



Forest products contribution to GDP



Arvydas Lebedys
FAO Forestry Officer (Statistics)

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Outline

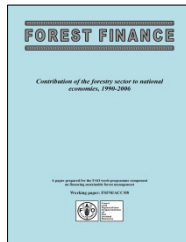
- Background - 3 FAO's global studies on forest sector's contribution to GDP
- Scope, data availability and results
- Data issues (example from user prospective)
- Final thoughts



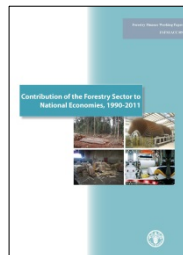
Background



2004: *Trends and current status of the contribution of the forestry sector to national economies (data for 1990-2000)*



2008: *Contribution of the forestry sector to national economies, 1990-2006*



2014: *Contribution of the forestry sector to national economies, 1990-2011*
(input to FAO's State of the World's Forests 2014)

All available online at: <http://www.fao.org/forestry/finance/52843/en/>





Scope of the study

- **Formal (“visible”) forest sector** (forestry+wood+pulp&paper)
- **All countries/territories**
- **Period:** 1990-2011
- **Employment:** forestry & logging, wood industry, pulp & paper industry and furniture industry
- **Value-added (contribution to GDP):** forestry & logging, wood industry, pulp & paper industry and furniture industry
- **Productivity:** m³/tonne per employee, value added per m³/tonne, value-added per employee
- **Export/import:** forestry products, wood products, pulp & paper and wooden furniture





Data availability

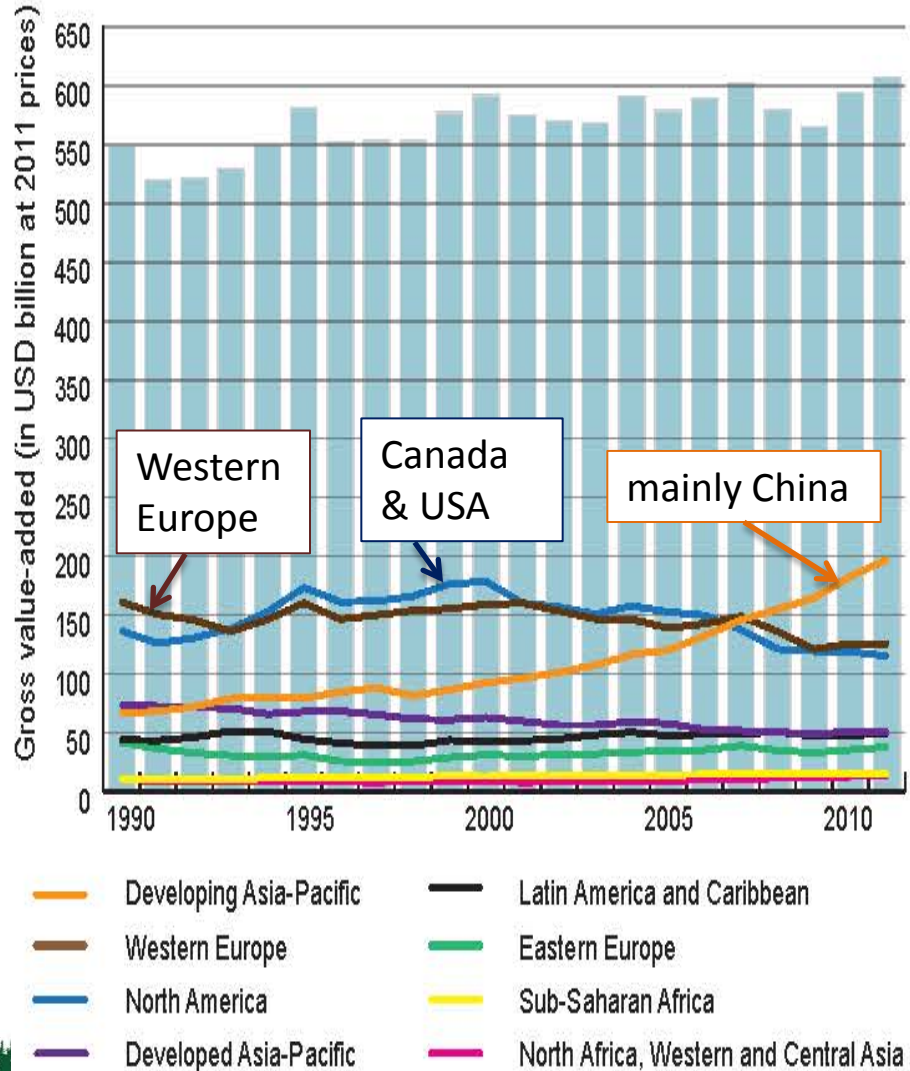
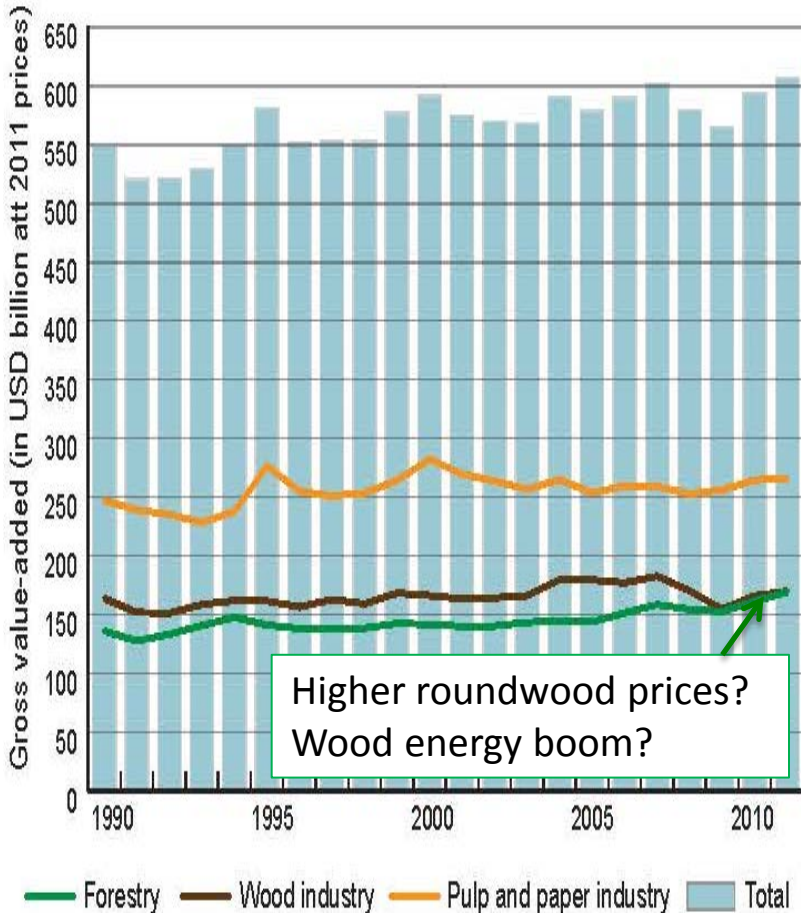
**Average number of official statistics collected for each year
(over the period 1990 to 2011)**

	Forestry & logging	Wood industry	Pulp & Paper industry	Furniture industry
Employment	61	105	103	102
Value-added (GDP)	124	97	92	87

- Countries with available value-added statistics account for 84% of global forest area, 92% of industrial roundwood removals, 99% of sawnwood and wood-based panel production and 99.9% of pulp and paper production (in 2011).

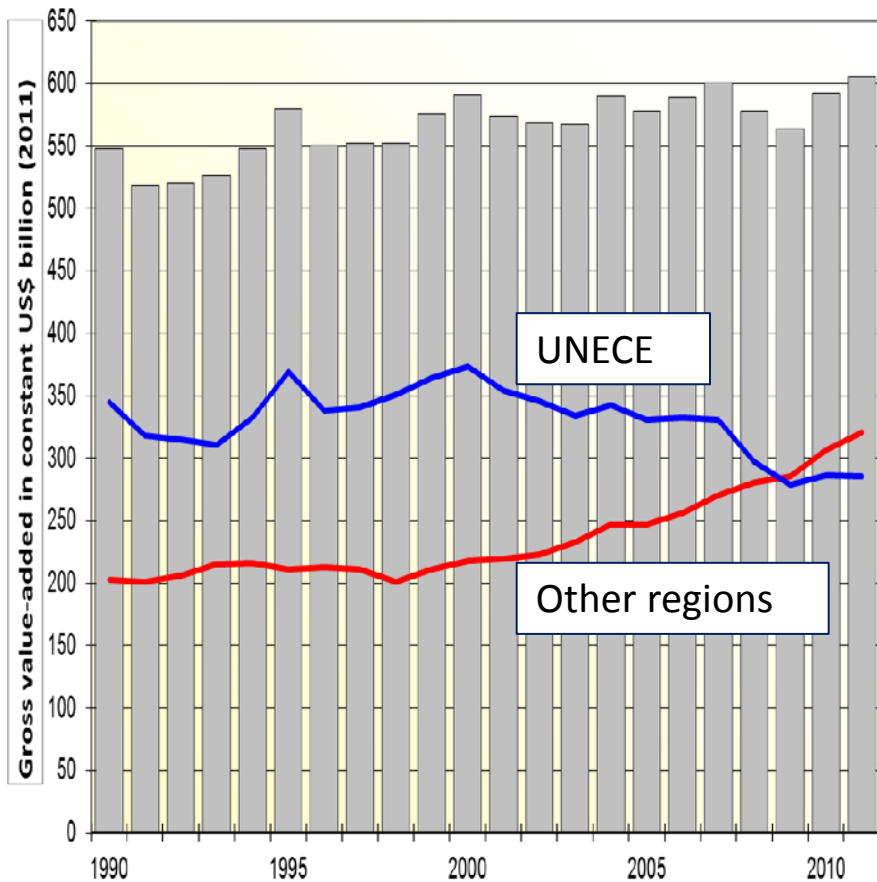


Global trends in gross value added

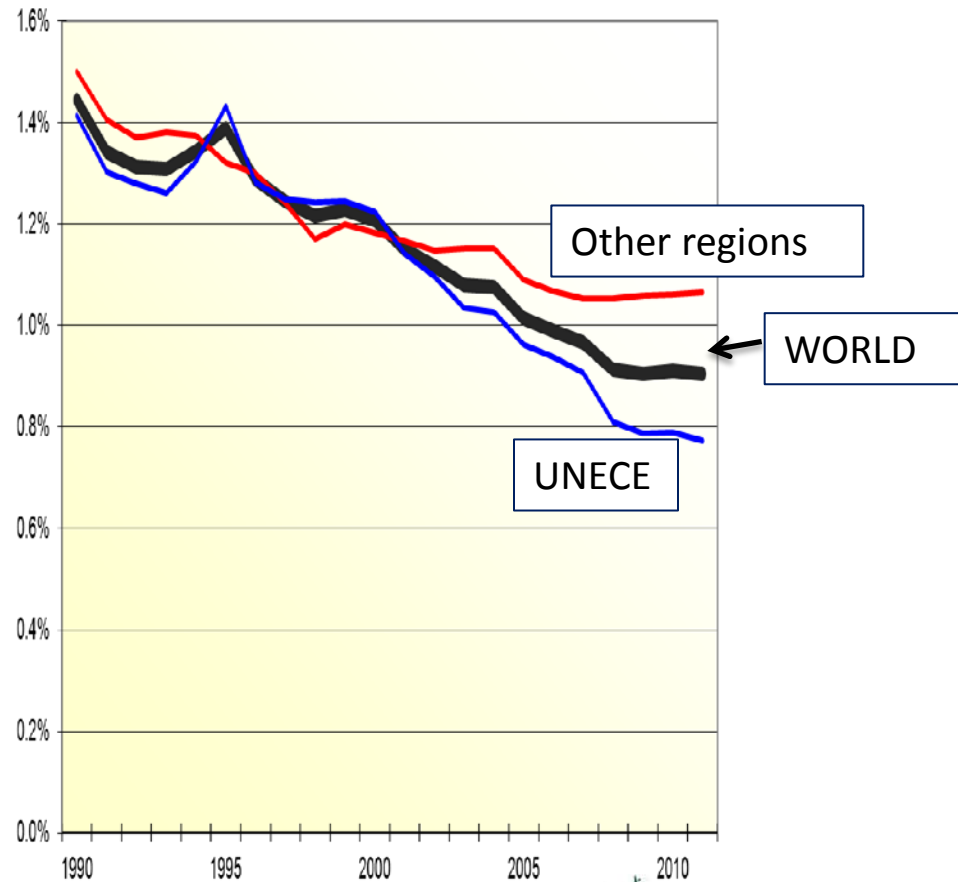


UNECE vs. other regions

Forest sector value-added



Contribution to GDP





Summary, 2000-2011

Region	Contribution of the forestry sector (in percent)											
	Share of labour force			Share of total GDP			Share of Agricultural and Manufacturing GDP			Share of merchandise exports		
	2000	2011	Change	2000	2011	Change	2000	2011	Change	2000	2011	Change
Sub-Saharan Africa	0.2	0.2	0.0	1.9	1.2	-0.7	6.5	4.7	-1.8	3.8	1.2	-2.6
North Africa, Western and Central Asia	0.3	0.2	-0.1	0.3	0.3	0.0	1.6	1.9	+0.3	0.3	0.4	+0.1
Developed Asia-Pacific	0.8	0.6	-0.2	1.0	0.7	-0.3	4.6	3.8	-0.8	1.3	0.9	-0.4
Developing Asia-Pacific	0.3	0.3	0.0	1.6	1.5	-0.1	3.9	3.9	0.0	2.7	1.8	-0.9
Western Europe	1.1	0.8	-0.3	1.2	0.8	-0.4	5.8	4.9	-0.9	3.9	3.0	-0.9
Eastern Europe	1.5	1.0	-0.5	1.6	1.2	-0.4	5.4	5.4	0.0	5.8	3.7	-2.1
Northern America	1.1	0.6	-0.5	1.2	0.7	-0.5	7.4	5.0	-2.4	6.0	3.4	-2.6
Latin America and the Caribbean	0.5	0.5	0.0	1.1	0.9	-0.2	4.7	4.3	-0.4	3.0	1.9	-1.1
<i>All tropical countries</i>	<i>0.3</i>	<i>0.2</i>	<i>-0.1</i>	<i>1.6</i>	<i>1.1</i>	<i>-0.5</i>	<i>5.2</i>	<i>4.1</i>	<i>-1.1</i>	<i>3.1</i>	<i>1.8</i>	<i>-1.3</i>
<i>All temperate countries</i>	<i>0.7</i>	<i>0.5</i>	<i>-0.2</i>	<i>1.2</i>	<i>0.9</i>	<i>-0.3</i>	<i>5.3</i>	<i>4.3</i>	<i>-1.0</i>	<i>3.6</i>	<i>2.4</i>	<i>-1.2</i>
<i>World total</i>	<i>0.5</i>	<i>0.4</i>	<i>-0.1</i>	<i>1.2</i>	<i>0.9</i>	<i>-0.3</i>	<i>5.3</i>	<i>4.3</i>	<i>-1.0</i>	<i>3.5</i>	<i>2.3</i>	<i>-1.2</i>

Note: Export figures include wooden furniture.



Sometimes too much data...



Gross Value Added: National Accounts vs. EAF

(ISIC Rev.4: A02 Forestry and logging)

GEO/TIME	2005	2006	2007	2008	2009	2010	2011	2012
Austria	0%	0%	1%	1%	0%	0%	0%	0%
Belgium								
Bosnia and H								
Bulgaria								
Cyprus	-33%	-29%	-15%	-38%	-79%	-74%	-64%	-61%
Czech Repub	46%	43%	28%	36%	25%	27%	50%	44%
Denmark								
Estonia								
Finland	-15%	-17%	0%	0%	0%	0%	0%	7%
France	-35%	-14%	8%	2%	-4%	1%	-9%	-22%
Germany (un	11%	9%	8%	10%	9%	-28%	7%	-16%
Greece	-4%	10%	14%	6%	10%	-11%	20%	1%
Hungary	22%	-7%	5%	1%	2%			
Iceland								
Italy	172%	210%						
Latvia					-54%	-37%	-58%	
Lithuania	-7%	1%						0%
Luxembourg						-41%	-49%	-50%
Malta								
Netherlands	82%	88%						
Norway		24%	21%	17%	15%	28%	19%	26%
Poland	-38%	-36%		-32%			2%	3%
Portugal	3%	2%	0%	0%	0%	0%	3%	
Romania	0%			0%	1%	1%	0%	0%
Slovakia	-5%	4%	42%	85%	109%	101%	71%	76%
Slovenia	5%	1%	4%	-2%	-1%	-7%	-7%	-18%
Spain	98%	67%	119%					
Sweden			1%	0%	0%	0%	0%	0%
Switzerland								
United Kingd								

Out of 124 cells about the same:

- Difference > 10% in 58 data points (47%)
- Difference > 30% in 34 data points (27%)
- Difference > 50% in 19 data points (15%)



Possible improvement

Better identification (codes) of forest-based activities in international classifications (CPC/ISIC):

- Wooden furniture?
- Wood-based/bio energy?
- NWFPs?
- Forest-based services?

Would appear in national statistics automatically...





Final thoughts

- Economic value of the “traditional ” formal forest sector is well defined and known:
 - over 100 countries with annual stats (total US\$ 606 billion in 2011)
 - Statistics are publicly available (no need to collect separately)
- Informal sector can be estimated (US\$ 124 billion in 2011)
- Work should focus on valuation of other sectors (wood-based energy) and forest services





Thank you

