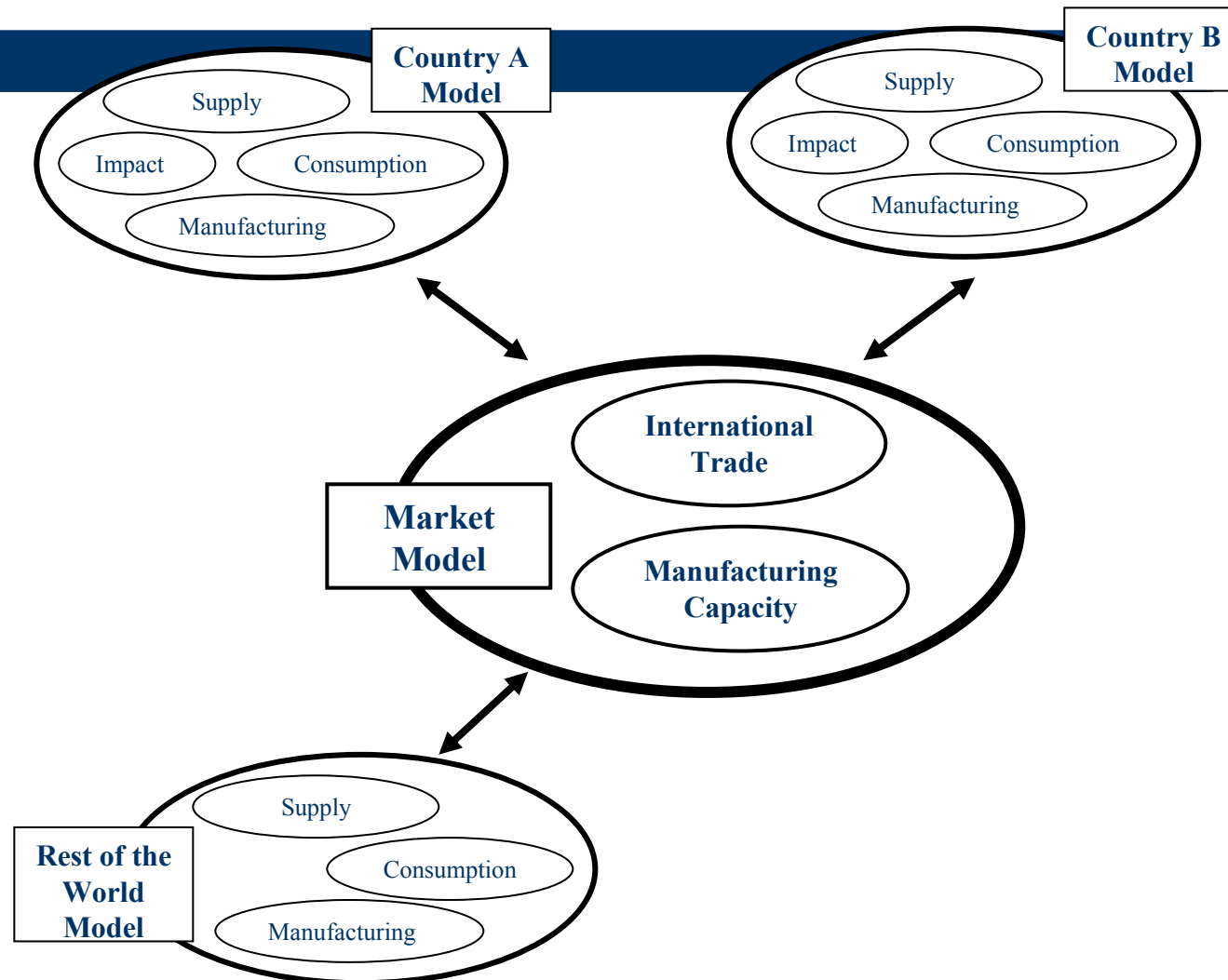
## Use

- Collaborative in its application
- Web based version supported
- Free distribution of source code

# Objectives: Specific

- Monitor bilateral-international trade
- Relate manufacturing costs to capacity use
- Reflect forest management and policy options, e.g.
  - Afforestation
  - Tenure change
  - Species or productivity changes after harvests
  - Harvest flow constraints (e.g. non-declining harvest)
- Support simultaneous optimization of multiple periods

# General Framework



# Approach for Modeling

- Initial product supply
- Final product demand
- Products and processes.
  - Process is defined by ....
    - multiple inputs in fixed proportions
    - multiple outputs in fixed proportions
    - cost linearly related to capacity utilization
- Buyer seeks lowest price

# Methodology

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

**Initial Products** ● - - - ►

Forest by type  
Recycled pulp  
newsprint  
Non-wood fibre  
paperboard

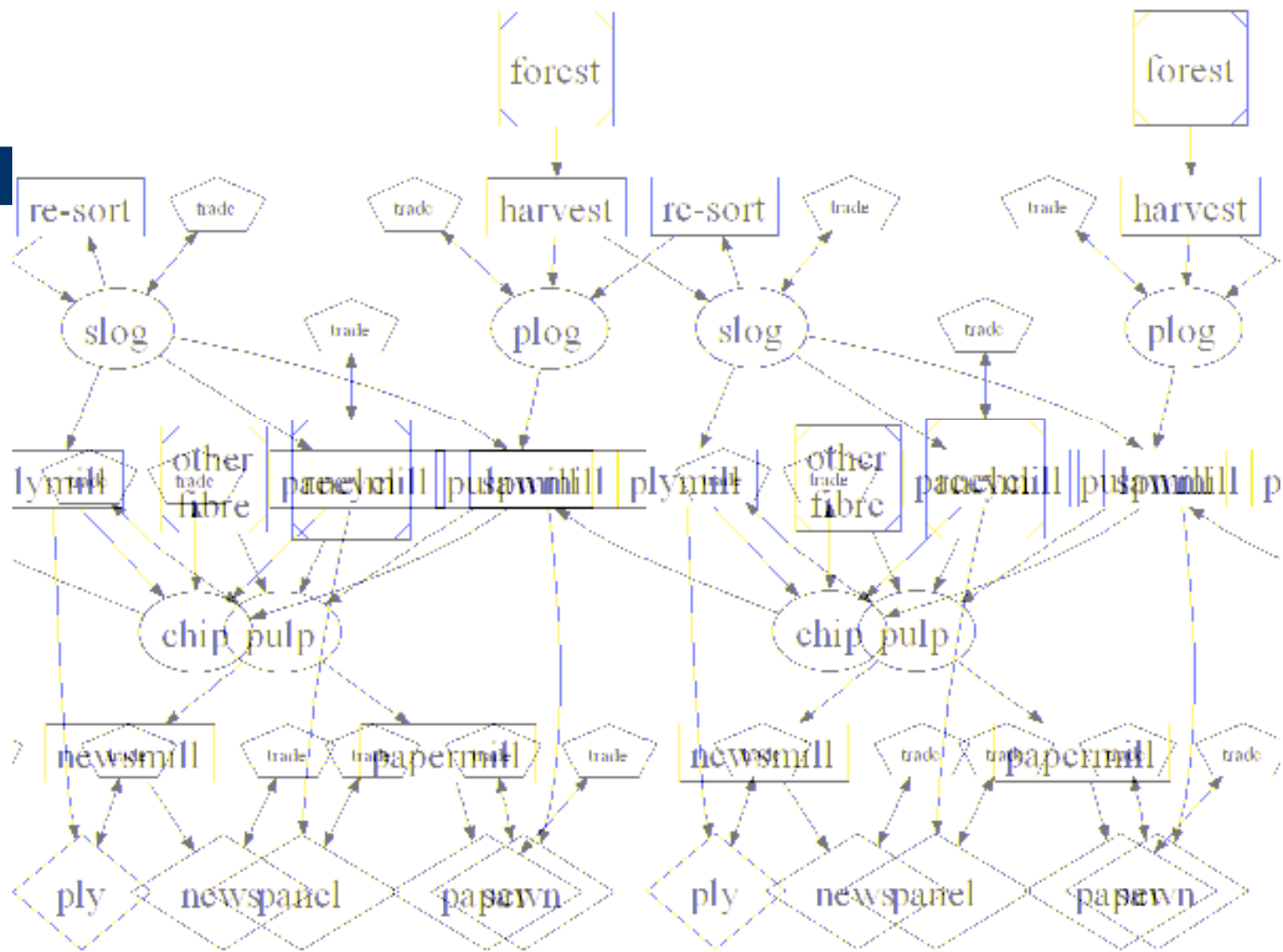
**Intermediate Products** ● - - - ►

Sawlogs, pulplogs, pulp

**Final Products**

Plywood, panels  
sawntimber,  
  
Paper and

Model for China Mainland (Ringsi Models Used for China Mainland (Ringsi Models Use  
 (forest detail omitted) (forest detail omitted) (forest detail omitted)





# Approach for Software

- Allow user's to run their problem on website through standard browser
- Text files for model input
- Java / Servlet as programming language
- html files for model output
- Support a collaborative website with forum and wiki

# IFFP Online Access

simple input files

consumption.txt	
PRD	CON
sawn_05	78.5
ply_05	58.5
panel_05	78
news_05	14.5
paper_05	207

# IFFP Online Access (cont.)

## web based access



Welcome to the IFFP Model v0.81



<p>Pick your user name:</p> <input type="text" value="a_guest"/>	<p>Pick a problem set: <input type="text" value="myopic"/></p> <p><a href="#">upload a new problem set in a zip file</a></p>	<p><input type="button" value="Proceed with this user and problem"/></p> <p><a href="#">delete this problem set</a> <a href="#">zip and download this problem set</a></p>
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*You can't break anything, so give it a try!*

*This beta version of the webapp is very basic. No error checking and no session control.*

*I'll tidy up the webapp as i get complaints!*

*If you don't see your self in the user list or you want to see your name to appear differently, send Steven an email.*

*At the moment session control is your hands. Each user has their own workspace, but at the moment there is nothing to stop a user from overwriting one of their already running applications.*

*This will be a problem if two people are using the same user at the same time.*

*Please send any comments to Steven.*

# IFFP Online Access (cont.)

web based access



## IFFP Trade Model v0.81



### Problem : myopic

Trade specific files	Country specific files	Control running the model	Result files
<p>View <a href="#">trade.txt</a> <a href="#">readme.txt</a></p> <p>Upload <a href="#">upload a trade.txt file</a> <a href="#">upload a readme.txt file</a></p>	<p>View CHN <input type="button" value="v"/> <a href="#">supply.txt</a> <a href="#">process.txt</a> <a href="#">efficiency.txt</a> <a href="#">substitution.txt</a> <a href="#">consumption.txt</a></p> <p>Upload <a href="#">upload a CHN specific file</a></p>	<p><a href="#">start the trade model</a> <a href="#">monitor the trade model</a></p>	<p>View <a href="#">product balance by country</a> <a href="#">details of consumption</a> <a href="#">details of trade</a> <a href="#">details of supply</a> <a href="#">details of processing input</a> <a href="#">details of processing output</a> <a href="#">details of products</a> <a href="#">details of substitution</a></p> <p>Reset <a href="#">reset result files</a></p>

*Use this page to control the model inputs, start the model and view the outputs.*

*Once you set the model running, you can monitor the progress or just close the browser and come back at any time.*

*The trade model works on the countries listed in "trade.txt". To get to their respective input files, select the appropriate country on this page page. You now have access to CHN files.*

*Please send any comments to Steven.*

# IFFP Online Access (cont.)

simple output files

productBalance.html									
cntry	prd	fromRaw	fromProc	fromTrade	fromSubst	toCons	toProc	toTrade	margPrice
CHN	fibre_05	35	0	0	0	0	-35	0	344
CHN	news_05	0	10	4	0	-15	0	0	904
CHN	panel_05	0	49	29	0	-78	0	0	210
CHN	paper_05	0	185	22	0	-207	0	0	2057
CHN	plog_05	0	91	0	0	0	-80	-11	24
CHN	ply_05	0	67	0	0	-59	0	-8	586
CHN	pulp_05	0	139	38	0	0	-177	0	354
CHN	recycl_05	82	0	0	0	0	-82	0	344
CHN	sawn_05	0	49	29	0	-79	0	0	205

# IFFP Wiki to Support Collaboration

[[start]]

IFFP COLLABORATION

Edit this page

Old revisions

Recent changes

Search

Trace: » start

## IFFP wiki

**This is a wiki to support collaboration in documenting the development and use of the IFFP Model.**

Edit

- You need not login.
- Use the Index to see what subjects have been started.
- Use the Search (upper right) to find information.
- To enter a new subject, put the proposed title in the Search and you will have the option to create and save it. Use a colon to nest subjects.
- For more information see the *wiki syntax* entry.
- Use the word cloud below, to bring up results of a search on that word.

all any based china cloud consumption description development directory **documentation** forest http **iffp** international link list looks  
may **model** modeling more name non not option other out pages pdf product products pulp read reference scenarios see  
some start structure supply system topic **trade** use **user** wiki 1 2 3 2006

- Use the tag cloud below, to bring up pages having these tags.

cloud documentation **iffp** reference tags

cloud, tags  
Edit

start.txt · Last modified: 2007/02/15 18:26 by 70.66.36.83

Edit this page

Old revisions

Login

Index

Back to top

ASS XML FEED

CC LICENSED

51 DONATE

PHP POWERED

W3C XHTML 1.0

W3C CSS

BOB/WIKI

# Future

- Demonstrate utility (objective of the next few days)
- Train country experts (to transfer the model)
- Finalize analysis including western Russia (to develop Russia scenarios)
- Fully develop on-line version for multi-country analysis (to facilitate dialogue)
- Rapid response to the needs of policy makers (to be relevant)