VCO Workshop on
"Linking International Forest Value Chain Modeling Effort"
during the Forest Sector Modeling Conference 2013

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Rica Victoria Hotel, Lillehammer, Norway

Workshop Report

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Introduction

Forest Sector Modelling Conference 2013 was held in Lillehammer, Norway, October 15-18, 2013. Thirty nine researchers from universities and research institutes from around the world took part in this conference and attended 32 presentations and plenary sessions.

Drs. Gary bull, Chris Gaston, and Saeed Ghafghazi held a plenary session on October 16th representing the ongoing forest value chain modelling research in Canada and within the VCO network.

The objective of this panel and open floor discussion was knowledge sharing on the state of the art forest value chain modeling directions and potential research collaboration internationally.

The discussion provided an opportunity for the conference participants to reflect on their experience and current challenges with forest sector and value chain modelling and provide insights for future research.

Table 1. Program of the Workshop

VCO Workshop on *Linking International Forest Value Chain Modeling Efforts*	
4:00 pm:	**Introduction** Gary Bull, University of British Columbia
4:10 pm:	**Forest Value Chain modeling – Canadian Perspective** Saeed Ghafghazi , Queen's University
4:20 pm:	**Wood products Value Chain: Disaggregated Trade-Model** Chris Gaston, University of British Columbia
4:30 pm:	**Panel and open floor discussion** Gary Bull, Chris Gaston, Saeed Ghafghazi

Workshop Observations, Outcomes, and Conclusions

The workshop started by two short presentations by Saeed Ghafghazi and Chris Gaston to introduce VCO and other Canadian forestry related research networks, forestry challenges in Canada, and the new directions that Canadian forest value chain modelling and forest-based research in general is heading. Following the presentations, in an interactive discussion led by the panel, experts from various organizations such as IIASA, EFI, METLA, NRCAN, Universities of British Columbia, Washington, Wisconsin-Madison, Eastern Finland, and etc were asked to share ideas and comment on the following questions:

- How to deal with trade data disaggregation issues?
- How to incorporate emerging products/ bioenergy? How to link operational level and strategic level models?
- Opportunities/interests in initiating forest value chain research projects at an international scale and exchange programs?

Summary of the points discussed with regards to these questions and also important issues facing forest value chain modelling is as follows:

1. On the issue of simplicity vs. complexity of models, and transparency of models and results, it was pointed out that maybe the main issue lies within model validation: 1) how well the model predicts or represents the real world and 2) how useful is the model for the user or decision maker.
2. Overall the three questions raised by the panel were considered very relevant to what other research institutes in Europe or the US are trying to tackle. One particular approach in dealing with these issues has been integration of various modeling frameworks. For example, EFI is experimenting with incorporating forest sector models (both simulation and econometric models) with foresight models (There has been a presentation in the conference regarding this approach which may be shared).
3. When talking about integrating emerging products such as bioenergy and biochemicals into models which deal with traditional forest products, besides time frame and type of products, the order of magnitude of impact on demand and supply should also be considered. Whether the value and quantities of products are large enough to the extent that fibre supply or market behaviour changes? For example, in the oil industry majority of profit comes from 4-5% of products in terms of volume, however getting at that 4-5% is not possible without proper market and use for the 95%. One approach may be to streamline and focus on products that may cause that structural change in the value chain.
4. One good example showing the importance of data disaggregation and how it could be done for value chain studies is that of Nokia mobile phone downturn study. For that study, the official data and statistics for products and services at a national or international level could not differentiate the specific products under study and therefore data for about 40 products from the companies were gathered and studied. This is the approach that forest institutes such as EFI is taking for forest products. Data is now gathered at the company level for specific products to find out which products and in which regions or countries create the highest value throughout forest value chain. These are sometimes case specific studies and results are specific to the boundaries of the case.
5. Besides timber and fibre that comes out of forests, the value will also continue to be in the standing tree. There are now possibilities to allocate money based on the value of standing tree in forests, e.g. carbon offset from old growth temperate rainforests, or national forests conservation.
6. When trying to predict the next structural change in the forest value chain and informing strategic decision support models, engineering studies can play a role in providing data and inputs where historic knowledge is not available. In most cases however, the data lacks the degree of generality required for supporting strategy. This is particularly true for emerging products or technologies. Including engineering insights into strategic level models will help inform policies that impact diffusion or development of new technologies and products.
7. Both IIASA and EFI expressed interest for collaboration with VCO in the form of joint projects or hosting researchers through existing or individually defined intern programs. (Dr. Bull may be contacted for further details)
8. One way to facilitate collaboration as well as validation, is to make input data and models available to other researchers.

Appendix 2 – Photos