



MINISTERO DELL'AMBIENTE  
E DELLA TUTELA DEL TERRITORIO E DEL MARE

# The problems in the dish

Improve the performance of food chains

# Contents of the presentation

- Summary of problems in the "dish"
- The ongoing activities of the Ministry of the Environment.

# The problems

- The environmental impacts
- The socio-economic issues
- The health issue

# European data on the impacts (\*)

Environmental impact of final consumption of the various sectors

- 31% food and beverage
  - Meat and dairy products 25%
  - Other 6%
- 23.6 buildings
- 18.5 transportation
- 26.9% Other sectors

(\* *IMPRO study*)

# Additional data concerning Italy

- ISPRA report 2010 on the contamination of water by pesticides.
- continuous soil and minerals loss, because of the significant changes made to the structure of the soil by cultivation and irrigation techniques and the use of synthetic fertilizers
- gradual reduction of the water holding capacity of soils which in recent decades has been reduced by 30%;
- decrease of the ion exchange capacity (less able to retain and drop them minerals and nutrients, less ability to retain and release organic substance);

# Health questions

- WHO has defined the food as one cause of non-communicable diseases
- Many studies confirm that excessive use of animal protein increases the incidence of tumors.
- In the world as well as about 850 million undernourished people, there are about 2 billion people with serious weight problems and consequent diseases

# One thing to think about: Meat consumption in Italy

- 1960            29,4 kg/y procapite
- 1970            54,3
- 1980            74,6
- 1990            83,7
- 2000            91,0
- 2008            101,0

*Question: can we define "sustainable" this trend?*

# Socio-economic problems

- The current model of agro-industrial sectors, characterized by intensive farming and agricultural systems, highly dependent on fossil fuel consumption, combined with speculation, and excessive influence of the distribution sector, has, as a fact, compared to a non-some reduction in food prices, the following serious problems:
  - A sharp reduction in specific revenue producers
  - A strong marginalization of family farming models (which is still the form of farming that feeds most of the planet)
  - The massive abandonment of land by farmers in "developing countries", which has the effect of creating unlivable megalopolis.
  - The abandonment, even in Italy, of important crops such as wheat, citrus fruits, etc ... (Italy imports more than one-third of the wheat)



# Reflections: where do we stand?

- With rising oil prices, this agricultural model is at risk
- If they are not identified alternative systems to maintain soil fertility, we will start inexorably toward a major crisis;
- Several field studies have demonstrated significant differences in outcome between the current use of soil and synthetic fertilizers and a more conservative use of the soil and the sensible use manure and water.
- They are significant differences, in favor of the uses preservatives, for many parameters of investigation: the organic substance content, the ion exchange capacity (in time and in space), a better response both to the phenomena of erosion and soil compaction, a reduced release of CO<sub>2</sub>

# Needs

- an approach able to assess all aspects of sustainability (environmental, social and economic);
- An approach that, can contribute to the functioning of models and tools "Governance" at the local and national level

# What should we do?

- Reduce oil dependency of agriculture; Produce energy rather than consume it.
- Restore the humus (blocking CO<sub>2</sub> instead of releasing CO<sub>2</sub>)
- Defending agricultural work, both to enhance the food supply chains, both to protect the territory.
- Integrate farming with other activities in view of a rational government of the territory
- Revive the role of farmers as stewards of the land
- This approach generally requires more commitment and competence of farmers and a greater number of farmers

# What should we do?

- Rethinking the distribution models by including rules and controls, using economic mechanisms also to defend the quality of products, to internalize environmental costs, and to defend the work. (right price, life cycle costing, GPP)
- Enhance, promote innovative experiences on the consumption and distribution
- Revise lifestyles and revive the "Mediterranean diet"
- Relocate the food system
- Systems policolturali sustainable, intelligently designed have been shown to have a higher yield to monocultures, both from the point of view of production, both from the environmental point of view, that, above all, from the economic point of view social

# The work plan of the Ministry of the Environment

- Ongoing activities
  - Application of Green public procurement in public catering
  - Fight food waste (project PIMPAS)
  - Italian LCA database on food chain
  - European project "environmental footprint"
- System actions in the program (waiting for the new law)
  - Action Plan on sustainable consumption and production
  - The environmental enhancement of agro-industrial sectors

# The environmental improvement of the agro industrial supply chains

- The attention to the product and the approach "life cycle"
- Analyze, evaluate, improve and communicate the sustainability of agro-industrial supply chains
- The attention to the territory and production chains that are grafted on it in an appropriate way
- A shared approach with stakeholders to reduce the environmental impacts along the chain of production, distribution and consumption, through:
  - Disciplinary production improved,
  - Improved distribution models
  - Development of new models of distribution and consumption (diet, seasonal products, short chains ... ..)



tanks for the attetion

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