



SIXTH FRAMEWORK PROGRAMME  
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*Modelling agricultural policies:  
state of the art and new  
challenges –  
Indication for future research  
and needs*

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## Indication for future research

We have to distinguish between:

### “Basic research”

1. Better definition of the socio-economic framework and technological context.
2. Better definition of methodological tools able to reply to policy needs under the constraints of data (in quantity and quality).
3. Make the models more user-friendly by investing in Information Technology

### “Applied research”

1. Ex ante evaluations
2. Ex-post evaluation



## Indication for future research: *basic research*

- 1) Better definition of the socio-economic framework and technological context.

If models should represent the reality, modellers have still difficulty to give to models an appropriate framework under the socio-economic perspective.

Models represent “a part of the picture” but not the whole picture.

*Where is the other part of the society?*

*Where are the transaction cost?*

*Where is the other part of the production system?*

*How can we integrate different theoretical approaches and methodological tools?*



## Indication for future research: *basic research*

Concerning technology,

there are still many researches to develop in order to define in a better way the technological set used by farm holdings for agro-environmental impact analysis and for policy analysis too.



## Indication for future research: *basic research*

- 2) Better definition of methodological tools able to reply to policy needs under the constraints of data (in quantity and quality).

The methodological approaches presented in the seminar are enough in order to face the major agricultural policies problems?

*Which level of improving we still have to aspect?*

*How to move toward macro dimension starting from micro economic approach?*



## Indication for future research: *basic research*

Possible level of improving

|                | Mathematical programming | Econometric models | Spatial analysis |
|----------------|--------------------------|--------------------|------------------|
| Micro economic | Elevated                 | Low                | Very High        |
| Macro economic | Elevated                 | Elevated           | Very High        |

Do we need a more interdisciplinary approach?



## Indication for future research: *basic research*

### 3) Make the models more user-friendly by investing in Information Technology

We need great improvement of Information Technology in the process of:

- input/output data management;
- facilities in writing programs;
- facilities in modify set of constraints;
- interface with GIS systems.

MicroWave and GTAP examples !!!



Indication for future research: *applied research*

### **1. Ex ante evaluations**

Policy effects on food supply and supply chain;

Policy effects on internal/external farm resources;

Policy effects on public resources (environmental consequences, financial resource);

Policy effects on farm household welfare and on farmer sustainability;

Policy effects on relationship between agricultural world and “the other part of the society”;

Policy effects of First Pillar measure on rural development process;



## Indication for future research: *Applied research*

### **2. Ex-post evaluation**

Evaluations of effectiveness and efficiency of First and Second Pillar measure concerning the public financial contribution and the general welfare reached by farm household and by the whole society.

- Specific Ex-Post evaluation for First Pillar policy tools
- Specific Ex-Post evaluation for Second Pillar policy tools



## Indication for future research: needs

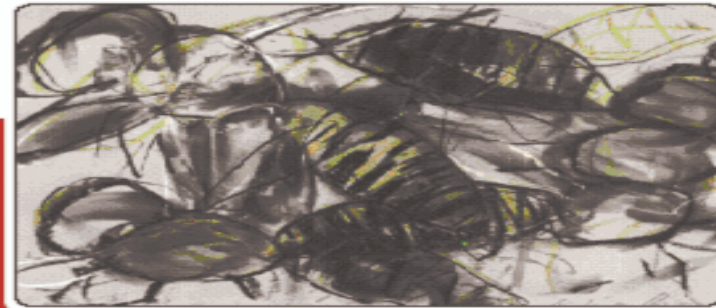
### **Needs**

1. More co-operation and exchange among researchers;
2. More co-operation and exchange between researchers and stakeholders + policy makers;
3. Multidisciplinary approach;
4. More availability of data and possibility to integrate them with databank of different nature and goals.

Thank you very much !!!

## Modelling Agricultural Policies: State of the Art and New Challenges

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