Washington DC Transatlantic Landuse conference

Regulation and cross-compliance in EU:

compliance, costs, competitiveness and comparison with US, Canada and New Zealand

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Some citations about Cross-compliance

- “Cross-compliance reduces conflicts between other agricultural programs and conservation programs and does so in a way that appeals to many people’s sense of fairness” (Batie and Sappington, 1986, AJAE)
- “Cross-compliance is viewed as a potentially effective instrument to persuade laggards” (Stonehouse 1996, CJAE)
- “There are various constraints and trade-offs inherent in the very structure of a cross-compliance programme that limit what it can achieve” (OECD, forthcoming)

Content

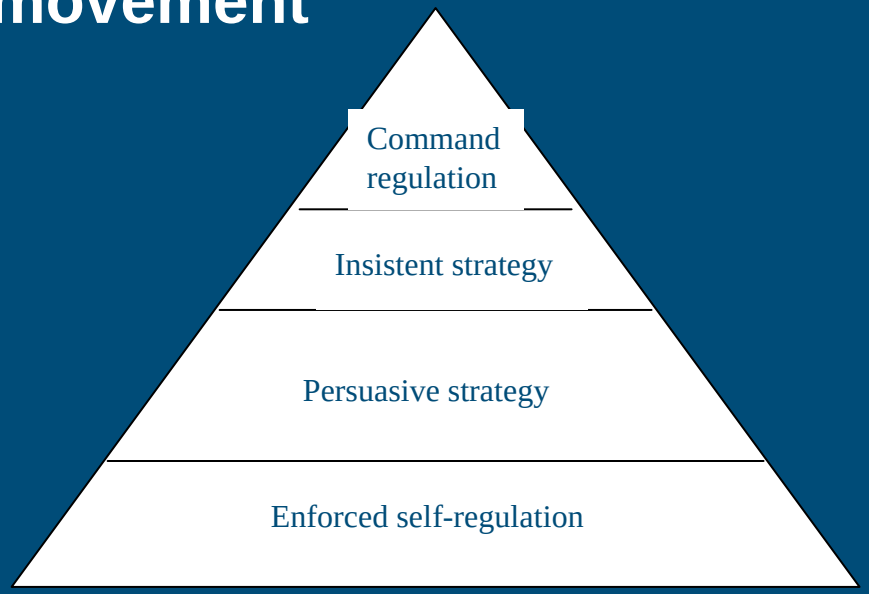
- Theory of regulation
- CC as a policy instrument
- Best estimates of degree of compliance
- Costs of compliance & competitiveness
- Key-competitors (USA, Canada, New-Zealand)
- Some conclusions

Regulation theory and practice

Ayres and Braithwaite (1992): **Responsive regulation**

Hampton: **Risk-based regulation**

OECD (1997), EU Action Plan (2002): **Better regulation movement**

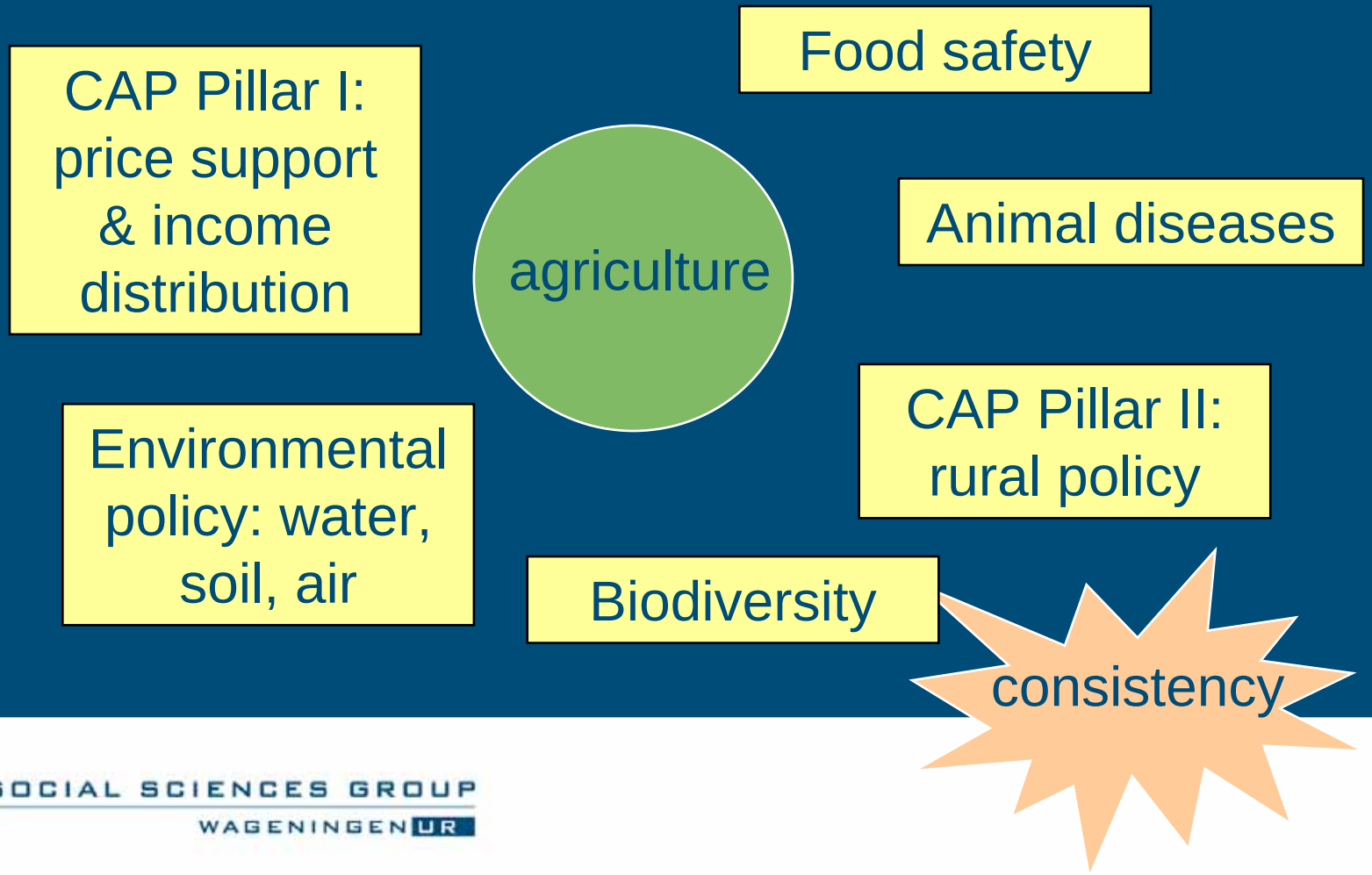


Enforcement strategies pyramid

Sanctions pyramid

EU ag's policy environment

- Policy mosaic influencing agriculture



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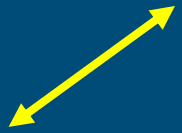
Cross-compliance

- 2003 CAP reform (Luxembourg Agreement)
  - price decline, decoupled payments, cross-compl.
- Additional enforcement mechanism
- Use direct payments to create leverage
- Economic/financial: profit loss (benefit) *vs* penalty (cost)



CAP: - price support ↓

- (decoupled) direct payments ↑

CC: - penalty ↑

- probability of detection ↑

Best estimates of degree of compliance

Environment	France	Germany	Italy	Netherlands	United Kingdom	Spain
Birds and Habitat Directives	n.a.; probably very high	management plans not yet in place in most areas	management plans not yet in place in most areas	very high	very high	very high
Protection of groundwater	not very high for exhaustible oils	very high	very high	high	very high	very high
Sewage Sludge Directive	very high	very high	very high	very high	very high	very high
Nitrate Directive	dairy farmers low and beef farmers extremely low	not high	extremely low; national implementation tool place only recently	low, (mainly due to recent change in the regulations)	very high	high
Identification and registration	**France**	**Germany**	**Italy**	**Netherlands**	**United Kingdom**	**Spain**
Identification and Registration of bovine animals	high, but not always within 7 days	very low	n.a.; databank working since 2005	very high	low	very high
Identification and Registration of ovine and caprine animals	extremely low; new regulation since 2005	very low	n.a.; databank working since 2005	high	very high	very high

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Best estimates of degree of compliance

Public, Animal and Plant Health	France	Germany	Italy	Netherlands	United Kingdom	Spain
Plant protection products	high, no precise estimate available	n.a	n.a.	high	n.a	n.a.
Food Traceability and Food Safety	n.a.	n.a.	n.a.	high	n.a.	n.a.
Hormones and beta-antagonists	n.a.	n.a.	n.a.	n.a.	nearly all farmers comply	n.a.
Notification of diseases	high, no precise estimate available	n.a	n.a.	high	n.a.; since 1 January 2006 imposed	n.a.
Animal welfare	France	Germany	Italy	Netherlands	United Kingdom	Spain
Housing of calves	expected to be high	expected to be high	expected to be high	expected to be high	expected to be high	n.a.
Housing of pigs	expected to be high	expected to be high	expected to be high	expected to be high	expected to be high	n.a.
Good Agricultural and Environmental Condition	France	Germany	Italy	Netherlands	United Kingdom	Spain
Soil erosion control	n.a.	very high	n.a.	not high	very high	very high
Maintain Soil Organic Matter	n.a.	very high	n.a.	not high	very high	very high
Soil Structure	n.a.	very high	n.a.	not high	very high	very high
Minimum Level of Maintenance	n.a.	very high	n.a.	not high	very high	very high

Estimated degrees of compliance: highlights

- France: 40% of water purification plants spread sludge illegally
- Nitrate: infringements for NL, Germ, Italy
- UK: main cause breaches failure to keep records; 2nd cause oversupply in NVZs
- I&R: 30% non-compliance no exception; loss of eartags part of problem
- Food safety: interaction with voluntary schemes; fear for inclusion of hygiene package (UK already imposed)
- Animal welfare: long term-approach, changes included in investment plans
- GAECs: also include pre-existing legislation; large share of farmers already voluntary did required actions

Estimated degrees of compliance: highlights

Improvement of compliance: NL

Theme	Estimated degree of compliance BEFORE 2005 in %	Estimated Seriousness of non-complicance	Estimated % of farmers who made CC –induced changes	Estimated degree of compliance AFTER 2005*) in %	Percentage improvement in rate of compliance as compared to pre-2005
Birds and Habitat Directive	85.3	Non-serious	4.6	95.4	12%
Protection of groundwater	81.5	Non-serious	18,5	88.9	9%
Sewage sludge Directive	100	Non-serious	0	100	-
Nitrate Directive**)	74.8	Serious	30	75	0.5%
Identification and registration of bovine animals	75.2	Non-serious	24.8	93.6	25%
Food traceability and food safety**)	70.1	Unknown	29.9	92.5	32%
Notification of diseases	86	Non-serious	10.3	89.7	4%
Housing of calves	75.7	Non serious	24.3	90.7	20%
Good agriculture and environmental conditions	80	Non-serious	35	88.6	11%

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Estimated degrees of compliance:

conclusions

- Degree of compliance is in general rather high for most SMRs
- Nitrate and I&R are exemptions: non-compliance rates up to 30% were found
- Lack and delay of macro-compliance is likely to at least temporary negatively affect degree of compliance at micro-/farm-level
- Part of problem in compliance with I&R is loss of eartags
- Degree of compliance is estimated to be high for GAECs; offset payments play a role
- A significant share of farmers already voluntary fulfils GAEC requirements
- Cross-compliance is effective: evidence was found showing that it improves degree of compliance
- Impact of CC on competitiveness is low => dairy-nitrate example (cost <1%; exp -2%; imp -2%)

Measuring costs of compliance

- Cost character
  - Ordinary costs of compliance
  - Additional costs of compliance

  GAECs
  SMRs

- Cost type
  - Compliance costs
  - Administrative costs
  - Financial costs

  paperwork
  time
  license

  - Operational costs
  - Investment costs

  abatement costs
  yield loss
  adjusted barn
  storage

- Other issues:
  - ex-ante or ex-post evaluation
  - accumulation of costs with interacting regulations

Costs of compliance

Environment	Best estimate	Remark
Birds and Habitat Directives	€33 - €190 / ha.yr	
Protection of groundwater	€0 - €30 / ha.yr	
Sewage Sludge Directive	€0 - €33 / ha.yr	
Nitrate Directive	€5000-€12000 /dairy farm.yr	storage, transport, rent additional land
Identification and Registration		
I & R of bovine animals	€750 - €1750 /dairy farm.yr	50-80 dairy cows/farm; incl. labor costs
I & R of ovine and caprine animals	€60 - €900 / farm.yr	20-300 sheep/farm
Public, Animal and Plant Health		
Plant protection products	€0 - €50 / farm/yr	cupboard, record keeping
Food Traceability and Food Safety	n.a., expected to be low	record keeping?
Hormones and beta-antagonists	n.a., expected to be low	opportunity costs may be higher
Notification of diseases	€0 / farm.yr	
Animal Welfare		
Housing of calves	n.a.	costs could be significant
Housing of pigs	n.a.	
GAEC		
Soil erosion control	€4 - €100 /ha.yr	water gullies
Maintain Soil Organic Matter		ploughing
Soil Structure		surface leveling, drainage
Minimum Level of Maintenance		cleaning ditches

Social costs could be high

Estimated costs of compliance: highlights

- France (Nitrate): costs of compliance for average intensive dairy farm amount €6300; beef farm €30.000; arable farm €0.
- Neth (Nitrate): cost of compliance for average dairy farm amount €2100; intensive livestock €5700; arable farm €3000 gain!
- UK (Nitrate): costs of compliance for average dairy farm amount €4950; pig farm about €1500
- Italy (GAEC): retention of landscape features could cost as much as €1750/ha (terraced surface)

Estimated levels and costs of compliance: a summary

Field	degree of compliance	estimated ordinary costs	potential improved compliance	potential induced costs
SMRs				
Biodiversity (Birds & Habitat Directives)	M	L	+	L
Protection of groundwater	H	L	0	0
Sewage sludge	H	L	0	0
Nitrate	M	S-H	+ +	S
I&R of bovine animals	M-H	L	+ +	L
I&R of ovine and caprine animals	M-H	L	+ +	L
Plant protection products	H	L	0	0
Food traceability and safety	?	?	?	?
Hormones and beta-antagonists	H	L	0	0
Notification of diseases	H	L	0	0
Housing of calves	?	S	?	?
Housing of pigs	?	S	?	?
GAECs				
Soil erosion control	? / H	-	+ +	L
Maintain soil organic matter	? / H	-	+ +	L
Soil structure	? / H	-	+ +	L
Minimum level of maintenance	? / H	-	+ +	L-S

M : moderate; H : high; L : low; S : significant; ? : unknown

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Estimated levels and costs of compliance: conclusion

- The Nitrate and Animal Welfare requirements can impose significant ordinary costs
- Because SMRs reflect pre-existing legislation the additional costs are in principle zero
- As far as CC improves compliance it induces ‘additional costs’ (usually low)
- Costs of compliance could be very diverse depending on farm structure, farm management practices, geographical and bio-physical conditions
- Cost of compliance with the GAEC requirements are estimated to be low (excl.maintenance?)

Key-competitors (USA, Canada, New-Zealand)

Theme	US	Canada	New Zealand	EU
Biodiversity	No specifics	Protection of habitats	Decline in indigenous biodiversity; habitat preservation	Protection and preservation of habitats
Environment	Water quality; environmental pressure from Concentrated Animal Feeding Operations	Pesticide use, water (save drinking wells, increasing importance of nitrate contamination, and air quality (odour)	Degrading water quality; increasing importance of nitrate contamination	Nitrate, heavy metals, water quality
Health	Food safety	Food safety; hormone growth promoter products use; animal disease surveillance	Food safety; hormone growth promoter products use;	Food safety; hormone growth promoter products use; registration and traceability of animals; contagious animal diseases; use of plant protection products;
Animal welfare	Long-distance transportation	Minimum housing requirements; intensive livestock farming practices; humane transportation and slaughter	Minimum requirements, dry sow stall	Minimum space, and minimum requirements regarding other animal 'needs'
Good agricultural and environmental practice	Mainly erosion	Erosion, and soil quality (has improved already)	Erosion and sustainable land use (vegetation clearance ad soil disturbance)	Erosion, organic matter content, soil structure

Key-competitors (USA, Canada, New-Zealand)

Policy instrument	US	Canada	New Zealand	EU
Direct regulation	In particular applied for regulation food safety, plant protection products	In particular applied for regulation food safety, plant protection products	In particular applied for regulation food safety, plant protection products	Dominant kind or regulation applied
Cross-compliance	Compliance only required for cost-sharing assistance with best management practices	Farmers can receive payments if they comply with standards embodied in a voluntary codes of practice	Instrument not used	Obligatory cross-compliance since Luxembourg agreement (2003) covering biodiversity, environment, health and animal welfare
Taxes and subsidies	Financial incentives linked to voluntary conservation programs	Financial incentives linked to specific 'good' agricultural practices	Some financial assistance for farm erosion schemes	Selectively used to encourage collection of used transmission oil, a.o.; implicit subsidisation of farm assistance (see below)
Technical assistance	Plays an important role, in particular wrt environment and good farming practices	Plays an important role, in particular wrt environment and good farming practices	Plays an important role, in particular wrt environment and good farming practices	Farm advisory service complementary to cross-compliance, will be in place in 2007
Contracts and voluntary schemes	Play an important role in particular wrt environment, animal welfare, registration of animals	Play an important role in particular wrt environment, animal welfare, registration of animals	Play an important role in particular wrt environment, animal welfare, registration of animals	No use of voluntary schemes for achieving minimum standards as in the CC package, instrument only used for achieving 'services' going beyond minimum standards

Comparative results: United States

Theme	Field	intensity of regulation	degree of compliance	costs of compliance
Production intensity (average)			medium	
SMRs Environment	Biodiversity (Birds & Habitat Directives)	- - -	unkown	low
	Protection of groundwater	- -	high	low
	Sewage sludge	- -	high	low
	Nitrate	- - -	high	low
Identification and registration of animals	I&R of bovine animals	- - -	high	low
	I&R of ovine and caprine animals	- - -	high	low
Public, animal and plant health	Plant protection products	-	unknown	low
	Food traceability and safety	- -	unkown	unkown
	Hormones and beta-antagonists	-	unknown	low
	Notification of diseases	comparable	high	negligable
Animal welfare	Housing of calves	not relevant	not relevant	not relevant
	Housing of Pigs	not relevant	high	not relevant
GAECs	Soil erosion control	- - -	high	low
	Maintain soil organic matter	not relevant	not relevant	negligable
	Soil structure	not relevant	not relevant	negligable
	Minimum level of maintenance	not relevant	not relevant	negligable

Conclusions / propositions

- A balanced regulatory impact assessment is currently missing (but is less relevant for CC than for SMRs and GAECs)
- CC enforcement ‘pays’ if cost of compliance are high, current compl.rate is low, social costs of non-compliance are high, monitoring is costly, MS are lacking
- CC is effective instrument for Commission to make achieved compliance levels less dependent from national regulators (governance structure)

Conclusions / propositions

- Cross-compliance is a policy instrument to improve consistency between support policies and environmental and nature policies
- The EU's key competitors rely more on voluntary action and technical assistance with fin.incentives
- Impression: increasing reliance on regulation in future is expected in order to achieve policy goals
- A complete RIA needs to take into account benefits and aims