Looking for an enabling environment to foster soil carbon sequestration

Julien Demenois, Matthieu H. Arnoult, Mohamed Habibou Assouma, Vincent Blanfort, Claire Chenu, Thomas Eglin, Abigail Fallot, Lydie Chapuis-Lardy, Jean-Baptiste Laurent, Suzanne Lutfalla, Dominique Masse, Jean-Michel Médoc, Alfredo Napoli, Yacine Badiane Ndour, Marc Nougier, Jean-Christophe Poussin, Olivier Roupsard, Saïdou Nourou Sall, Laure Tall, Emmanuel Torquebiau, Jean-Marc Touzard, Charlotte Verger

Contact: julien.demenois@cirad.fr

Project background

The adoption rate of new practices contributing to the 4 per 1000 objectives and their duration of implementation are critical for its impacts at global scale. We organized participatory multi-stakeholders workshops to contribute to a better understanding of what could be an enabling environment in the context of the 4 per 1000 Initiative. To address diversity of agro-environmental and socio-economic conditions, we gathered stakeholders from contrasted sites in France and Senegal.

)hiectives

- 1. Identifying constraints to the adoption of 4 per 1000 innovations in France and Senegal
- 2. Identifying actions to alleviate these constraints in France and Senegal





Methodology

Participation of 48 farmers, agricultural organizations and agricultural schools, agro-industries, administrations, NGOs, donors and research organizations

Multi-stakeholders workshop in France

Four case studies:

- 1. Polyculture cattle breeding
- 2. Cattle breeding
- 3. Field crops (wheat, barley, rape seed)
- 4. Vineyard



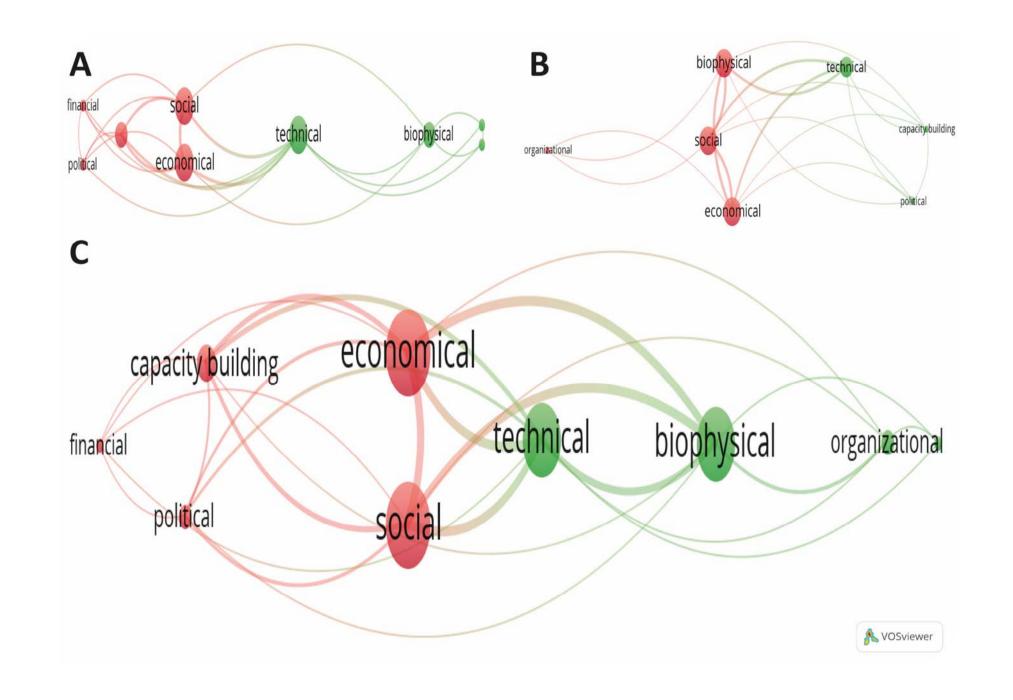
Multi-stakeholders workshop in Senegal

Four case studies:

- 1. Peri-urban agriculture
- 2. Irrigated agriculture
- 3. Agroforestry
- 4. Rainfed agriculture livestock

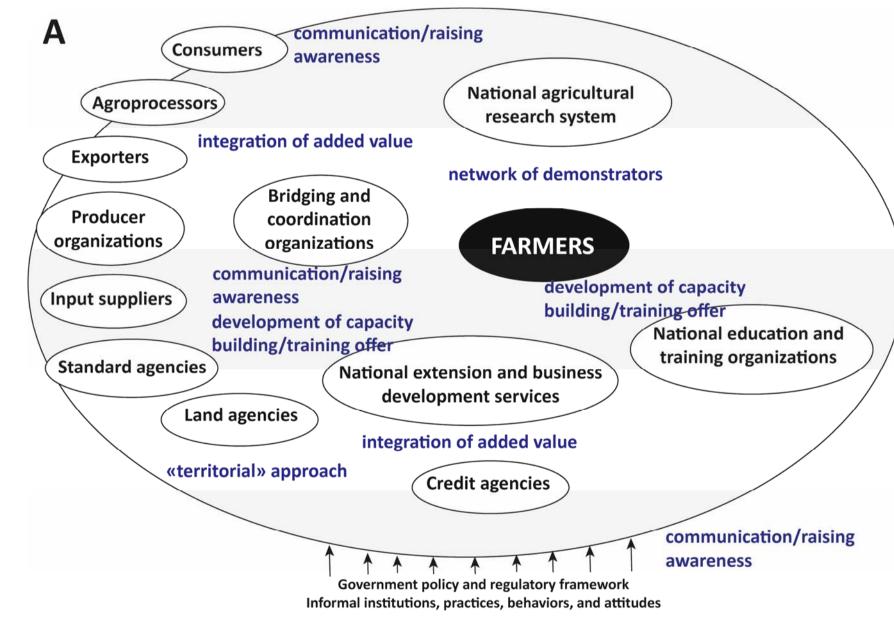
Working group « Agroforestry in Senegal » at work

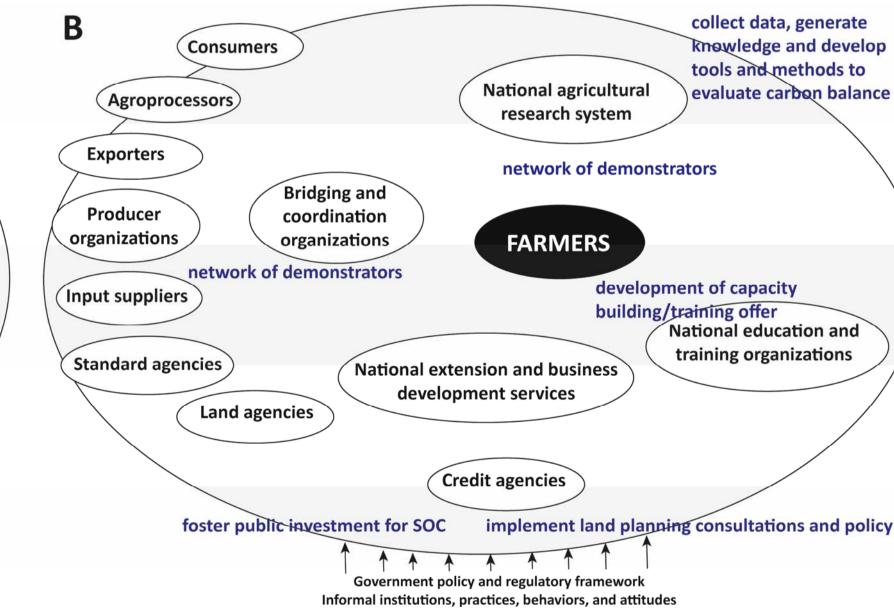
Results



Identified constraints to adoption of 4 per 1000 practices in France and Senegal

A: France; B: Senegal; C: France & Senegal. The size of the circles and lines are proportional to the occurrence of the mentioned barrier. Different colours correspond to different clusters of words.





Agricultural Innovation System and actions to the adoption of 4 per 1000 practices in France and Senegal

A: France; B: Senegal. Actions are indicated in blue. White, light and dark grey, black colours are used for presentation purpose only.

Conclusion

Download the

poster here

- Most barriers relate to the enabling environment and not to technical issues
- Holistic approach, based on Agricultural Innovation System, necessary to foster soil carbon sequestration
- Development of integrated landscape approach identified as a way forward for both France and Senegal













