

8th AIEAA Conference

Tomorrow's food: diet transition and its implications on health and the environment

**Organised session 2 - Changes, challenges and opportunities in
the forest sector: Policy and economic responses**

Pistoia, 13th June 2016

The impact of Vaia storm on the timber market in North-Eastern Italy

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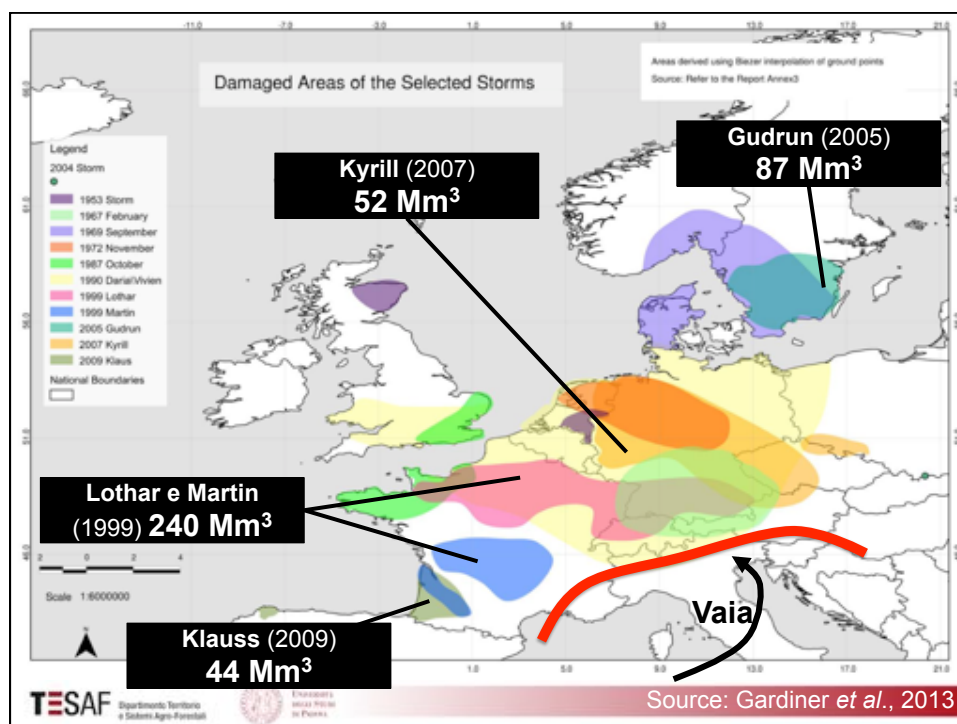
¹TESAF Department - University of Padova; ²Etifor Srl

Contents

- Intro: Vaia Storm
- Vaia storm and the timber market in NE Italy
 - Data sources & methodological issues
 - Preliminary data
- Beyond timber market
- Some final considerations

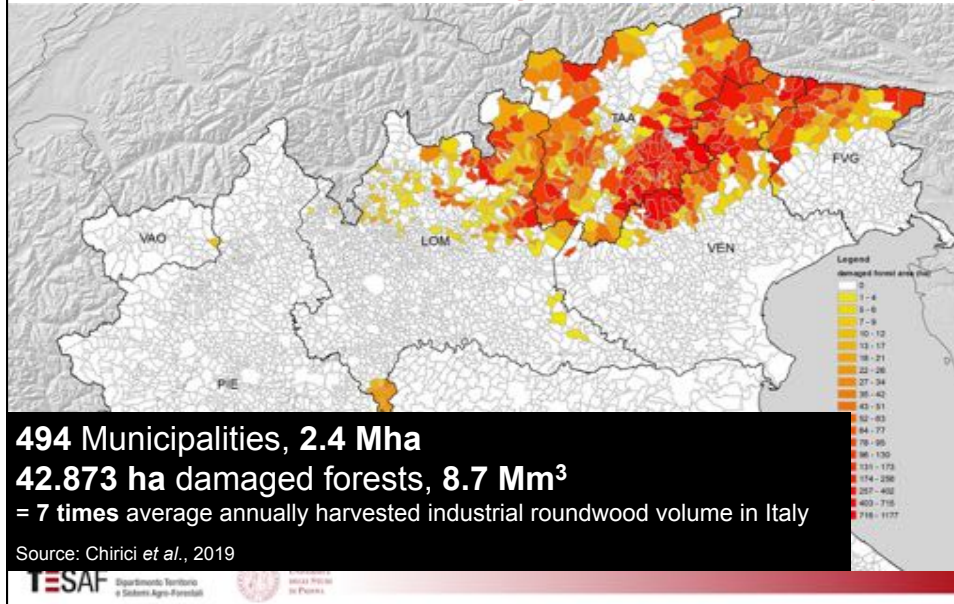
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Vaia storm (28-30th October 2018)

Forest areas (ha) damaged per municipality



Damaged forest areas

Regions/provinces	Damaged forest area (ha)	Timber volume 1 000 m³
Veneto	12 114	2 500
A.P. of Trento (TN)	18 300	3 300
A.P. of Bolzano (BZ)	4 200	1 500
Friuli VG	3 600	950
Lombardia	3 200	400
Total	41 491	8 690

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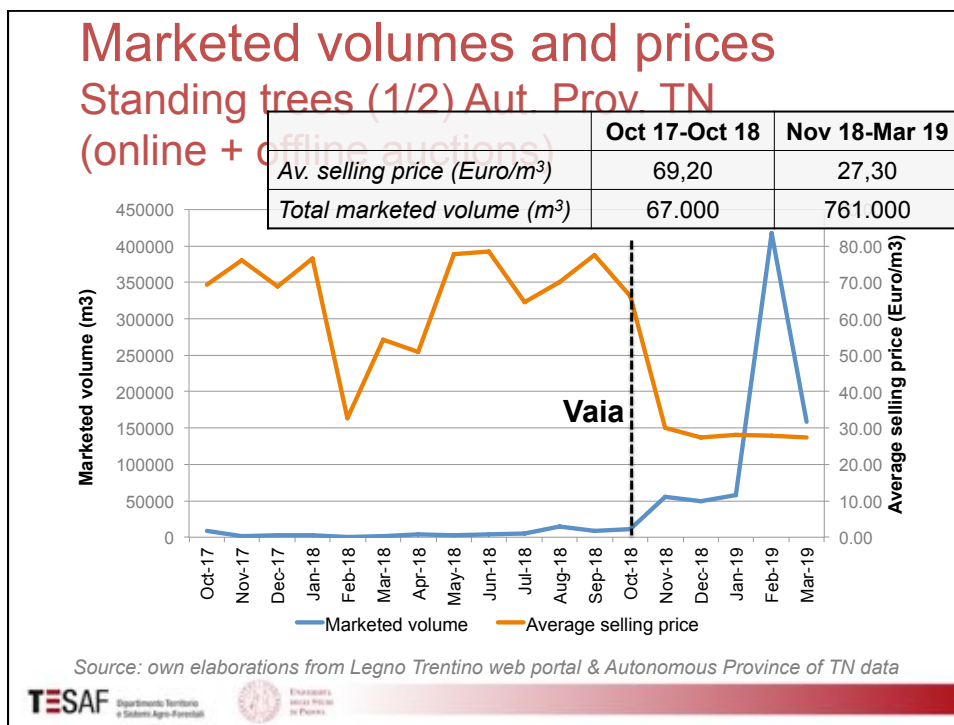
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Data sources & methodological issues

Volume, price and other auction data trends for standing trees/road-side sales **before** (Oct 2017-Oct 2018) and **after** (Nov 2018-Mar2019) Vaia storm

Data sources:

Area	Source	Sales
Autonomous Province of TN	Legno Trentino (online portal) + Data from Autonomous Province of TN	Standing/Road-side
Autonomous Province of BZ	Autonomous Province of BZ website (Agriculture & forests Directorate)	Standing/Road-side
Asiago Plateau (VI)	Auction records by Municipalities	Standing
Comelico's <i>Regole familiari</i> (BL)	Auction records by 10 <i>Regole</i>	Standing



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Marketed volumes and prices Standing trees (2/2) – Asiago & Comelico

Asiago Plateau (Nov. 18 - Mar. 19)

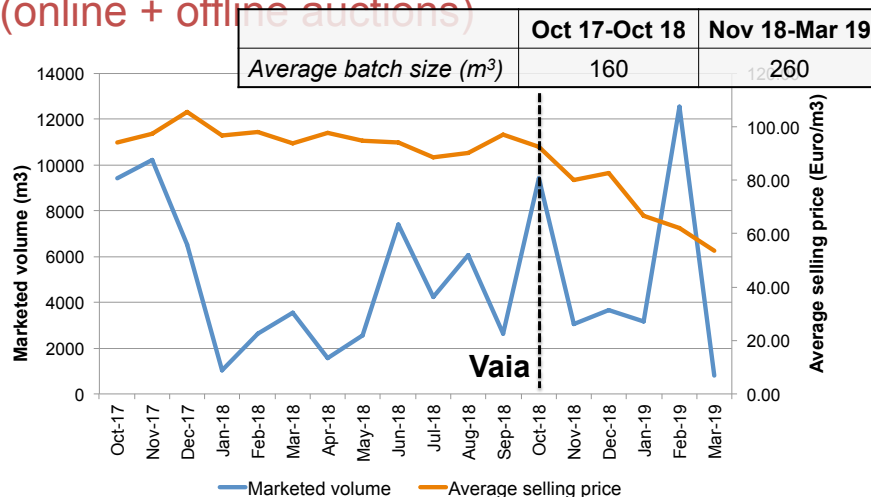
- **> 230.000 m³** marketed (Foza, Gallio, Asiago, Rotzo and Enego)
- Total annual removals in Veneto (Istat, 2015): **70.000 m³**
- Average selling price (after Vaia): **25,1 Euro/m³**

Comelico (Nov. 18 - Mar. 19)

- **250.000 m³** marketed (whole Comelico area)
- Average selling price (before Vaia): **71,3 Euro/m³**
- After Vaia: **26,3 Euro/m³**

Marketed volumes and prices

Road-side (1/2) – Aut. Prov. TN
(online + offline auctions)



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Ente Autonomo
Provincia di Trento

Marketed volumes and prices

Road-side (2/2) – Aut. Prov. TN & BZ

	Average Selling price (€/m ³)		% variation
	Oct. 18 – Oct. 19	Nov. 18 – Mar. 19	
Wood for packaging (Spruce)			
Autonomous Province of BZ	83,1	51,5	-38%
Autonomous Province of TN	87,6	55,6	-37%
Sawlogs (Spruce)			
Autonomous Province of BZ	103,9	79,4	-24%
Autonomous Province of TN	103,8	84,9	-18%
Mixed assortments (Spruce)			
Autonomous Province of BZ	80,5	68,1	-15%
Autonomous Province of TN	96	75,1	-22%
Sawlogs (Larch)			
Autonomous Province of BZ	133	111,3	-16%
Autonomous Province of TN	173	120,3	-30%

Source: own elaborations from Legno Trentino web portal & Autonomous Province of TN data +
Autonomous Province of BZ website (Agriculture & forests Directorate)

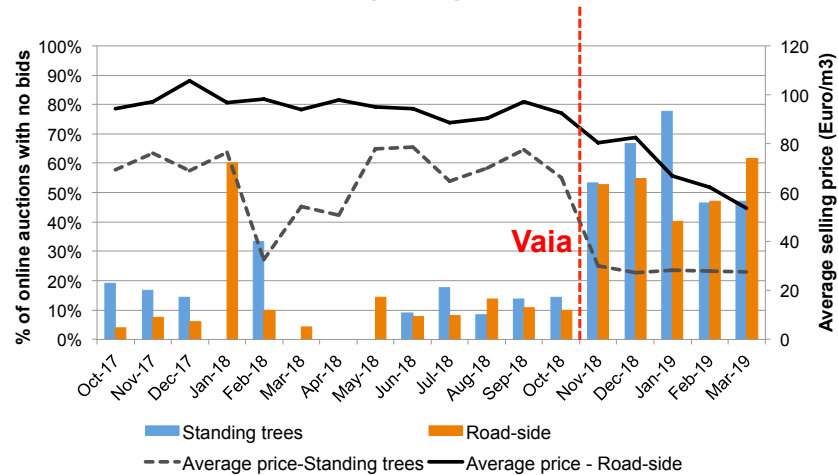
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Provincia di Trento

Prices go down, online auctions are less populated (1/2)



Source: own elaborations from Legno Trentino web portal & Autonomous Province of TN data

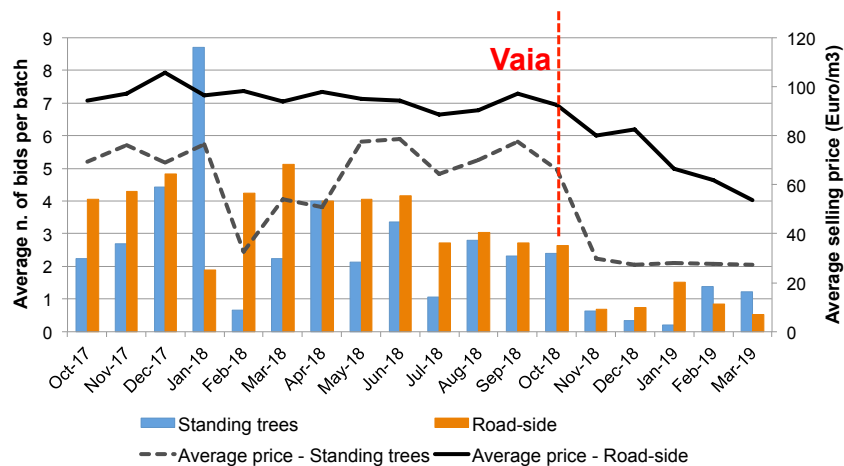
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Prices go down, online auctions are less populated (2/2)



Source: own elaborations from Legno Trentino web portal & Autonomous Province of TN data

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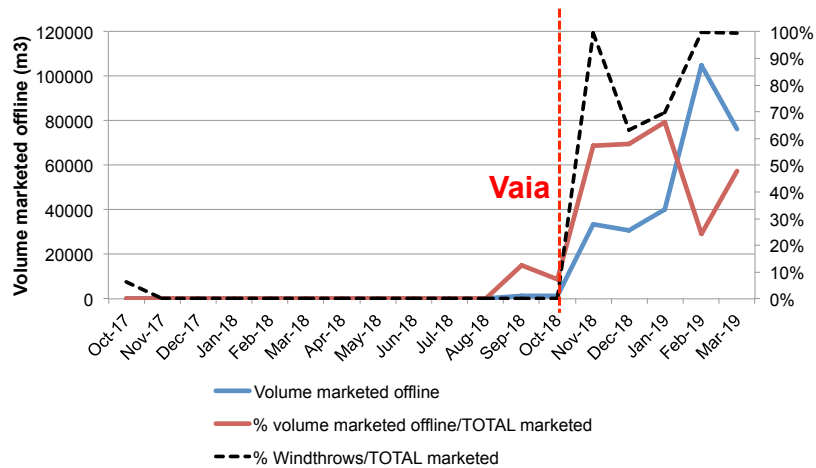
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Ente di Promozione Forestale

Online vs. offline sales

An increasing incidence of off-line bids for standing tree sales



Source: own elaborations from Legno Trentino web portal & Autonomous Province of TN data

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Vaia damages to forest resources: a quick preliminary assessment

Regions/ provinces	Damaged forest area (ha)	Timber volume 1 000 m ³	Damage estimation (M€)		
			Timber		ES
			^A 50 €/m ³	^A 20 €/m ³	^B M€/anno
Veneto	12 114	2 500	125	50	5.7
A.P. of TN	18 300	3 300	165	66	8.6
A.P. of BZ	4 200	1 500	75	30	2.0
Friuli VG	3 600	950	48	19	1.7
Lombardia	3 200	400	20	8	1.5
Total	41 491	8 690	434	174	19.5

A. Assuming an average stumpage price equal to 50 €/m³ and an actual selling price equal to 20 €/m³

B. Quick estimation via benefit transfer assuming an average value of 470 €/ha/year for ecosystem services (ES) losses (CLIBIO project quoted by ten Brink et al. 2009)



Adventure park
Roana (VI)
Credits: S. Cesca



Dolomites bike path
Castellavazzo (BL)
Credits: A. Pra

Additional damages:

- **Machinery and equipment** of forestry enterprises
- **Forest-based business activities**
- **Forest roads** → ca. 470 km TN, 11,5 M€ (Wolinski – Sherwood)
ca. 400 km BZ, 9,8 M€ (Broll - Sherwood)
- **Hiking and bike paths**
- Discouraging effects on **tourists/visitors**
- ...

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Can a ordinarily foggy
landscape (= the
domestic timber
market) become
sunny and clear under
extraordinary
circumstances?

Some final considerations (1/2)

- Difficulties in **accessing data**: limited and scattered information
- A forest-wood system largely **unready** to face an event like Vaia
- **Winners and losers**
- **Market saturation**: limited domestic primary processing capacity, no stocking yards → export
- Effects on **prices** and market **dynamics** (e.g. online vs offline auctions/sales, middle-men for out-coming companies, sales mechanism...)
- ...and likely **additional socio-economic impacts** in the medium-long term

Some final considerations (2/2)

- **Plans/measures** for dealing with future extreme events needed (e.g. stocking-yards, procedures for activating private operators, consistent rules across public administrations...)
- Not just a technical issue, a matter of **governance** of forest resources (horizontal and vertical coordination/integration among actors)
- **Tools for monitoring and supporting the market** under ordinary conditions → starting from and improving existing best-practices

