



# **Stakeholders involvement for reduction of diffuse pollution : an overview of strategies and tools in France**

**Laurence Amblard  
(Irstea, UMR Métafort, France)**

**Workshop on diffuse pollution sources  
EUROPE-INBO 2015  
October 21, 2015, Thessaloniki, Greece**



## Diffuse pollution in France

- Mostly diffuse pollution from agriculture (nitrates, pesticides)
  - To a lesser extent, domestic and collective sources (waste water, pesticide use)
- Trends in nitrate and pesticide pollution
  - Nitrate rates remain high in surface waters
  - Nitrate and pesticide rates increase in ground waters



# Policy challenges

- Diffuse nature of pollution
  - Targeting agricultural practices
    - ✓ Reductions in organic and mineral nitrogen fertilization, decrease of pesticide use, establishment of riparian buffers...
- High spatial variation in agricultural impact
  - Adapting measures to local conditions for an effective reduction of pollution
- Public good characteristics of pollution control
  - Changing farmers' incentives



# Water management planning

- Management plans at the river basin level (SDAGE)
  - River basin committees : representatives of local governments, state agencies, water users and environmental associations
  - Objectives for water use and protection including objectives for the control of diffuse pollution
  - Programs of measures
    - “Basic” measures : European and national regulations (e.g. EU Nitrate Directive)
    - Additional measures for reaching WFD objectives



## EU Nitrate Directive

- The main regulatory tool for the control of nitrate diffuse pollution
  - Action programs with mandatory measures
    - ✓ Nitrate Vulnerable Zones
- Constraints on implementation :
  - Insufficient designation of vulnerable zones and non-conformity of action programs
  - Low awareness of requirements by farmers
  - Difficulties in controlling and enforcing compliance



## EU Nitrate Directive

- A redefinition of the implementation process of the Directive
  - Designing Nitrate Vulnerable Zones
    - ✓ 55% of agricultural area (2012)
  - A core program defined at the national level and regional programs
    - ✓ State regional authorities
    - ✓ Regional technical groups (state agencies, farm organizations, technical institutes, agricultural cooperatives, Water Agencies)



## Territorial approaches

- Water Agencies multi-year intervention programs
  - Fees on water use/pollution
  - Financing territorial water policy
- Collaborative management plans at the watershed/groundwater body level (SAGE)
- Other tools : river contracts, territorial contracts, action plans in drinking water catchments



## **A case of territorial approach : protecting drinking water catchments**

- Cooperation between water suppliers and agricultural stakeholders (farm organizations, farmers)
  - Definition of protection zone(s) in the water catchment
  - Characterization of agricultural and non-agricultural pressures
  - Definition of an action plan to be implemented voluntary by farmers





# Tools for stakeholders' involvement

- Drinking water suppliers
  - Financial incentives from Water Agencies
  - National “Grenelle” regulation (2009) for priority water catchments
  
- Farmers
  - EU rural development policy instruments (agri-environmental schemes)
  - Environmental land leases
  - Development of eco-friendly market outlets (e.g. organic local supply chains)



## Main success factors

- The adequate scale for collective action
- The governance of collective action
  - Definition of the role of stakeholders involved
  - Involvement of farm leaders and farm organizations
  - Involvement of agricultural cooperatives and agro-industries
- Technical support to local stakeholders (water suppliers, farmers)



Thanks for your attention