

Italian Delegation to the Alpine Convention-Autonomous Province of Trento
**Workshop “Ecosystem services of the Alpine forests:
 approaches, good practices and examples”**
 8th June 2016 - School of management of Trento

Non-Wood Forest Products: product or service of the forest?

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This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No. 311919

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Outline

- “A” NWFP **definitions**
- NWFP & property **rights**? “*Conditio sine qua non*” for the market creation
- NWFP as **product** or **service**?
 - Production of “*products*”
 - Production of “*services*”
- (Forest and NWFP) **planning**
 - Silviculture and NWFP production: a link that matters!
 - Forest and NWFP management

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“All” starts from a definition. NWFP definition



NWFP (scientific) definition

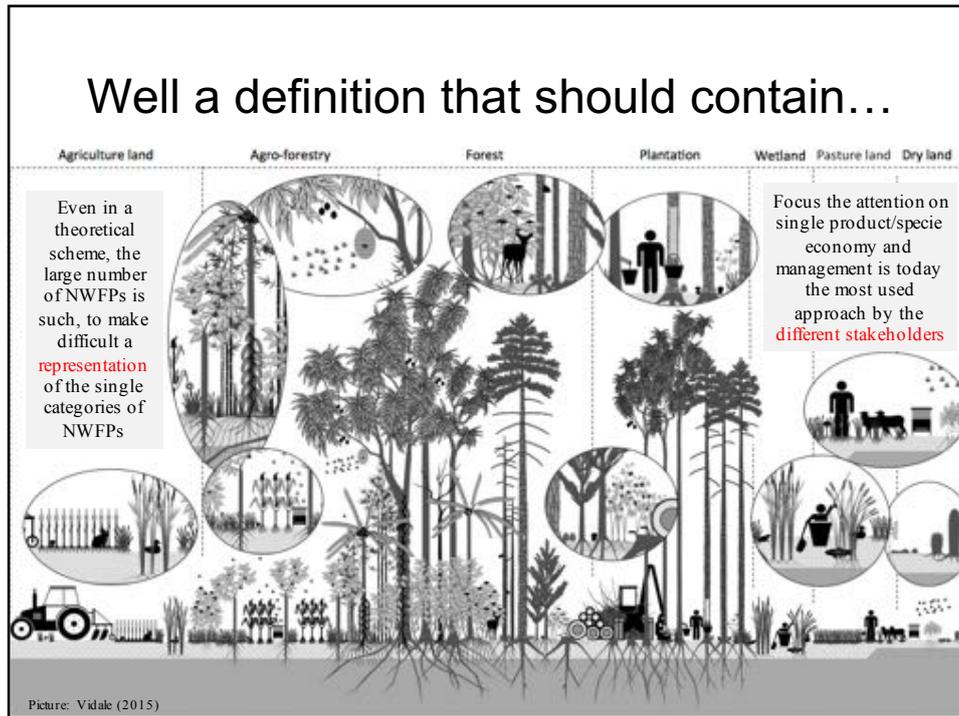
NTFP are “*all biological materials other than timber which are **extracted from forest** for **human use***” - (De Beer and McDermott 1989)

NWFP are “*products of biological origin other than wood derived **from forests**, other **wooded land** and **trees outside forests***” - (FAO 1999)

NWFP (legal) definition

“**primary production**” means the production, rearing or growing of primary products including harvesting, milking and farmed animal production prior to slaughter. It also includes hunting and fishing and the **harvesting** of *wild products*. (Art. 3, part 17, Reg. 178/02)

“*wild product*” resulting from “**collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas**” (Art. 12, comma 2, Reg. 834/07 “organic law”)



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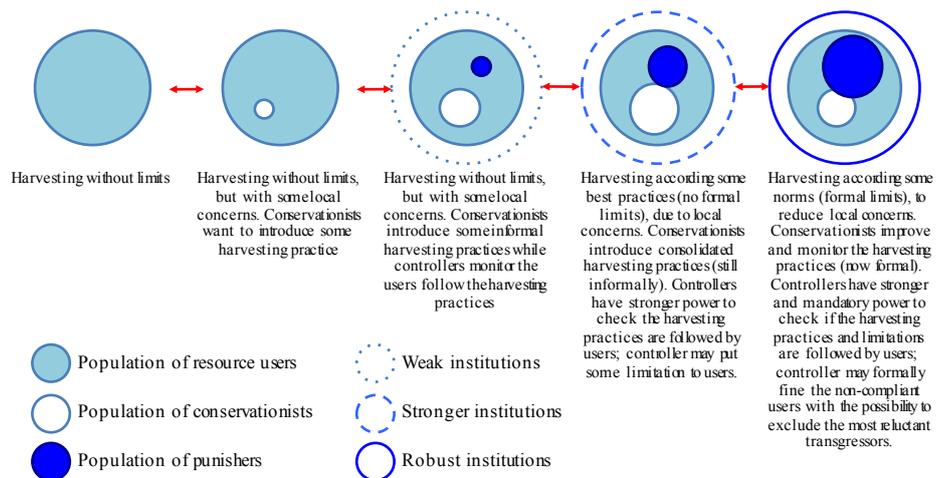
Property rights on NWFP: from *informal* to *formal* institutions

Institutions = “rules of the game” in a society (North 1990)

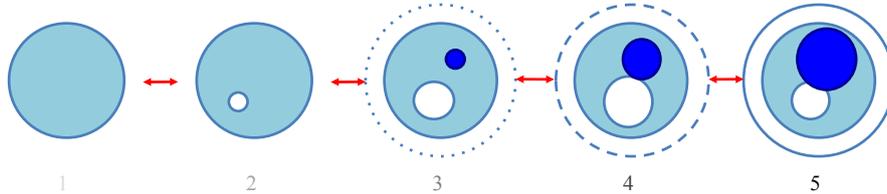
Actors and organizations = “players” of the game (North 1990)

- *Formal* institutions
 - Policies and legislation
 - Strategies, action plans
 - Policy instruments and property rights arrangements
- *Informal* institutions
 - Cultural norms, codes of conduct
 - Traditions, conventions, etc.

Property rights on NWFP: from *informal* to *formal* institutions



Property rights on NWFP: from *informal* to *formal* institutions



Harvesting rights	Harvesting limits	Case studies	Position
Anyone can harvest NWFP independently of the purpose	No limits	Finland	4
	Quantity limits for mushrooms (2kg/day/person)	Austria (in some forests, harvesting requires the acquisition of permits)	3
Harvesting for self-consumption allowed to everyone, commercial harvesting requires permits (or forest owners' consent)	No limits	Scotland	4
	Quantity limits for mushrooms (2kg/day/person)	Slovenia	3
Harvesting is restricted to permit holders or otherwise authorised persons or to local population	No limits	Serbia	3
	Limit on the area	Wales	4
	Quantity limits for mushrooms	Italy, Catalonia, Castilla y León (on certain areas)	5

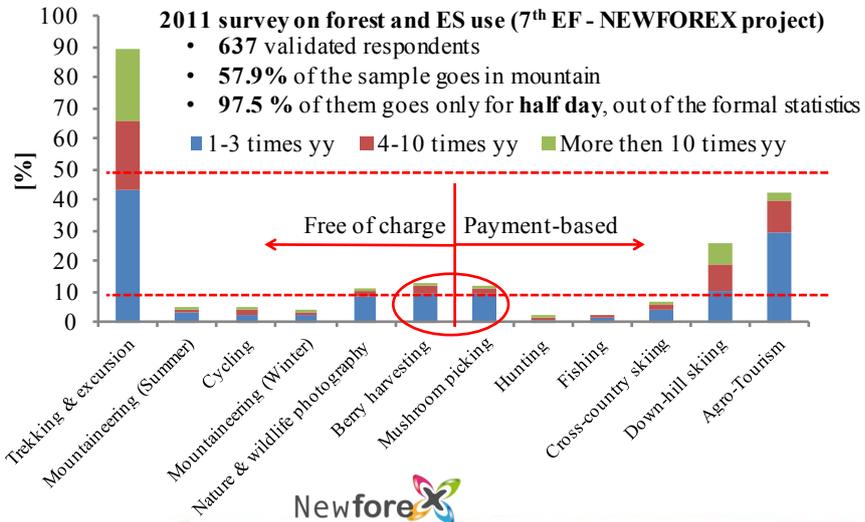
Property rights on NWFP: from *informal* to *formal* institutions



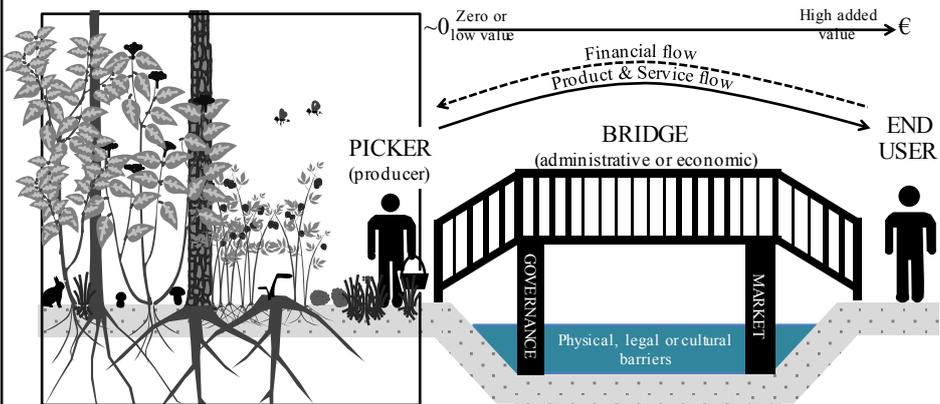
Source of law (some examples):

- Constitution (Art. 42)
- Civil Code:
 - Art. 820 C.C. (legal natural fruits)
 - Art. 821 C.C. (buying "fruits")
 - Art. 841 C.C. (real estate closure right) + all real rights
- Specific laws:
 - Law n. 352 of the 23rd August 1993 & D.P.R. n. 376 of the 14th July 1995 (wild mushroom law)
 - L.Pr. n. 11 of the 23.5.2007 (Province Law on Forests and Environment Protection)
 - Fiscal law (European Dir. 2006/112/CE or National Law D.P.R. n. 633 of the 26 October 1972)
 - ...[laws on truffles, resins, cork, berries, greenanies, MAPs, ...]

NWFP as product or service? Context



The definition of institution among players is the “*existence condition*” of any market



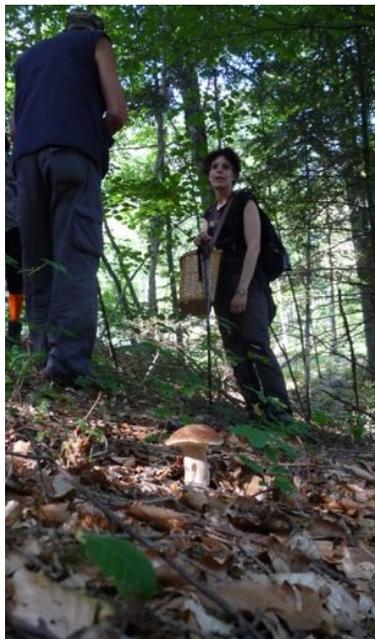
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NWFP as product or service?



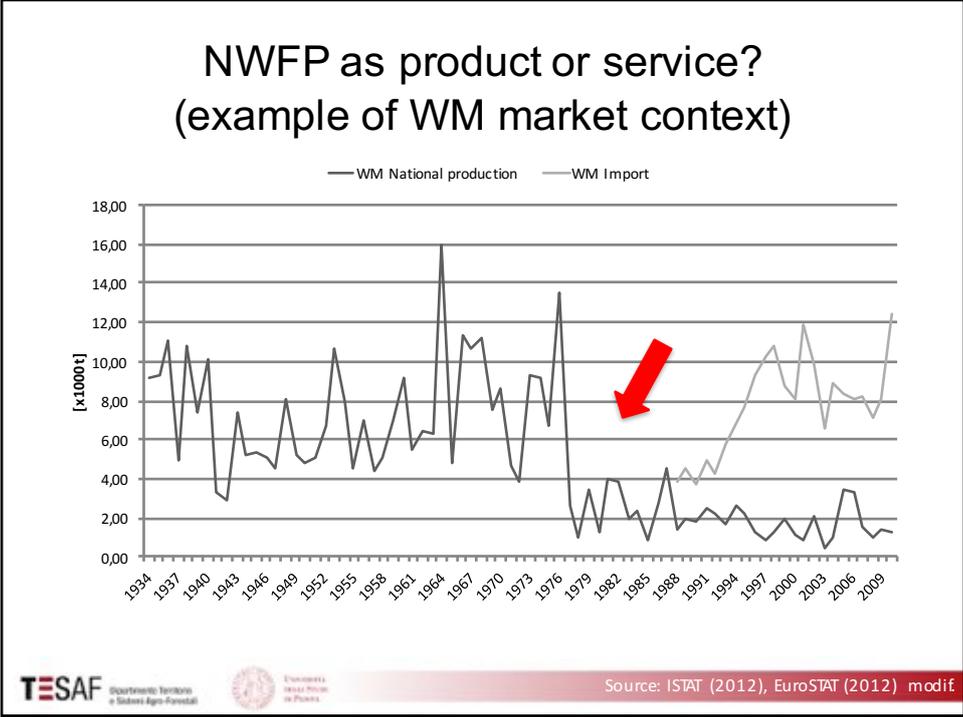
Recreational purpose



Let's see the institutions around the WM resources



Commercial purpose



NWFP as product or service? (context for service use)

	HH picking	HH n.	HH n. pickers	selling index
N-O	17.36%	3.01	2.40	0.23
S	12.93%	3.60	1.89	0.22
I	27.63%	3.29	2.19	0.25
N-E	16.36%	3.18	2.11	0.19
C	17.07%	3.16	2.57	0.31
Italy	17.35%	3.26	2.23	0.24

Product	Estimation of the population involved				
	Share of pickers of Italian Households [%]	Share of Household that pick [%]	Using ISTAT HH dimension [M people]	Using survey HH dimension [M people]	Using survey av. N. of picker per HH [M people]
Greenaries	6.80%	39.18%	3.945	5.124	3.529
Forest nuts	12.70%	73.20%	7.372	9.574	6.594
Wild mushrooms	12.16%	70.10%	7.060	9.170	6.315
Truffles	2.50%	14.43%	1.454	1.888	1.300
Wild berries	11.45%	65.98%	6.645	8.630	5.944
MAP	10.38%	59.79%	6.022	7.821	5.387
Sap&Resins	1.07%	6.19%	0.623	0.809	0.557
tot	17.35%	-	10.071	13.080	9.009

Source: StarTree Project Deliverable 3.3 & 3.6 (prov. Estimations)

NWFP as product or service? The case of “Fungo di Borgotaro”

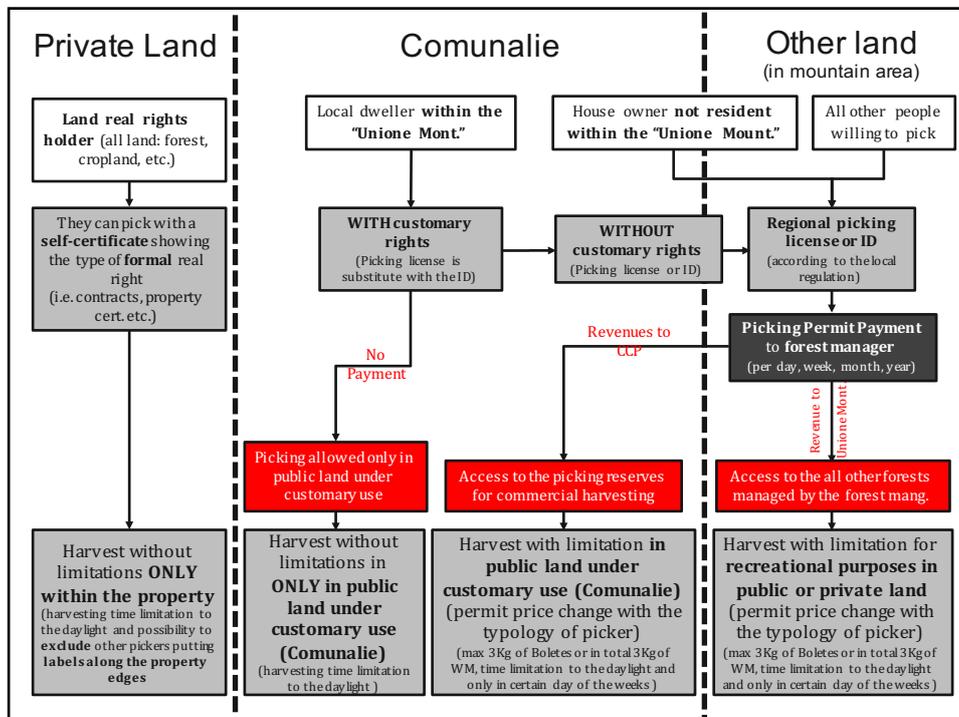


Recreational service



Product for Niche Market (IT-IT)

...let's see how the “institutions are set up!”



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Planning

“An issue that can
NOT
be CLEARLY
measured
will be difficult
to improve”

(unknown, because too obvious)

No data?!? Ai ai ai!



Planning

- It is quite hard to get statistically significant data to develop of robust **model** for enhancing NWFP productivity in the forest
 - Long time response of NWFP growth to the cut
 - High costs for research
 - High variability of forest condition
 - High variability of the weather
- Fragmented **interests** of SME dealing with NWFP
- Enormous **number of species** within NWFP concept

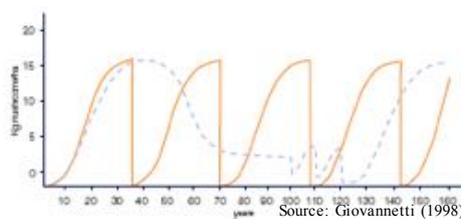
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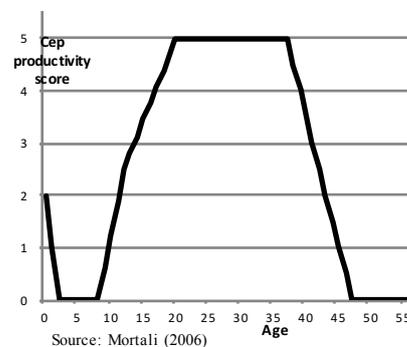
Planning



There are some theoretical models, but:

- **Theory** might be hard to test
- They are often **not applicable** due to the forest law (coppice vs stand forest)
- The forest manager **focus on timber** than other forest product or service
- High **variability** of the production on certain NWFP

Some models start to appear in literature, but we need a **fast techniques** to get also qualitative info



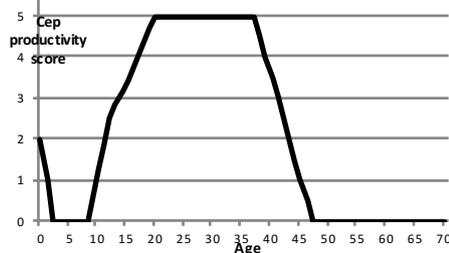
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(Why) Planning (?)



(Institution and) **NWFP models** are fundamental but not sufficient alone:

- The implementation of a **governance** strategy is very important on the economic performances
- The commercialization of service require even more effort on stakeholder **involvement**

Variables	Coefficient	Standard Error	LCL	UCL	Stat-T	p-value	H0 (5%)
Intercept	-11972.2	16529.0	-45494.5	21550.1	-0.72	0.473	accepted
Forest Surface	2.1	2.3	-3.1	7.2	0.81	0.418	accepted
Forest with PGI [1,0]	54294.5	15954.1	21938.0	86651.0	3.40	0.001	refused
Presence of FMP [1,0]	20667.0	22940.5	-25858.6	67192.6	0.90	0.373	accepted
Forest under CCP [1,0]	9600.0	21711.0	-34432.1	53632.0	0.44	0.661	accepted

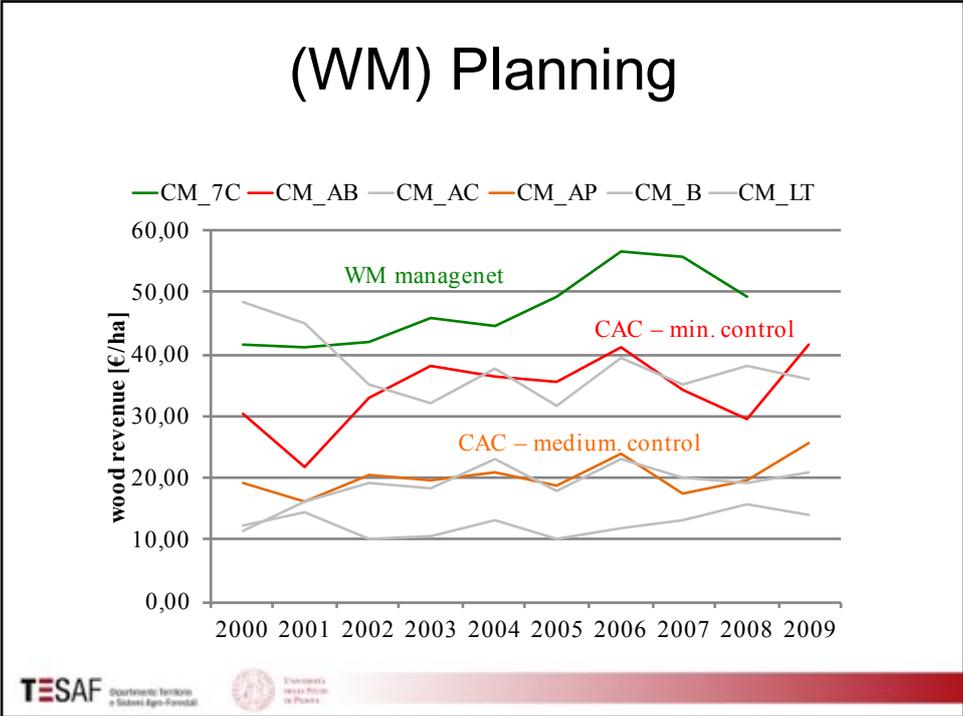
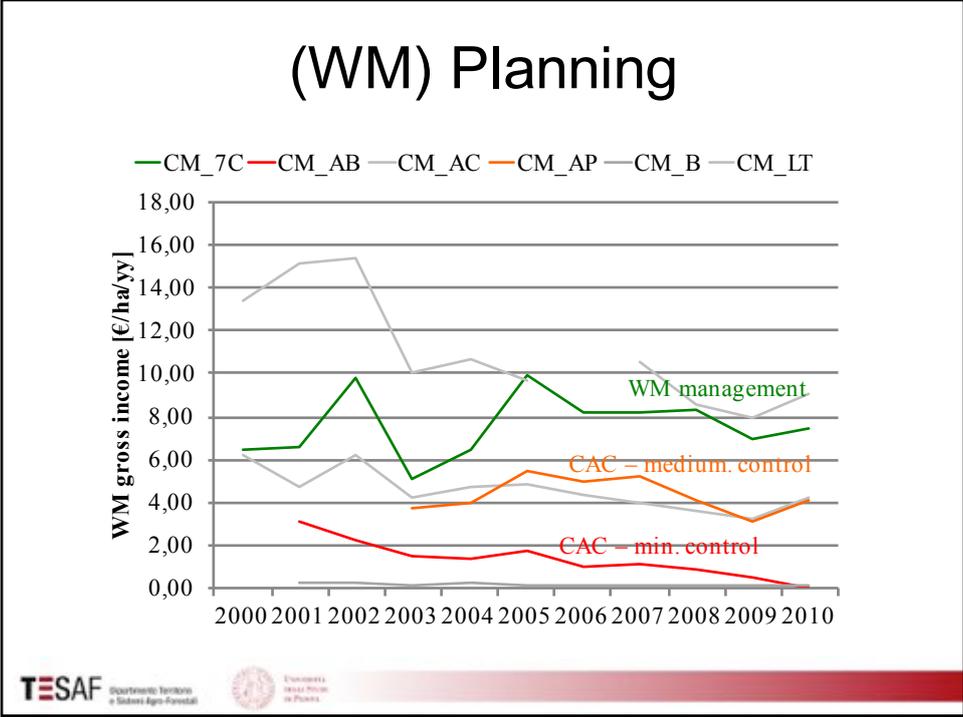
Model → Euro = - 11,972.2 + 2.1 * Surf. + 54,294.5 * IGP + 20,667.0 * FMP + 9,600.1 * CCP

R: 0.56 R²: 0.31 R²-adj: 0.24 N: 41 df: 4 Regr. p-value: 0.007

(WM) Planning

If we have data, we can design (properly) the a new idea of multi-purpose forest. Here an example from the Southern Alps, base on three economic performance of WM management:

- Command and control (CAC) → **minimal control**
- **CAC** → **medium control**
- **PES-like** → direct linkage between **WM manag.** and WM collection demand
 - Picking permit price based on the annual demand and forest WM provision
 - Need of demand and supply assessment



...getting to the end

- There is enough challenges in the near future of the forest sector: wild forest product (WFP) may enhance the capability of forest to create economic and social value (**need of new competences?**)
- Clear need to create **model** for WFP in forest
- New (and large) space for “*alternative*” **professional foresters**
- Well, let’s start to remove a “N” from “NWFP”: **marketing** and communication to rise awareness!

