

Introduction to the Wood Fibre Balance

History and Background

National Wood
Resource and Product
Balances workshop

2008 Workshop on National Wood Resources
Balance (<http://www.unece.org/forests/workshops/2008/wood-balance/conclusions1>)

A number of studies, in particular in Germany

Increasing discussions in Team of Specialists
meeting and encouragement to apply in
routine validation of JFSQ

Sources of Information

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Resource and Product
Balances workshop

The source for data on the wood fibre balance is the ECE/FAO TIMBER database. These are the same figures as shown in FAOSTAT.

The data are mostly provided through the Joint Forest Sector Questionnaire. Other figures come from official and unofficial sources, including secretariat estimates. These estimates (and repeated data) are marked in yellow on the country data sheets in the balance.

Features of the wood fibre balance

- Uses official data
- Tries to keep it simple
- Ignores energy wood both in supply and demand
- Uses solid wood equivalent
- Assumptions are made explicit and can be modified directly by user

Balance tool – basic structure

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		Wood Fibre Balance/ Балансы древесного волокна									
		Country Страна									
Row # Ряд#		RUSSIAN	unit единица измерения= 1000 m3 or 1000 mt or 1000 m3 SWE	2000	2005	2010	2015	% change 2000-2015			
1	Industrial wood fibres	Промышленный вывоз круглого леса и чистый объем торговли (за исключением сообщений о других IRW)	Industrial roundwood removals and net trade (excludes reported other IRW)	59 503	62 399	51 749	56 438	-5%			
2	промышленное древесное волокно	Чистый объем торговли щепой, стружкой и лесосечными отходами	Net trade in chips, particles and residues	1 048	2 035	3 553	2 718	159%			
3		Рекуперированная древесина, используемая в ДСП	Recovered wood used in particle board	254	250	122	51	-80%			
4	Wood Products древесная продукция	продукция агломератов	agglomerate production	недостающие	недостающие	177	312	отсутствующие			
5		производство пиломатериалов	sawnwood production	13 420	12 269	9 473	10 640	-21%			
6		производство шпона	veneer production	83	79	47	57	-31%			
7		производство фанеры	plywood production	1 170	1 305	980	1 150	-2%			
8		производство стружечных плит	particle board production (includes OSB)	460	452	220	92	-80%			
9		производство фибрового картона	fibreboard production	162	149	100	15	-91%			
10		производство механической древесной массы и полуцеллюлозы	mechanical/semi-chemical pulp production	4 819	4 361	3 775	3 320	-31%			
11		производство целлюлозы	chemical pulp production	7 100	6 773	6 733	6 930	-2%			
12		производство целлюлозы для химической переработки	dissolving pulp production	90	0	0	200	122%			
13	Availability Наличие	Спрос на массивную древесину	Solid Wood Demand	63 042	58 726	53 881	56 165	-11%			
14		Доступный деловой круглый лес	Available Industrial Roundwood	60 805	64 684	55 424	59 207	-3%			
15		Разница (круглый лес и спрос на него)	Difference (roundwood-demand)	-2 237	5 959	1 543	3 042				
16		разница (спрос / доступность)	gap (demand/availability)	-4%	9%	3%	5%				

Balance tool – assumptions and conversion factors

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2000	2005	2010	2015	% change 2000-2015		
59 503	62 399	51 749	56 438	-5%	Conversion factors (please use national units where applicable)	
1 048	2 035	3 553	2 718	159%	m3 of wood in m3 or mt	
254	250	122	51	-80%	Solid wood equivalent	
недостающие	недостающие	177	312	отсутствующие или	2.40	
13 420	12 269	9 473	10 640	-21%	1.00	
83	79	47	57	-31%	1.00	
1 170	1 305	980	1 150	-2%	1.00	
460	452	220	92	-80%	1.58	
162	149	100	15	-91%	1.80	
4 819	4 361	3 775	3 320	-31%	2.50	
7 100	6 773	6 733	6 930	-2%	4.90	
90	0	0	200	122%	5.70	
63 042	58 726	53 881	56 165	-11%		
60 805	64 684	55 424	59 207	-3%		
-2 237	5 959	1 543	3 042			
-4%	9%	3%	5%			
					positive = roundwood surplus	позитивный результат = излишки круглого леса
					Negative number means	Отрицательное число означает недостаточное количество круглого леса для расчетного спроса
					Positive number means	Положительное число означает больше круглого леса, чем расчетный спрос
					Assumptions	Предположения
					% of particle board that is from recovered wood	35% % стружечной плиты, полученной из извлеченной древесины
					share of agglomerates produced from industrial roundwood residues	100% доля агломератов, получаемых из промышленных отходов круглого леса
					usable industrial wood fibre - amount of wood fibre that is used, remainder leaves industry	100% используемое промышленное древесное волокно - количество используемого древесного волокна, остаточная промышленность

Unincorporated Comments

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- For row # 3 it has been suggested that this should also include other use of recovered wood in the wood industry, highlighting the use of residues in pallets
- If we are looking over a long time period we should consider a change in the level of stocks. This could also include effects of windthrow.
- Include an assumption / variable of the amount of imported chips that do not go to the wood industry, e.g for energy or other uses.
- There is a known gap between officially reported data and actual figures. Should there be some way to compensate for this in the balance?

Summary of results

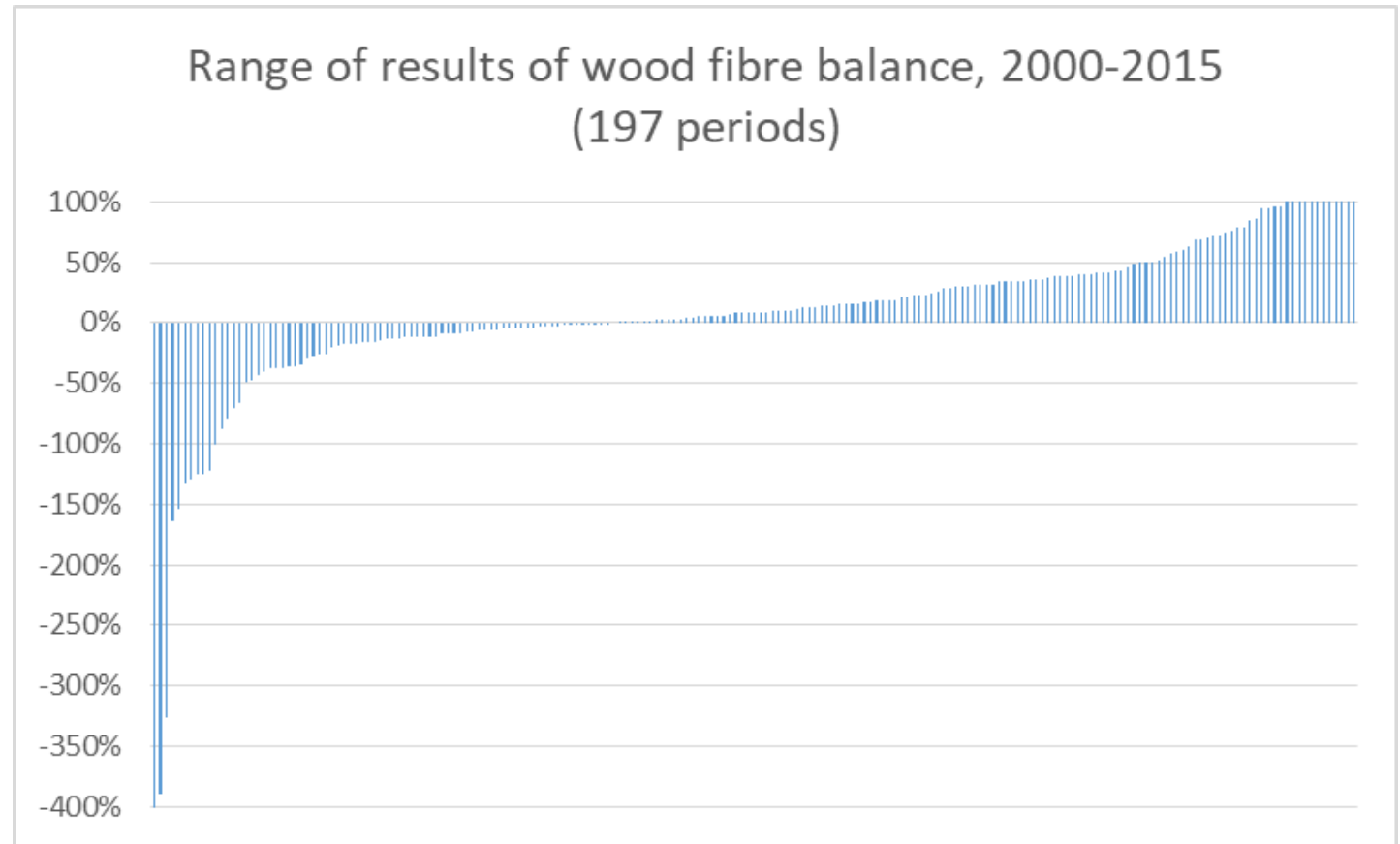
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Summary of overall balance (million m3)

	2000	2005	2010	2015
Available Industrial Wood Fibre	1 145	1 207	1 039	1 111
Solid Wood Demand	1 042	1 102	981	1 089
availability-demand	103	105	58	22
gap	9%	9%	6%	2%

Summary of results

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Summary of results

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<u>Range</u>		<u>Number</u>
-450%	-100%	11
-100%	-50%	4
-50%	-25%	14
-25%	-10%	18
-10%	-5%	10
-5%	0%	18
0%	5%	14
5%	10%	13
10%	25%	25
25%	50%	37
50%	100%	21
100%	110%	12
		197

Average of results

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	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>
number of period-measurements	45	49	51	52
average	19%	11%	3%	-5%
median	16%	10%	6%	2%
standard deviation	39%	66%	77%	77%

Questions to keep in mind

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- Is this tool useful for correspondent?
- What would be a «reasonable» results?
- What should be changed to make balance more useful and reliable?
- What direction should we take with balance?
- Is there any specific international action to take (project, workshop, study or publication, best practice guide)?

For Discussion

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- Usefulness and improvements to balance tool
- Please present your issues with balance – how it works, how it doesn't for you
- How to improve balance match of availability and demand
- Means of improvement in countries



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70 YEARS WORKING TOGETHER IN THE SERVICE OF FORESTS AND PEOPLE

Thank you!

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UNECE/FAO

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