



Ecosystem services and land use in a periurban context: multi-level analysis in the case of the Ile-de-France Region



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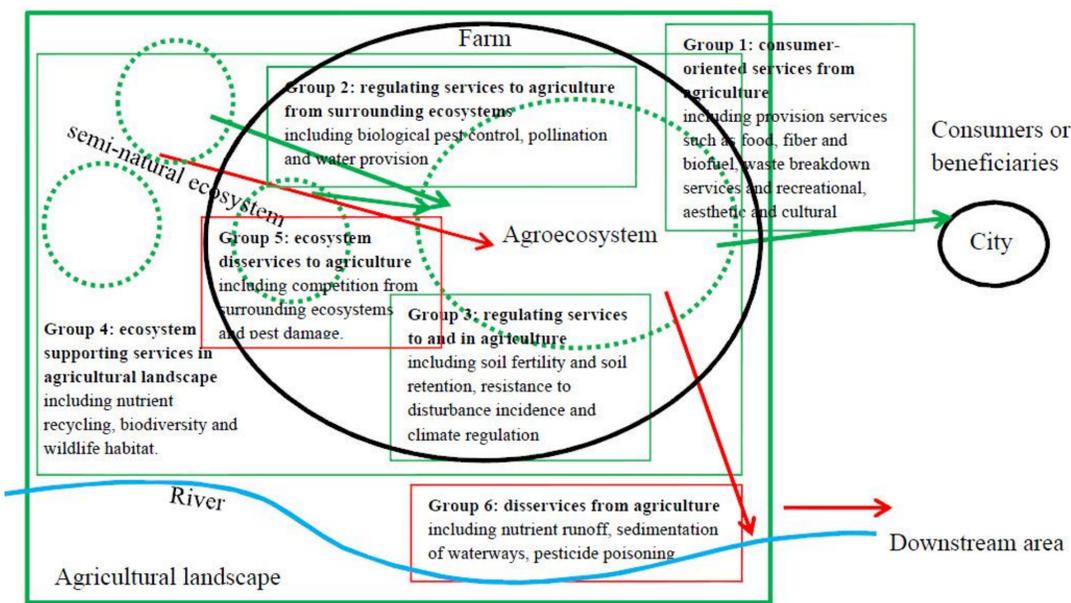
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Context & objectives:

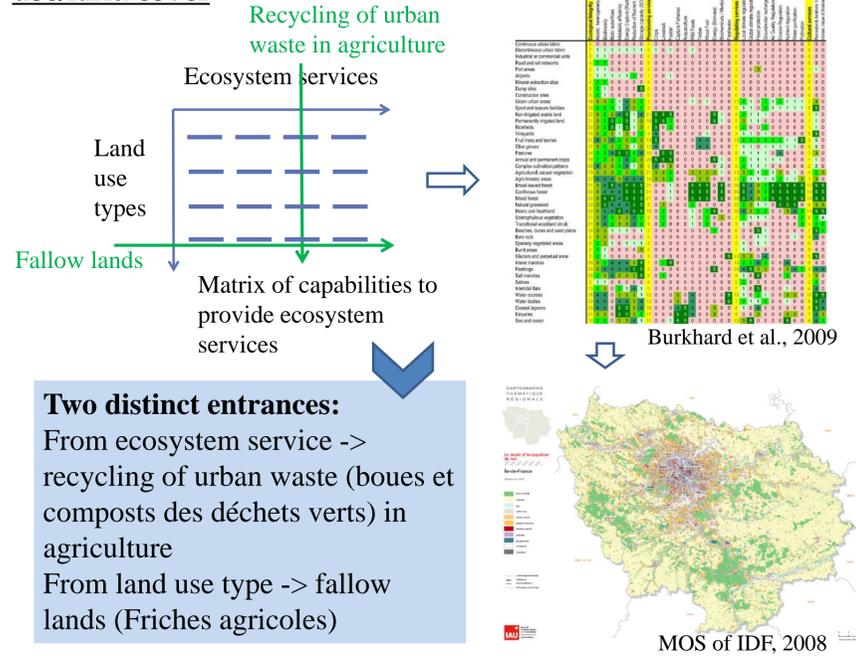
Under the challenge to meet the growing demands from society for both food and environmental benefits, two concepts have been used and well developed to look for alternative strategies:

Multifunctionality & Ecosystem service

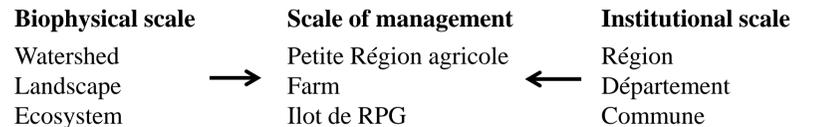
Based on a comparative review of the two concepts, a general framework about the ecosystem services/disservices in a periurban agricultural landscape has been proposed:



To link ecosystem services to land characteristics and land use/land cover

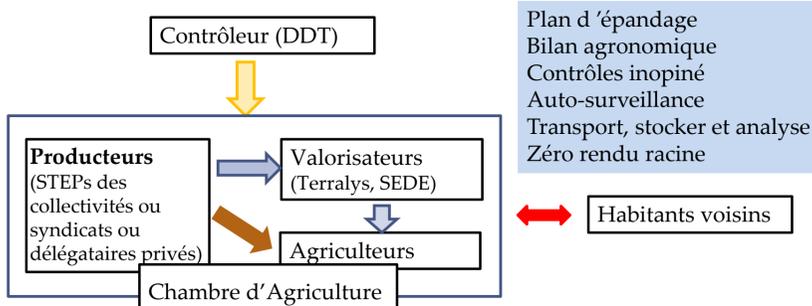


Problematique of scale

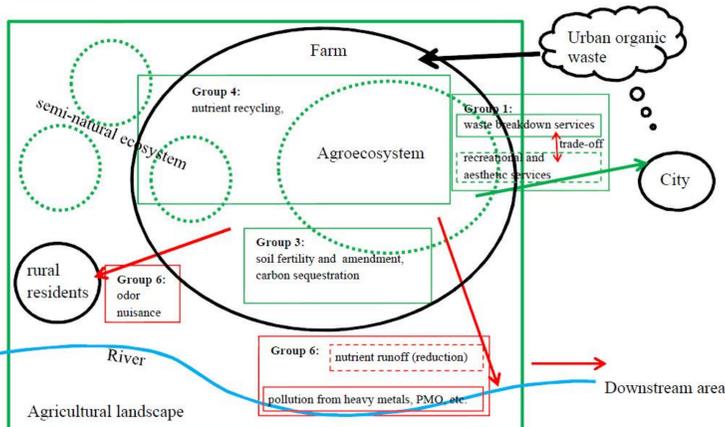


Study on recycling of urban waste in agriculture:

General understanding has been achieved on the sector of recycling urban waste in agriculture through interviews.



At local level, investigations will be carried out mainly on three differentiated water treatment stations (SMAROV, Mureaux and Plaisir) and two areas (la Plaine de Versailles and le Plateau de Saclay):



Field investigations (financed by BASC and will be carried out by one M2 student during 6 months, under co-supervision of Caroline Petit):

- Difference between la Plaine de Versailles and le Plateau de Saclay in terms of activities for recycling urban waste in agriculture (spreading of sewage sludge or compost?);
- Knowledge about spreading fields and processes;
- Interviews with farmers, residents, communities, etc.;
- Identification of ecosystem services/disservices based on the above framework;
- Contrast between the status of waste (sewage sludge) and status of product (compost)?

Study on fallow lands:

Regional level analysis

based on MOS of IAF to identify distribution of fallow lands i.e. abandoned farm (friches agricoles) and set-aside land (jachères).

Local level analysis will be carried out in two areas:



Area 1°: a bend of Seine including three communities: Vernouillet, Triel sur Seine and Carrière sous Poissy

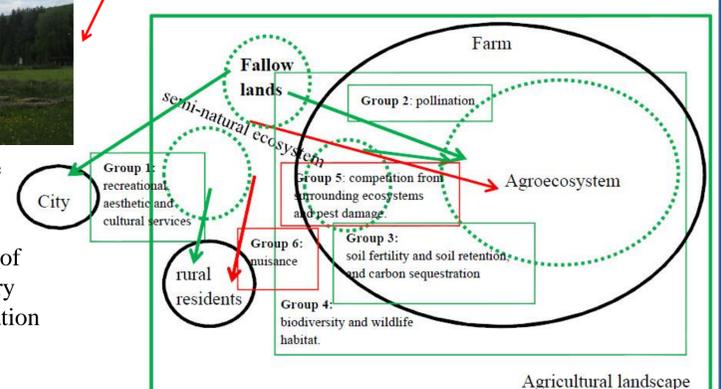


Area 2°: PNR de la Haute Vallée de Chevreuse (Convention among communities at the level of PNR; an existing inventory of fallow lands; consideration for ecosystem services)



Main distribution of fallow lands in Ile-de-France (Culture -> rural vacant land*)

* « espaces vacants ruraux », category No.14 of MOS, IAU



Field investigations (financed by BASC and will be carried out by seven M2 students in Paris X during 3 months, under co-supervision of Caroline Petit):

- Verifying distribution of fallow lands with existing inventories and field visits;
- 4 or 5 types of questionnaires for farmers, residents, communities, PNR and associations;
- Identification of ecosystem services/disservices based on the above framework;
- Role of urbanization (POS, PLU)?
- Integration into ecological networks (Trame verte et bleue)?