



TOWARDS A REGIONAL INITIATIVE TO DEVELOP E-LEARNING RESOURCES IN AGROECOLOGY

Challenges to develop educational resources and to teach agroecology: the MOOC agroecology

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Challenges: agroecology & e-learning

How to build capacities to support agroecological transition, for which the use of ecological processes is a key point for increasing productivity, supplying ecological services and reducing inputs ?

- What knowledge do actors / students require to understand and make use of ecological processes?
- How are these ecological processes modified by crop management practices, and how can they be optimised?
- Which innovations (technical, social, organisational) are necessary to facilitate the related change in practices, technical systems and professional social networks?
- How can these innovations be introduced into rapidly evolving production systems?
- How can training and research best develop the acquisition of knowledge and accompany change, to contribute to sustainable agricultural development?

Agroecology is knowledge intensive



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Challenges: agroecology & e-learning

- Needs for (massive, accessible) training and teaching on agroecology
- TIC : Digital native generation, internet access, smartphone...
- Need to include field, observation, experiences in the learning process
- Needs for peer learning
- Needs for partnership : interdisciplinarity, teachers – researchers - stakeholders, N-S, technical - academic

Numeric learning contents :
a mean to address these issues ?



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Our experiences

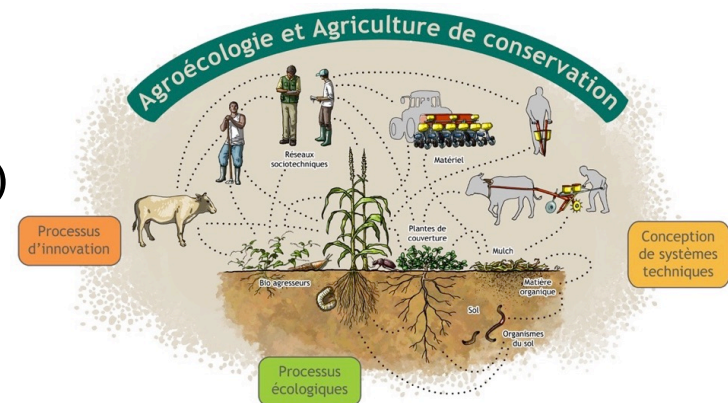
■ Projects :

- PEPITES (2009-2013) : Ecological, technical and social innovation processes in conservation agriculture
- PAMPA (2012-2013) : Programme d'appui multi-pays à l'agroécologie
- IPERCA (2015-2017) : Innovative Pedagogical Resources in CA for SE Asia
- **PARMI** (2014-2017) : Promoting agroecology demands innovation in education



■ MOOC agroécologie (agroecology since 2016)

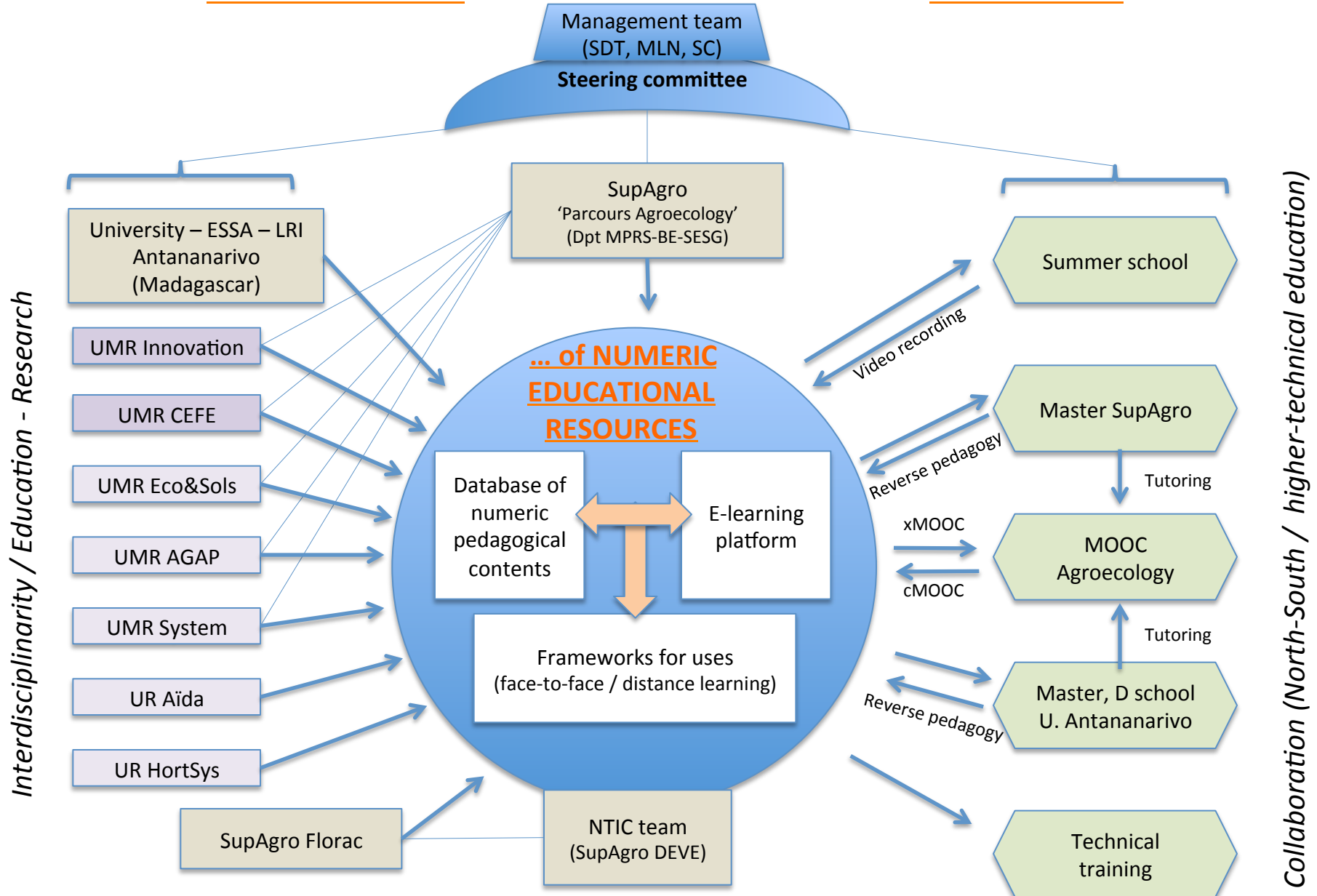
■ E-learning strategy of Montpellier SupAgro



PARMI : Promoting Agroecology demands innovation in education

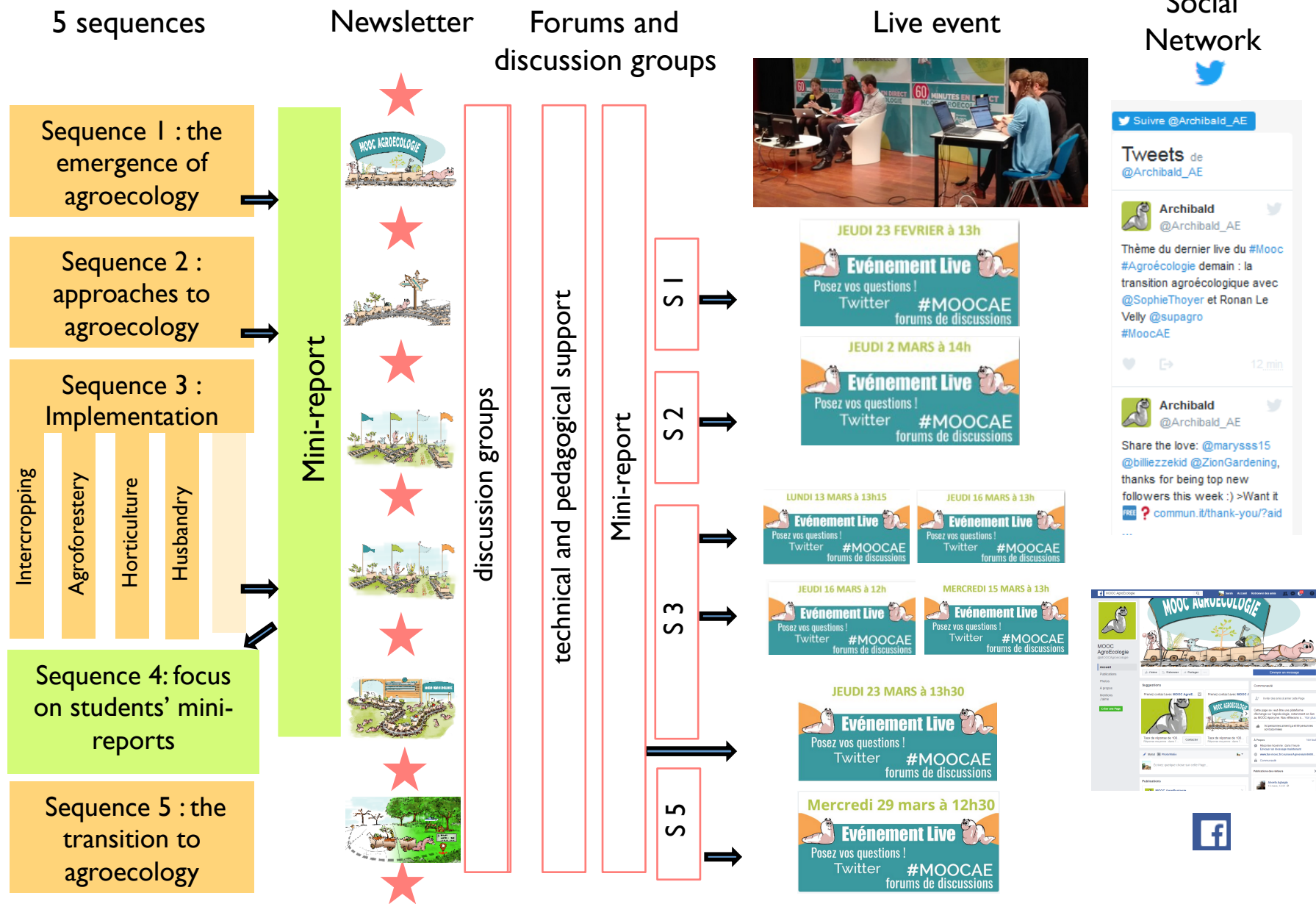
CONSTRUCTION...

... and USES...





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Key figures



12000 / 7500 + 750
participants



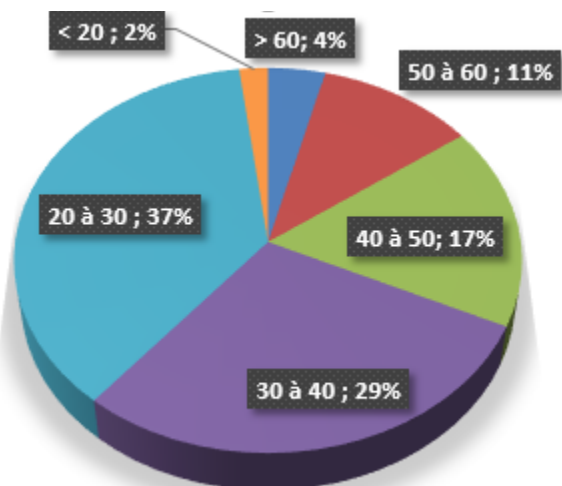
100
Countries



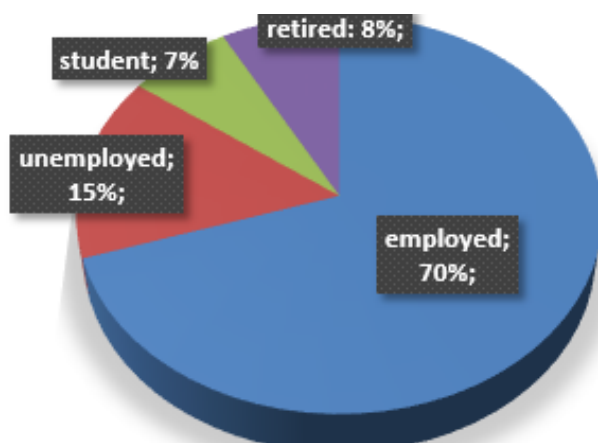
50
Students
for tutoring



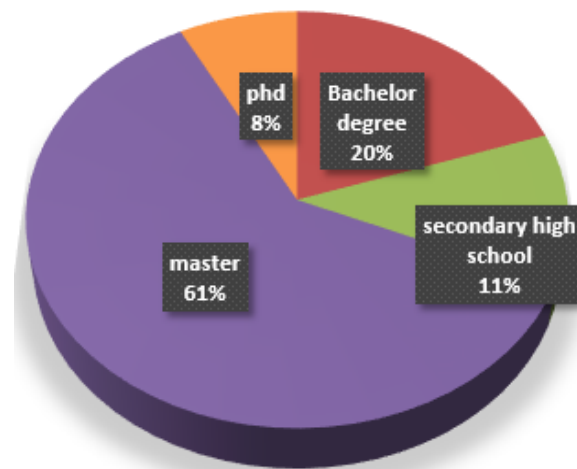
130 / 80
mini-reports



Age



Occupation

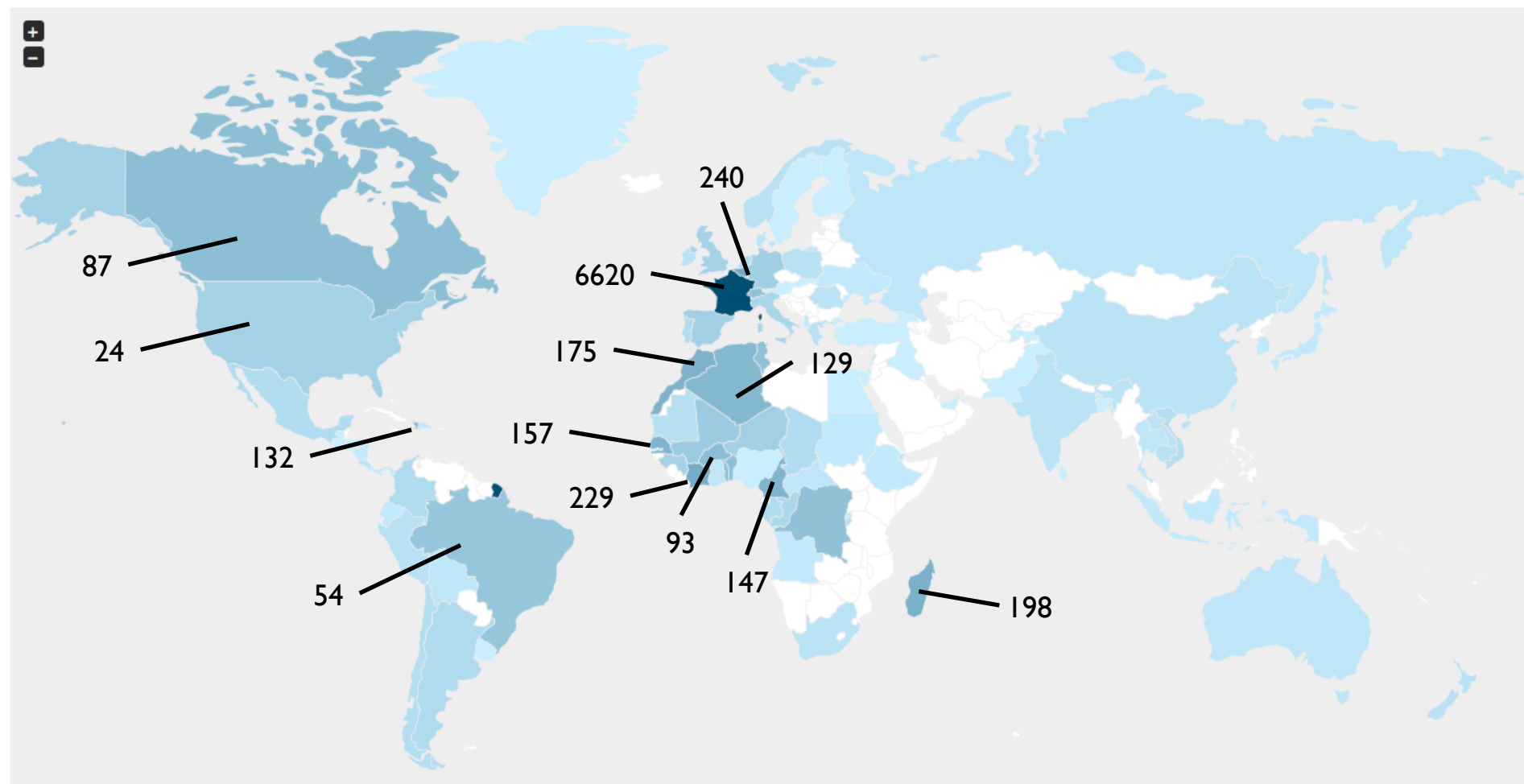


Study level



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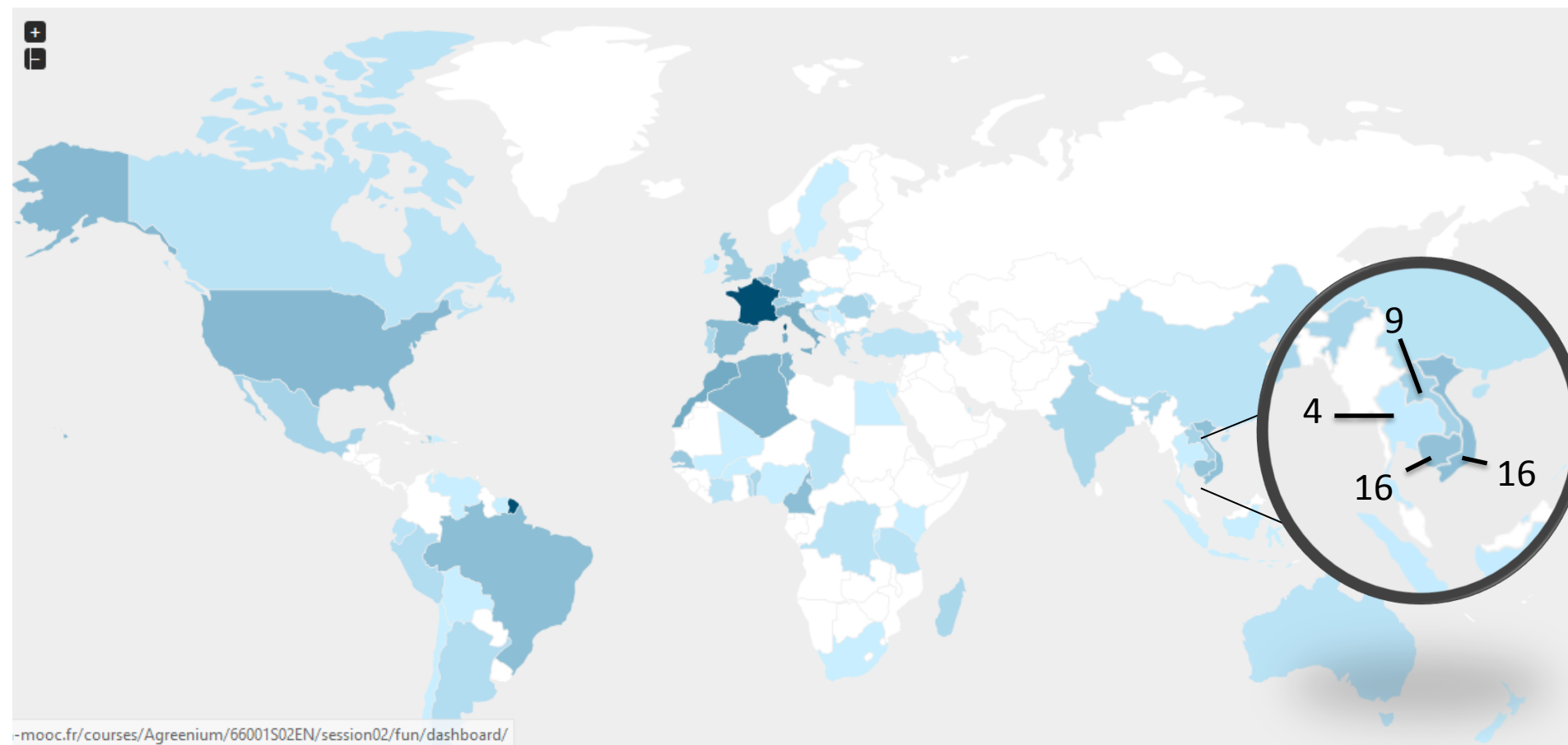
Key figures : participants location (french)





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Key figures : participants location (english)



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MOOC back office

- Institutional strengthening : SupAgro → Agreenium



Le Parisien (<http://www.leparisien.fr>)

Le premier Mooc mondial sur l'agroécologie est français

24 Févr. 2015, 21h53 | MAJ : 24 Févr. 2015, 21h53



Les ministres de l'Economie Emmanuel Macron (G), de l'Agriculture Stéphane Le Foll (C) et la secrétaire d'Etat à l'Enseignement supérieur Geneviève Fioraso assistent le 24 février 2015 à Paris à la présentation du premier Mooc sur l'agroécologie **Stéphane de**

- Mooc team :

- 11 lecturer-researchers : agronomy, ecology, sociology, ethnology, soil biology, animal science, economy
- 1 journalist : political sciences
- 9 researchers (INRA, CIRAD, IRD, MNHN)
- 7 persons from TIC team SupAgro : 2 pedagogical engineers, web publisher, community manager, audio-visual technician, graphics designer, computer technician



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MOOC back office

- Blended learning : MOOC – Agroecology curricula of SupAgro
 - Taking advantage of the Mooc to build new capacities : community management, forum animation, communication (live events...)
- Business model (full costs):
 - Mooc design and implementation : 150 000 €
 - Mooc session animation : 15 000 €
 - ‘Blended’ animation : 1 500 €
- English (2017) and Spanish (2019) versions :
 - Translation
 - Resources substitution
 - Resources building
 - Mooc session animation



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SupAgro e-learning strategy

- Design a new model
 - Educational innovation / added value : flipped classroom, blended learning, collaborative learning...
 - Business model : blended learning, SPOC...
- Focus on flagship themes : Agroecology...
- Strengthen international partnerships : higher education / research / development
- Build capacities on learning contents building and uses
- Enlarge target public
 - ... and take advantage of public diversity



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E-learning : the game is changing

- For teaching
 - From numeric tools and contents to numeric culture
 - E-learning for pedagogical innovation
 - Open the access to knowledge
- For the institutions
 - Gain visibility by showing pedagogical know-how
 - E-learning to develop partnership
 - Business model / new opportunities