

# **Lessons from the evaluation of the Austrian Rural Development Programme**

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## Background information

- Rural areas in Austria
- Austrian RDP 2007-2013

## Indicators in CMEF

## Changes vs effects

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- Gross, incentive, net effects

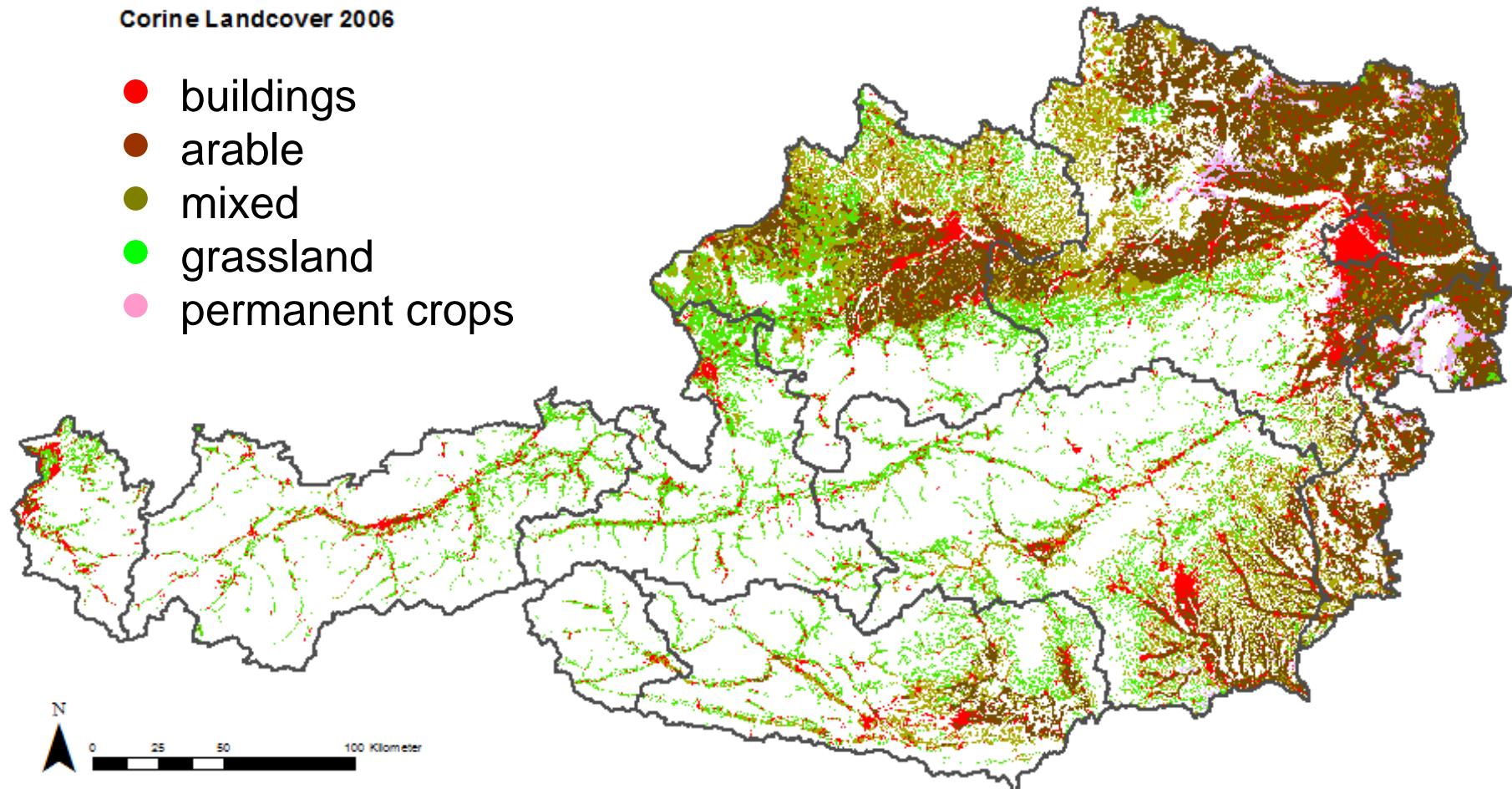
## Conclusions

- Evaluation of M121
- Effects
- Objectives

# Land cover in Austria, 2006

Corine Landcover 2006

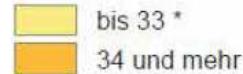
- buildings
- arable
- mixed
- grassland
- permanent crops



# Cattle in Austria, 2010

## Agrarstrukturerhebung 2010 Bestand von Rindern nach Gemeinden

Durchschnittliche Zahl  
der Rinder pro Halter



Anzahl der Rinder  
pro Gemeinde

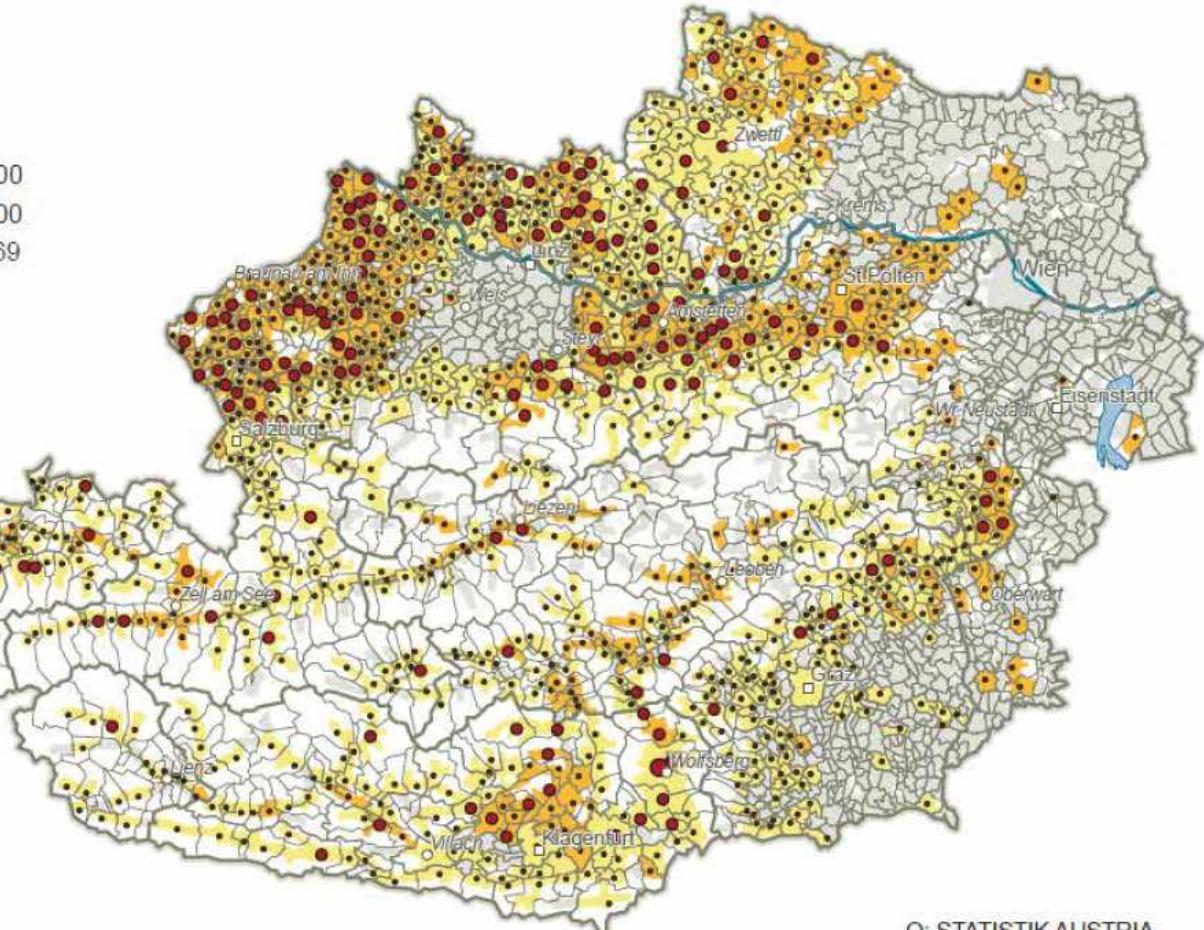
- 500 - 2.500
- 2.501 - 10.000
- 10.001 - 11.669

\* Mittelwert der Gemeinden: 33

Gemeinden mit weniger als  
500 Rindern

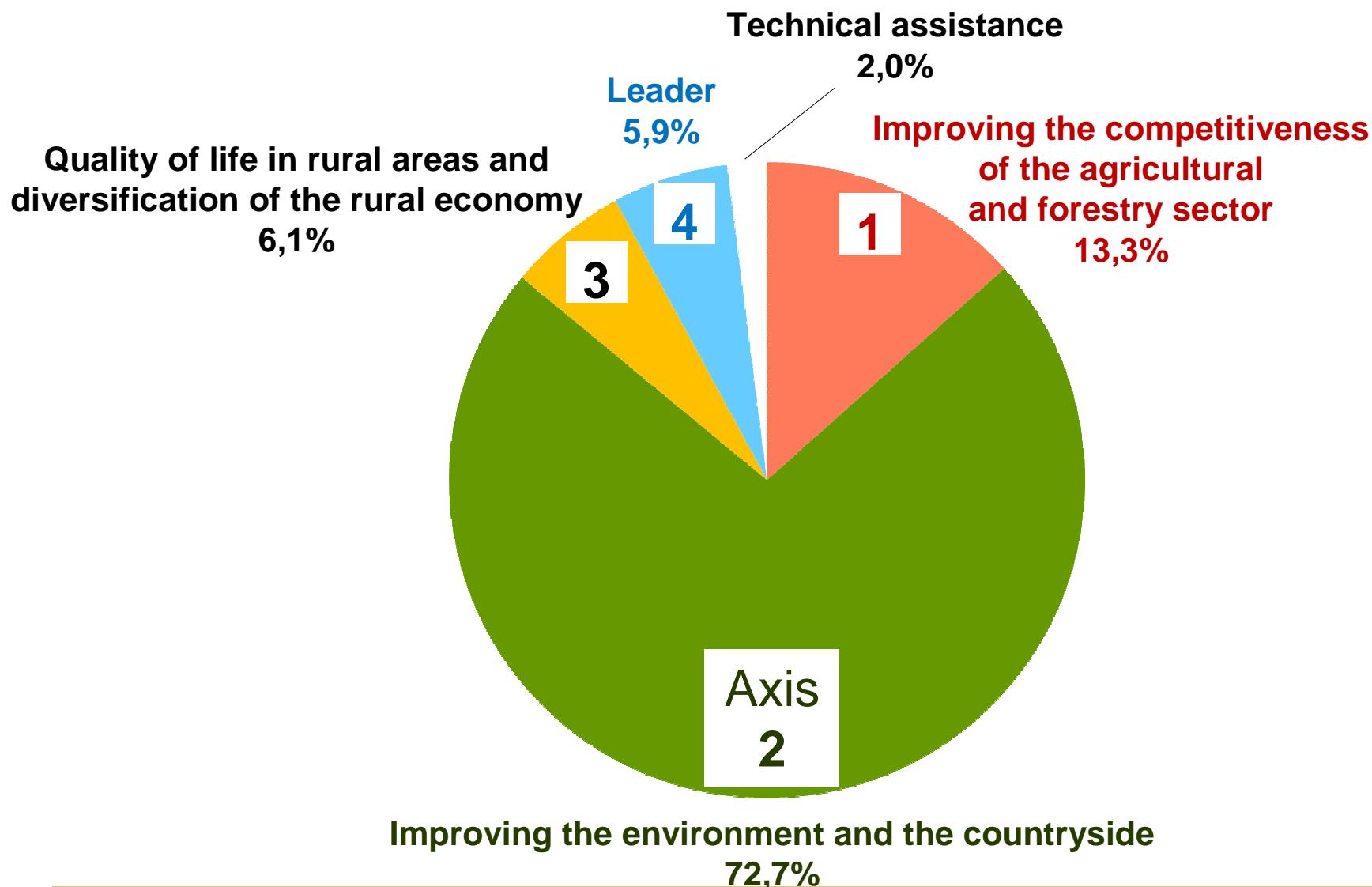


- Grenzen der Bundesländer
- Grenzen der Bezirke
- Grenzen der Gemeinden



Q: STATISTIK AUSTRIA

# Budget RD 07-13



# Indicators

59 Baseline indicators:

23 context related  
36 target related

... **Targets**

... Inputs (payments)

83 Output indicators (participants, ha, LU, ...)

16 Result indicators

7 Impact indicators

... Additional indicators

Statistics

Monitoring

Evaluation

# Result indicator 2

*Evaluation guidelines:*

“This indicator measures **the increase** in gross value added (GVA) of agricultural, food or forestry holdings/enterprises that are supported.

Important is that we measure **the gross effect**. This means that it can be possible that a change in GVA over different years can also be explained by other factors than the received support.”

“Collection method/good practice: Collect per supported holding the costs and revenues ...”

# Common impact indicators

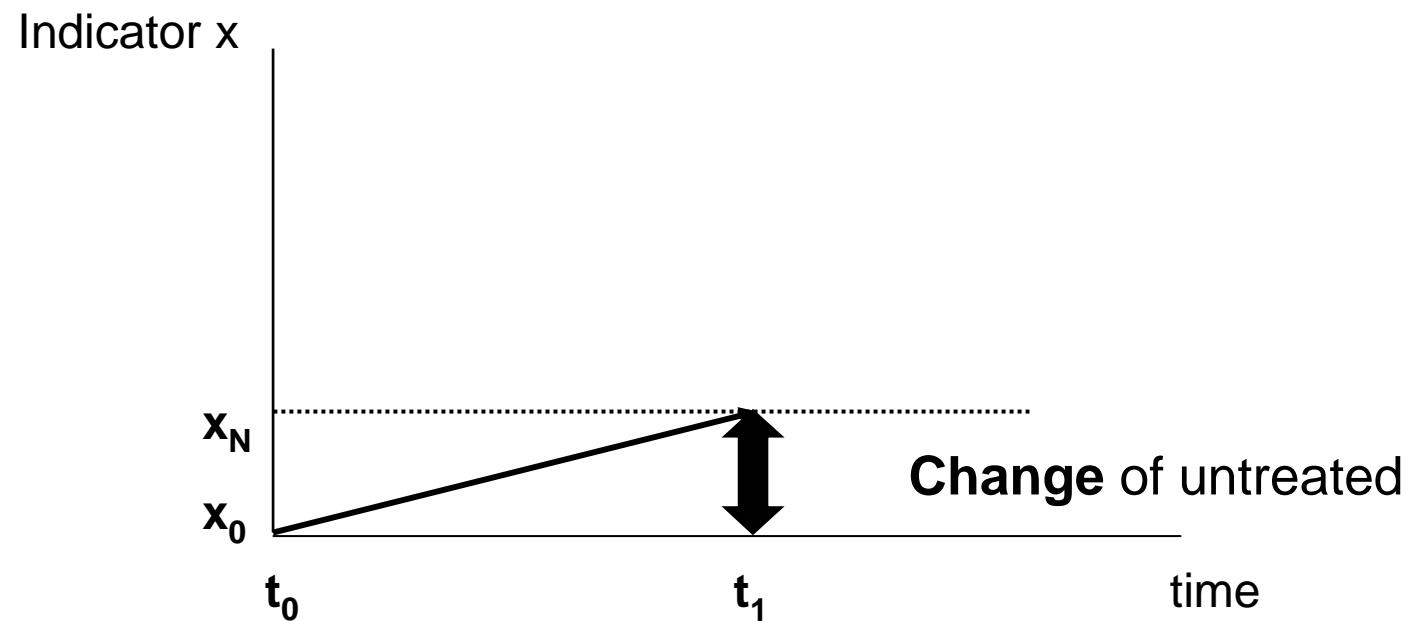
## IV. COMMON IMPACT INDICATORS

		Indicator	Axis
1	Economic growth		1
2	Employment creation		
3	Labour productivity		
4	Reversing biodiversity decline		2
5	Maintenance of high nature value farmland and forestry		
6	Improvement in water quality		3 4
7	Contribution to combating climate change		
?	Quality of life		

# Change (of untreated)

## Change for non-participants

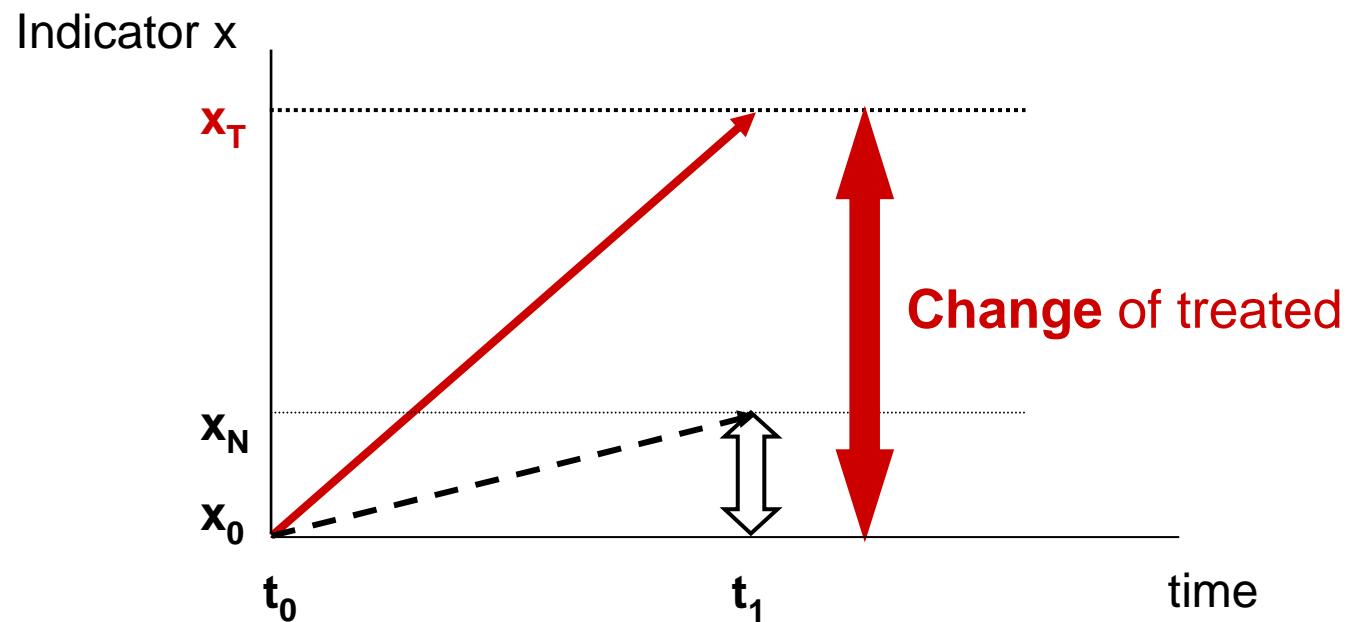
$$x_N - x_0$$



# Change (of treated)

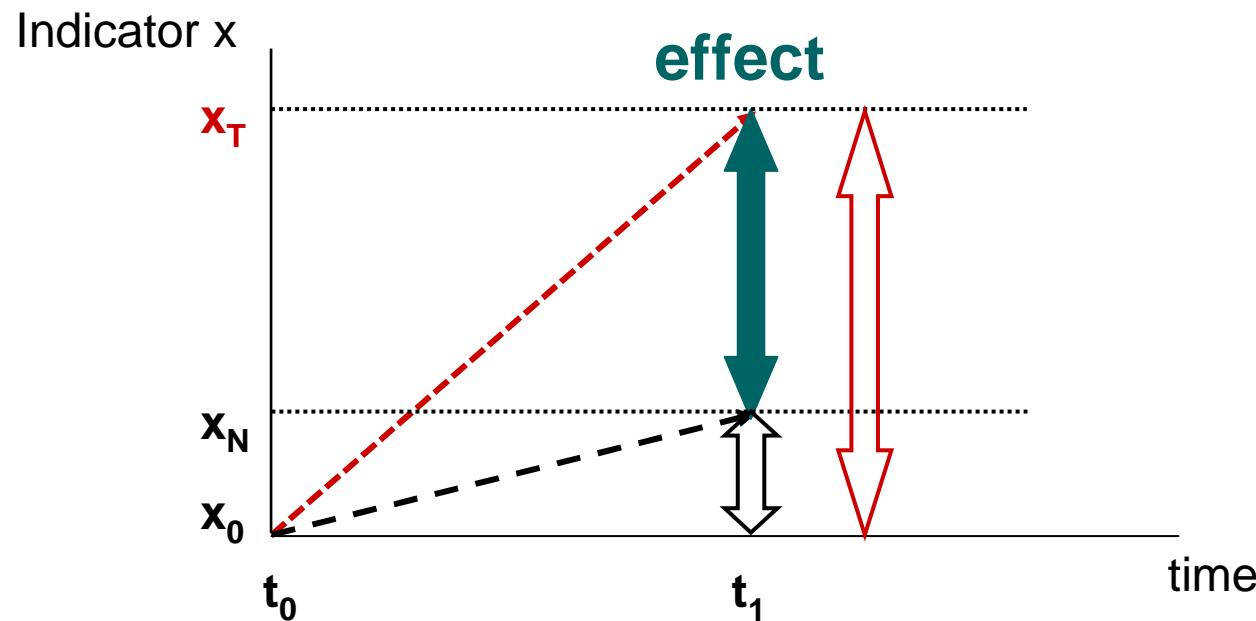
## Change for participants

$$x_T - x_0$$



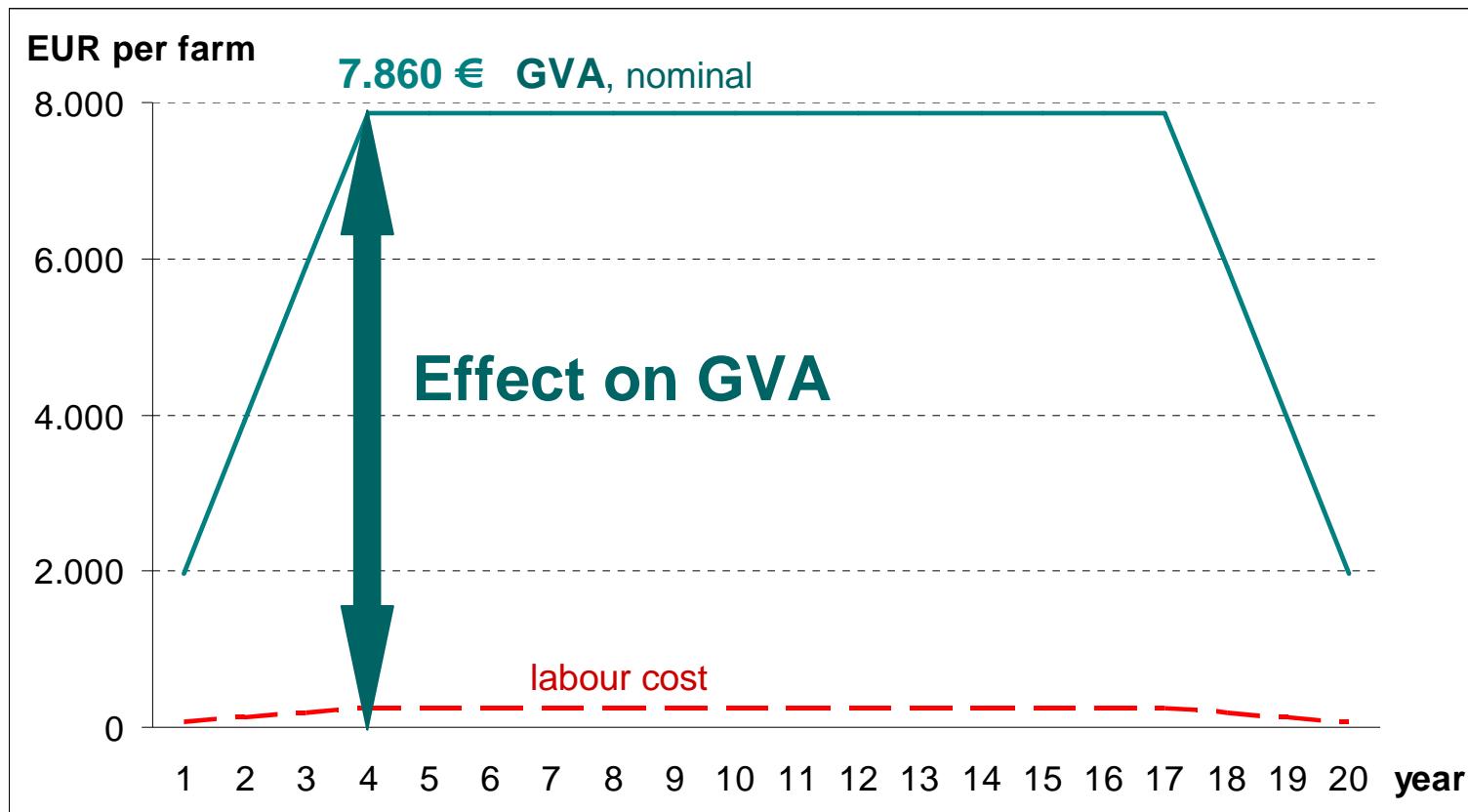
# Gross effect

**effect = difference of changes**



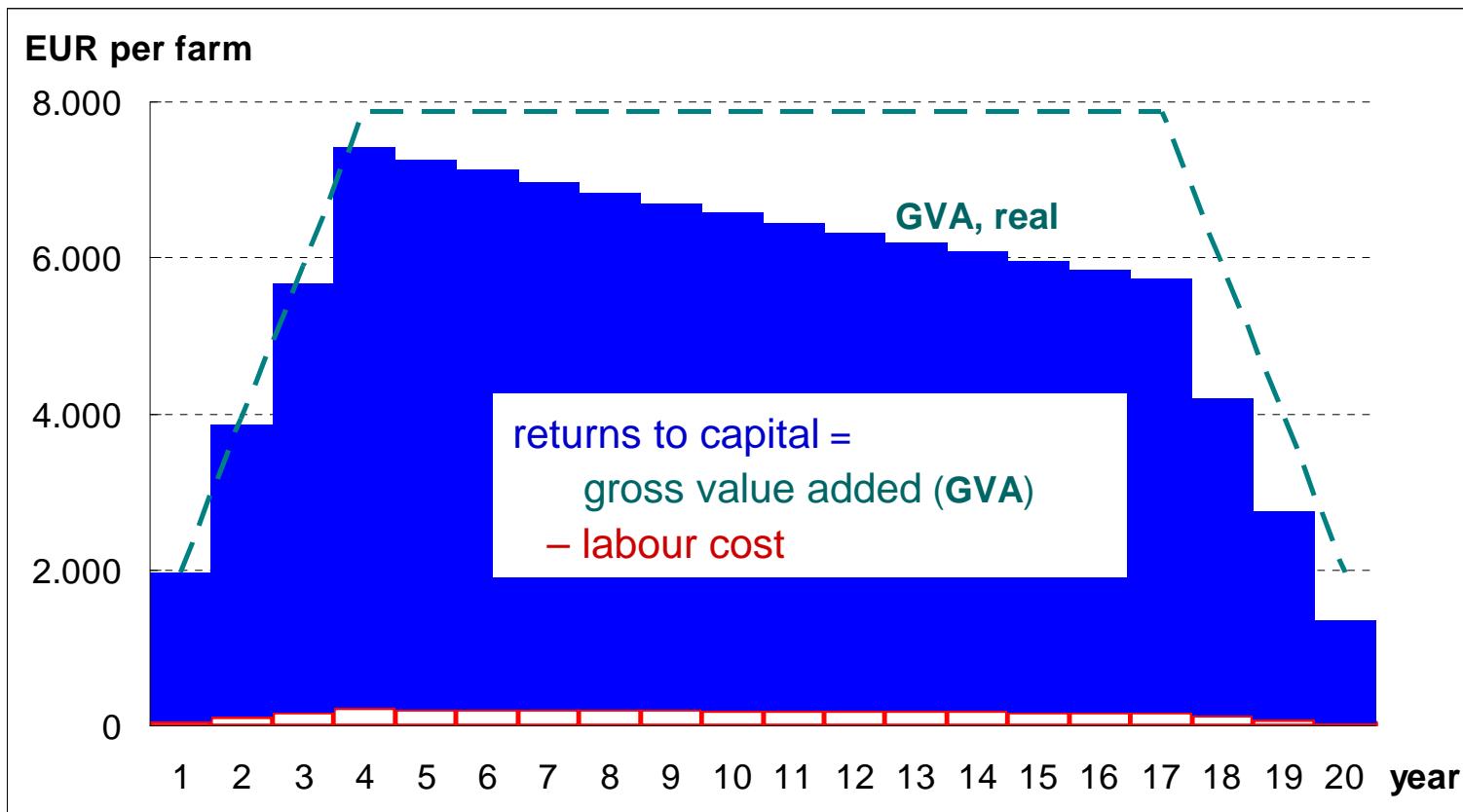
# Gross effects per holding (of M121) on

**Gross value added** (during the utilisation period of the investment)



# Gross effects per holding (of M121) on

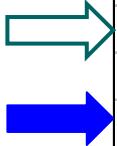
**Returns to Capital**, at base value (interest rate = 2 %)



# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€
GVA nominal	134.000
<b>GVA real (2 %)</b>	<b>111.000</b>
labour costs real	3.000
<b>returns to capital real (benefit)</b>	<b>108.000</b>



# Benefit-Cost Analysis of investment support

## Effects of measure M121

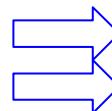
On average per holding (€)	€
GVA nominal	134.000
<b>GVA real (2 %)</b>	<b>111.000</b>
labour costs real	3.000
<b>returns to capital real (benefit)</b>	<b>108.000</b>
<b>investment</b>	<b>52.000</b>



# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€
GVA nominal	134.000
<b>GVA real (2 %)</b>	<b>111.000</b>
labour costs real	3.000
<b>returns to capital real (benefit)</b>	<b>108.000</b>
<b>investment</b>	<b>52.000</b>



<b>benefit / cost</b>	<b>2,1</b>
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# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€		farm level
GVA nominal	134.000		
GVA real (2 %)	111.000		111.000
labour costs real	3.000		
returns to capital real (benefit)	108.000		108.000
investment	52.000		
of which government		11.000	
farm manager			41.000



benefit / cost	2,1		2,6
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# Benefit-Cost Analysis of investment support

## Effects of measure M121

Gross effects

On average per holding (€)	€		farm level
GVA nominal	134.000		
GVA real (2 %)	111.000		111.000
labour costs real	3.000		
returns to capital real (benefit)	108.000		108.000
investment	52.000		
of which government		11.000	
farm manager			41.000
of which because of support			
investment without support			?

# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€		<b>farm level</b>	<b>without support</b>
GVA nominal	134.000			
<b>GVA real (2 %)</b>	<b>111.000</b>		111.000	65.000
labour costs real	3.000			
<b>returns to capital real (benefit)</b>	<b>108.000</b>		<b>108.000</b>	63.000
<b>investment</b>	<b>52.000</b>			
of which <b>government</b>		11.000		
<b>farm manager</b>			<b>41.000</b>	
<b>of which because of support</b>				11.000
<b>investment without support</b>				<b>30.000</b>

# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€	Gross effects		without support	Net effect
		farm level			
GVA nominal	134.000				
GVA real (2 %)	111.000		111.000	65.000	46.000
labour costs real	3.000				
returns to capital real (benefit)	108.000		108.000	63.000	45.000
investment	52.000				
of which government		11.000			11.000

# Benefit-Cost Analysis of investment support

## Effects of measure M121

On average per holding (€)	€	Gross effects		without support	Net effect
		farm level			
GVA nominal	134.000				
GVA real (2 %)	111.000		111.000	65.000	46.000
labour costs real	3.000				
returns to capital real (benefit)	108.000		108.000	63.000	45.000
investment	52.000				
of which government		11.000			11.000
farm manager			41.000		
of which because of support				11.000	
investment without support					30.000
benefit / cost	2,1		2,6	2,1	4,1




# Conclusions: Investment support

## M121 – Modernisation of agricultural holdings

- most important measure after agri-environmental payments and compensatory allowance
- **increases Gross Value Added** but (almost) **not employment**
- Benefit-Cost-Ratio = 2,1
  - Investments overall are **productive**
- Benefit-Support-Ratio = 4,1
  - Support is highly **productive**
- Who benefits?
  - Beneficiaries investments become more **profitable**
  - **supply increases**
    - prices decrease
    - **consumers benefit (globally)**

# Conclusions: Effects

**effects** are not changes

**efficiency** depends on **net effects**

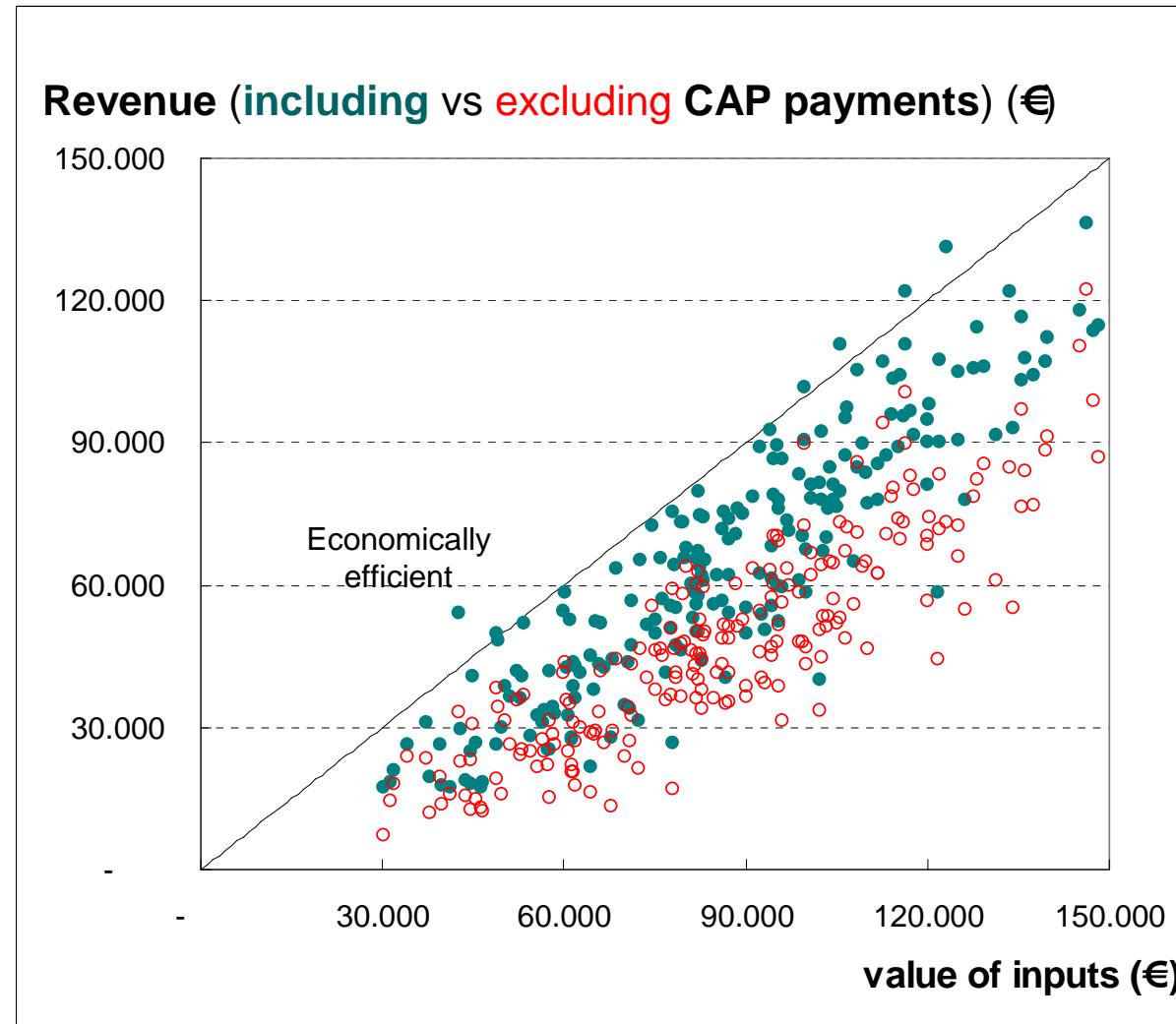
**effects** depend on

- **theory**, model, parameters (**assumptions** and/or econometric estimates)
- **deadweight** (incentive)
  - profitability (market forces, weather, ...)
- **time scale**
  - transitory, annual, lifetime, infinite (multipliers), dynamic?
- **domain** (target group, region, sectors, markets, environment, ...)
  - dislocation, substitution
- **objectives** (indicators to quantify progress)

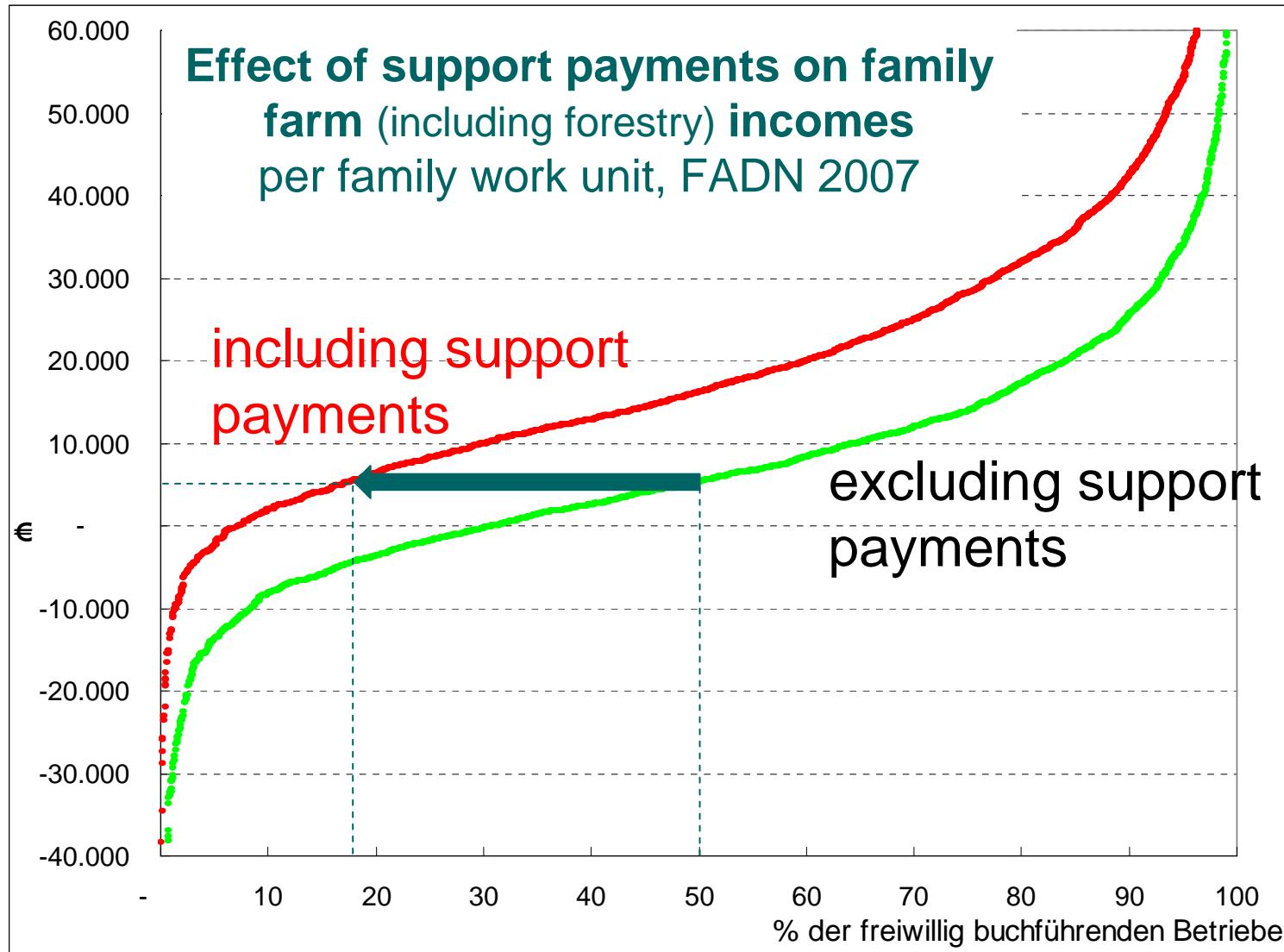
**objectives** of government intervention

- **public goods** (infrastructure, environment, quality of life, ...)
- **distribution** (personal, temporal, regional, sectoral, ...)
- correcting market failures

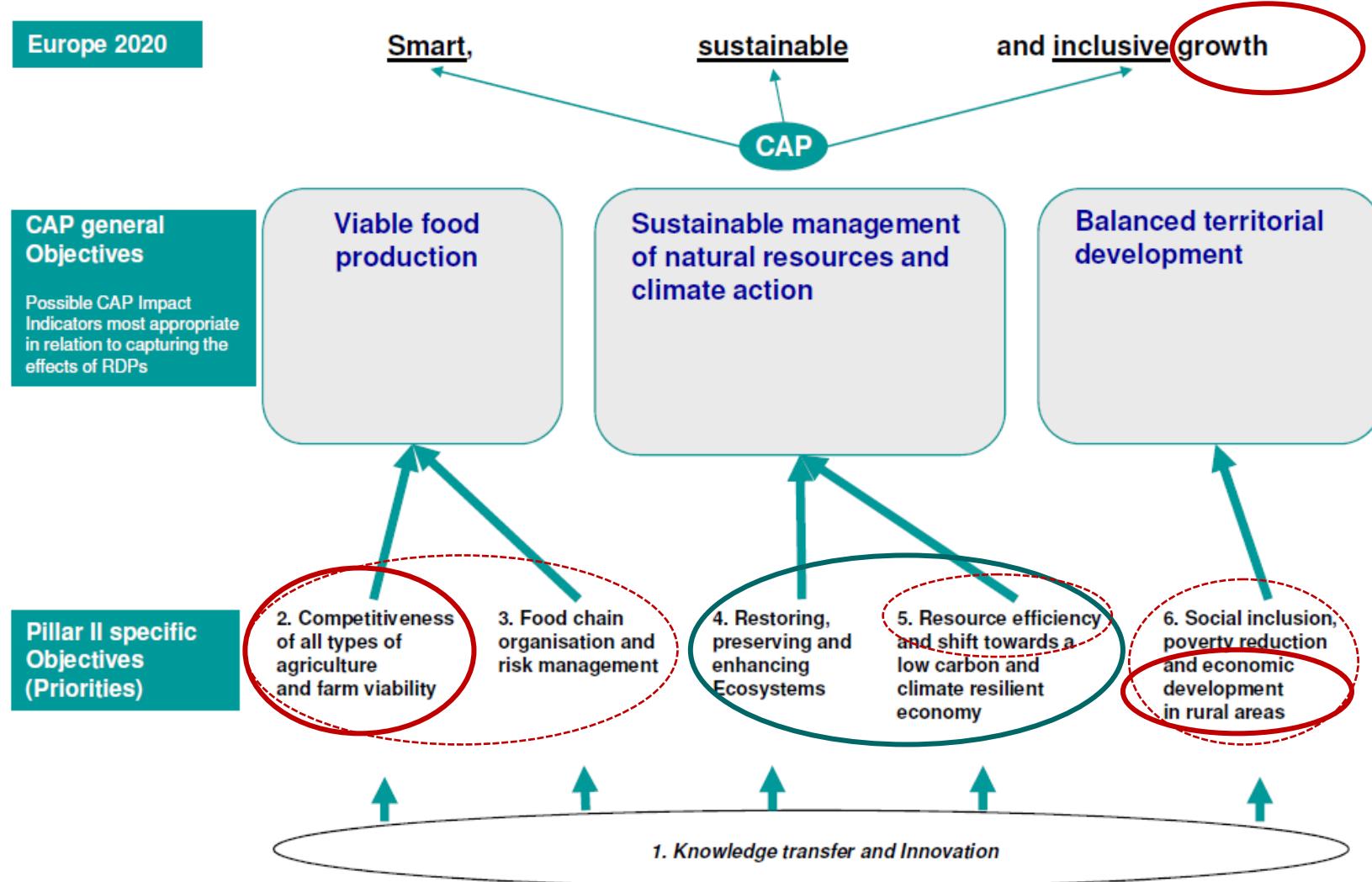
# Revenue / cost of Austrian dairy farms



# Distribution of family farm incomes in Austria



# Conclusions: objectives



# GVA, NVA and environmental services

