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## **A tool-box for designing an agroecological transition with local stakeholders**

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# tatabox



Transition Agroécologique des Territoires Agricoles

AGENCE NATIONALE DE LA RECHERCHE  
**ANR**

## PROGRAMME ANR - AGROBIOSPHERE 2013

Projet ANR-13-AGRO-0006-01

### TATABOX

**Transition agroécologique des territoires : une boîte à outil pour concevoir et mettre en œuvre une transition agroécologique des territoires agricoles avec les acteurs locaux.**

Date de début du projet: 16 janvier 2014

Durée: 48 mois

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Dissemination Level		
PU	Public	<input checked="" type="checkbox"/>
AN	Restreint aux membres d'autres projets ANR (Commission ANR incluse)	<input type="checkbox"/>
RE	Restreint à un groupe désigné par le consortium (Commission ANR incluse)	<input type="checkbox"/>
CO	Confidentiel, uniquement pour les membres (Commission ANR incluse)	<input type="checkbox"/>

TATABOX vise à tester et adapter une méthodologie pour aider les acteurs agricoles locaux à développer une vision de la transition agroécologique souhaitable et à la gérer. Le projet implique 9 unités de recherche et 986 ETP. Les chercheurs sont de différentes disciplines permettant une bonne analyse des différents processus en jeu : agronomes, zootechniciens, écologues, sciences de l'informatique, ergonomes, sciences de gestion, géographie sociale, économistes. Le cas d'étude est un grand bassin versant agricole dans la partie sud-ouest de la France (Aveyron et Tarn-et-Garonne).

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Clause de non-responsabilité :

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# tatabox



Territorial Agroecological Transition in Action

## A tool-box for designing an agroecological transition with local stakeholders

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Gaël Plumecocq

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UMR AGIR

INRA Centre Occitanie Toulouse, France



12<sup>th</sup> ESEE conference  
21th of June 2017

Session: Science-society contributions to sustainability  
transformation: Citizens Science, Community-Based Research,  
Participatory Action Research, Responsible Research and Innovation

AGENCE NATIONALE DE LA RECHERCHE  
**ANR** ANR-13-AGRO-0006



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Sciences en Société





# Agroecological transition: a challenge that requires new tools



**Multiple challenges  
Conventional agriculture**

# Agroecological transition: a challenge that requires new tools



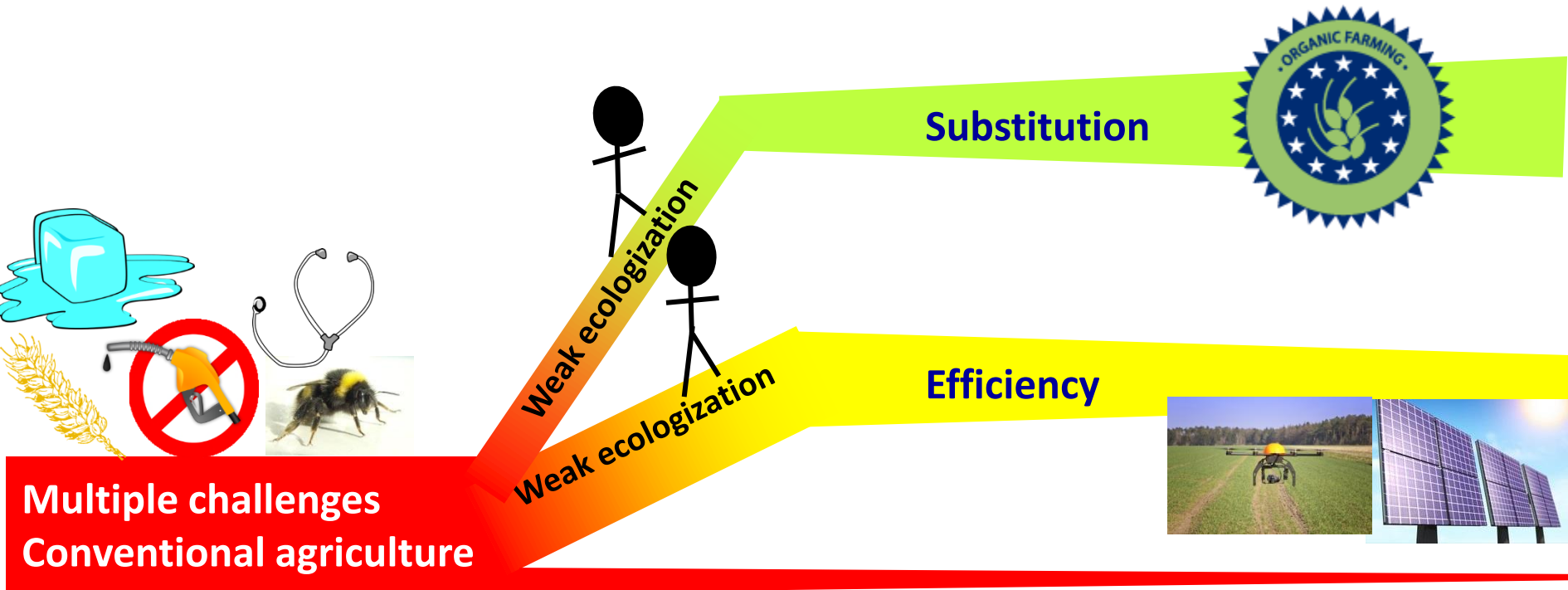
**Multiple challenges  
Conventional agriculture**

**Weak ecologization**

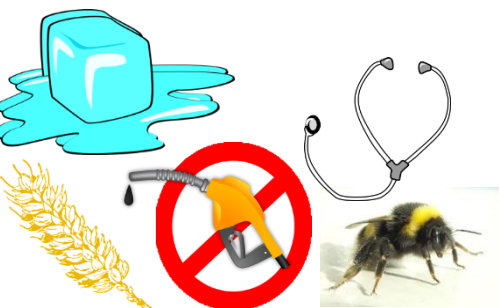
**Efficiency**



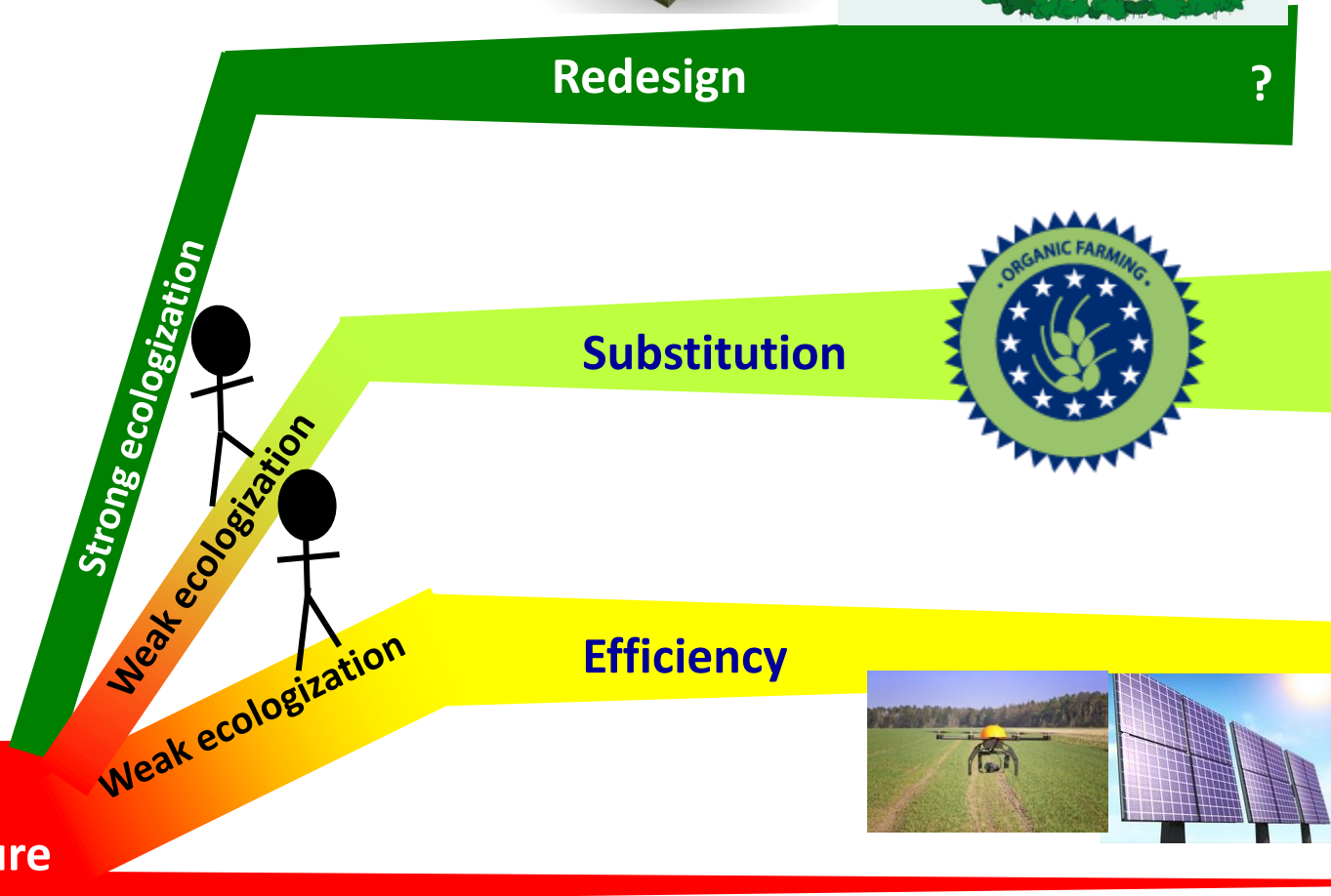
# Agroecological transition: a challenge that requires new tools



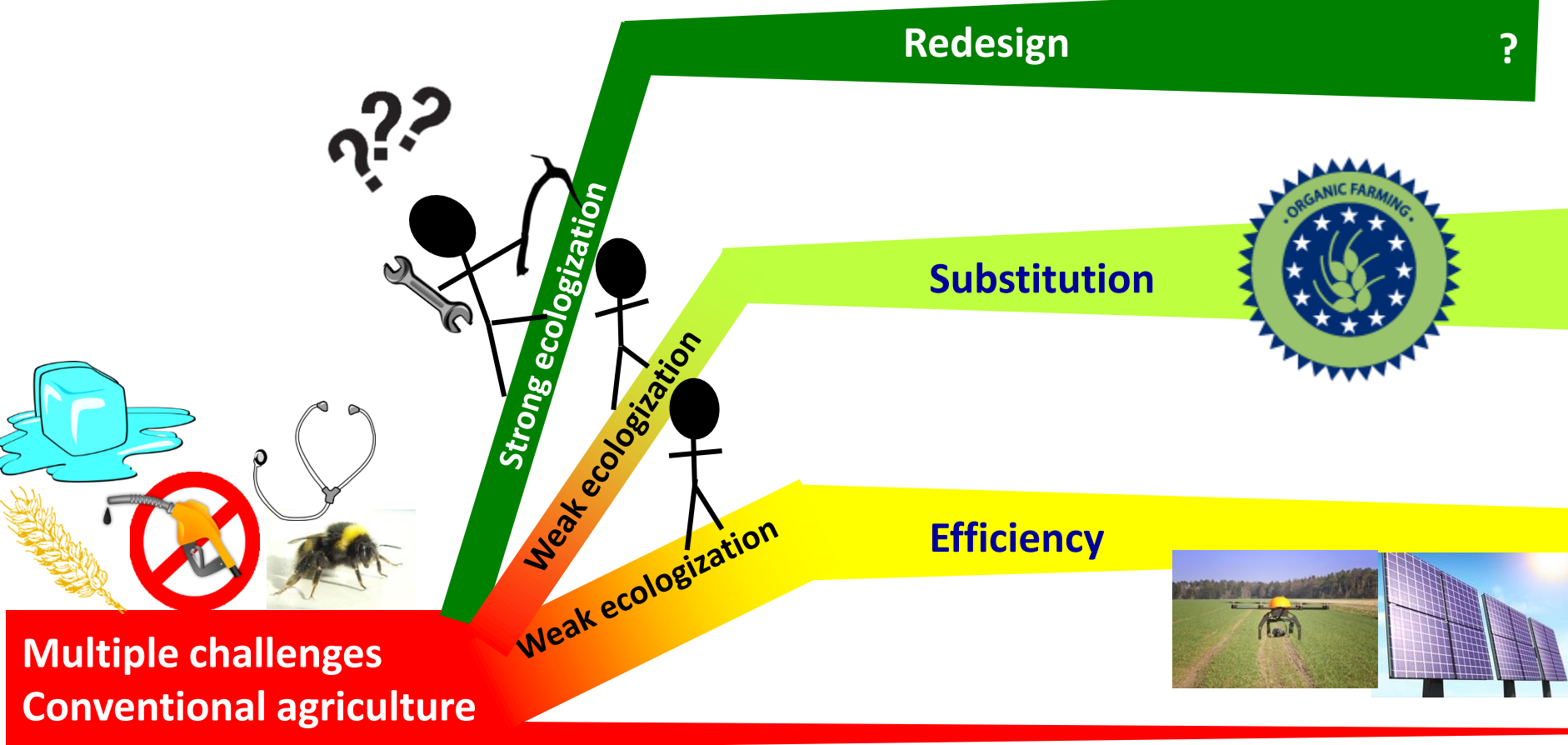
# Agroecological transition: a challenge that requires new tools



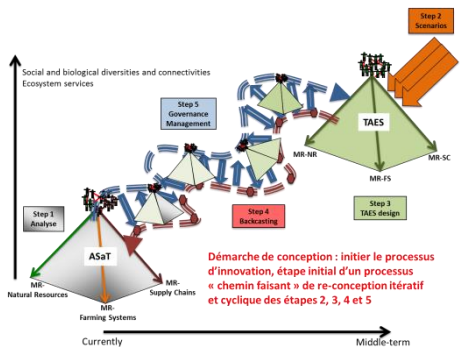
Multiple challenges  
Conventional agriculture



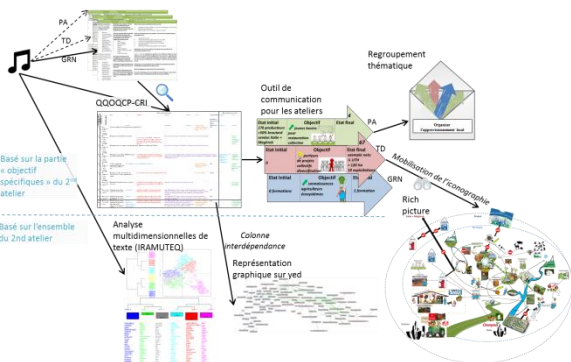
# Agroecological transition: a challenge that requires new tools



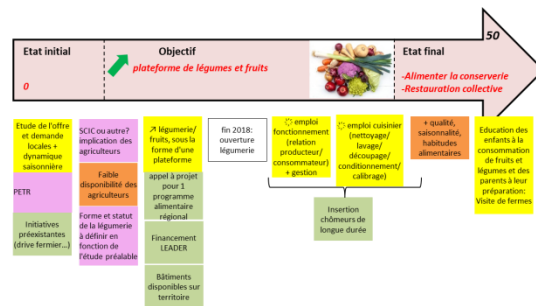
# This presentation focuses on the participatory methods and tools design and application on 2 territories



## Frameworks for agroecological transition

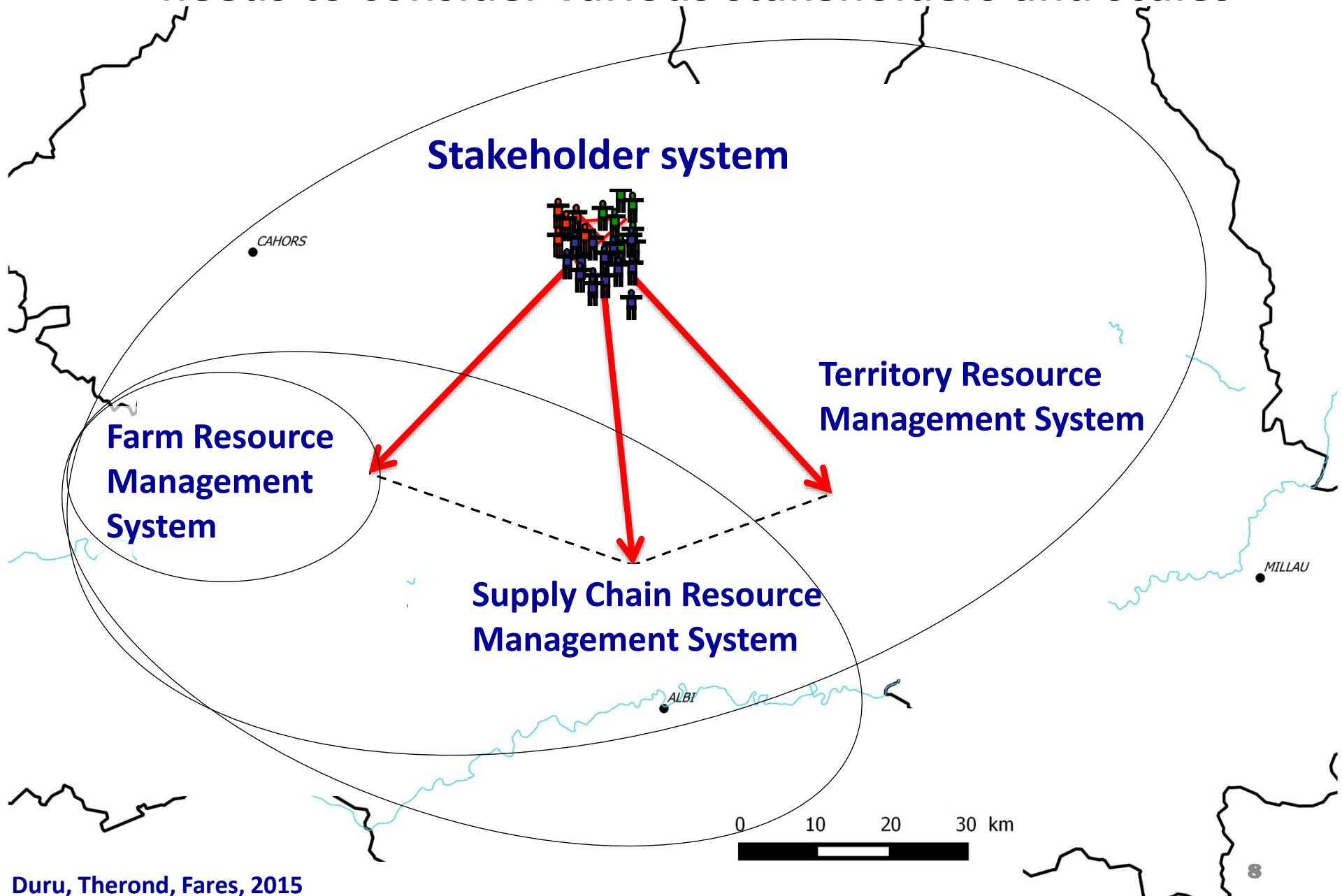


## Methods and tools design

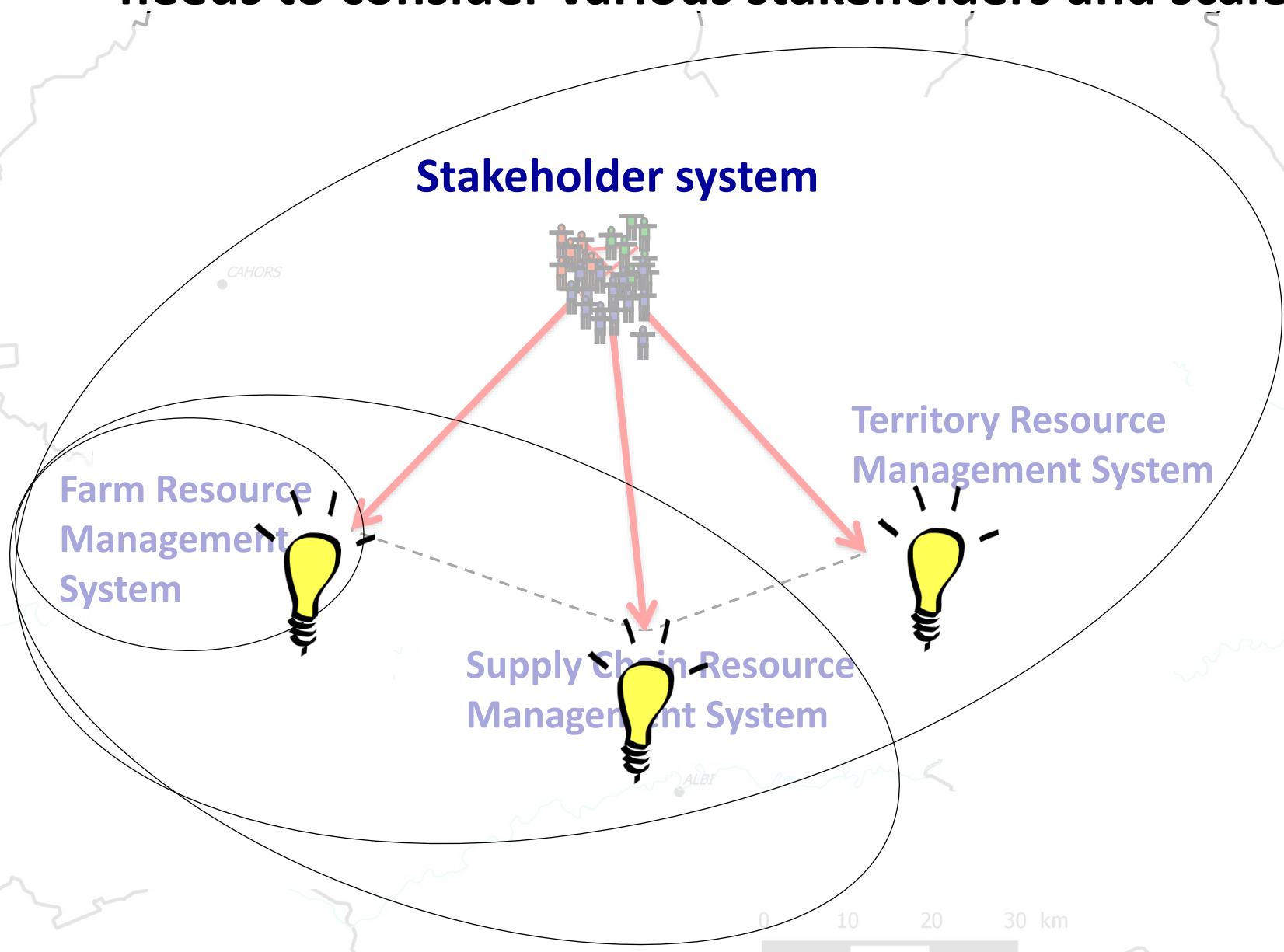


## Results obtained

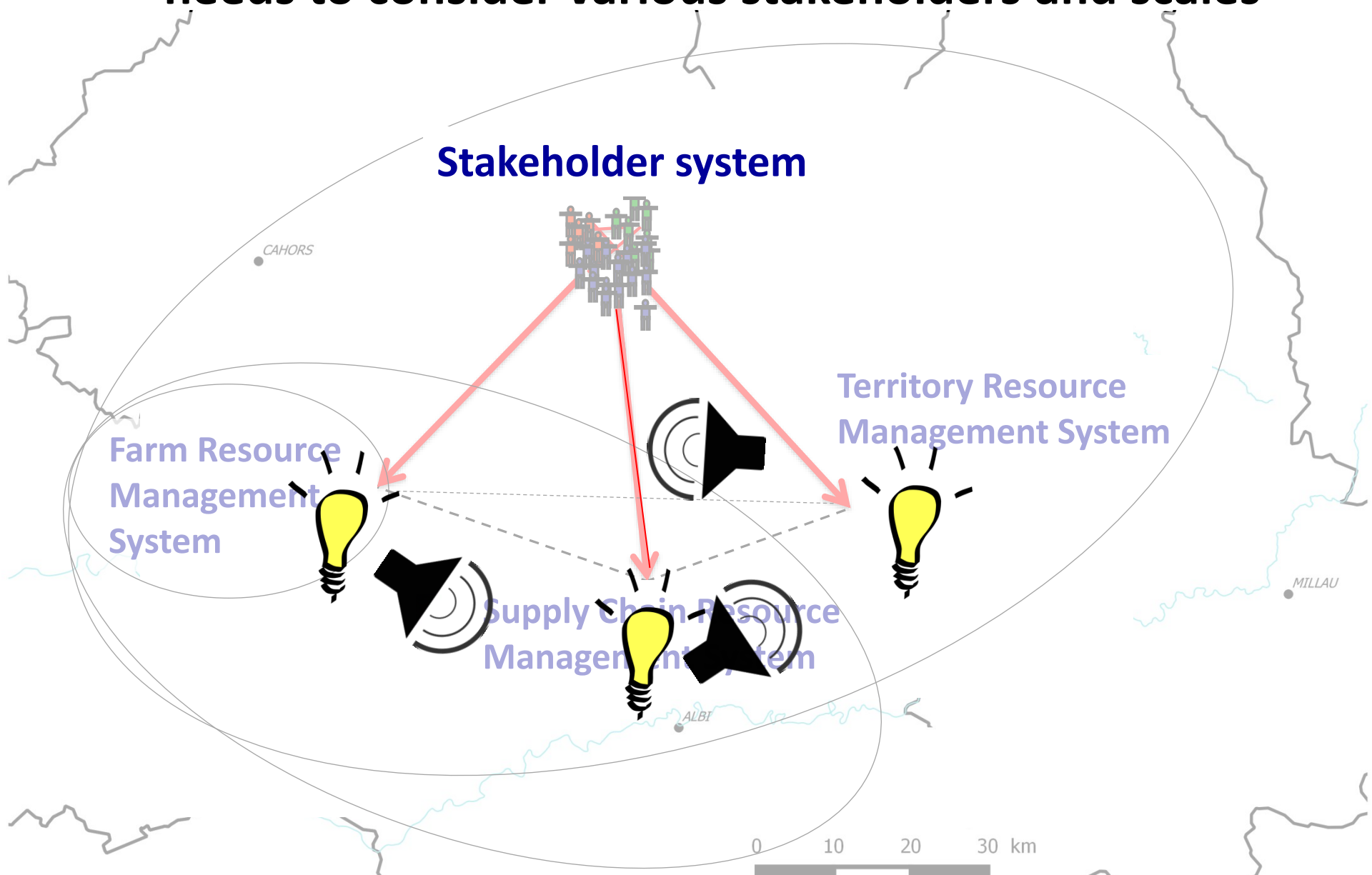
# Conceptual framework: agroecological transition needs to consider various stakeholders and scales



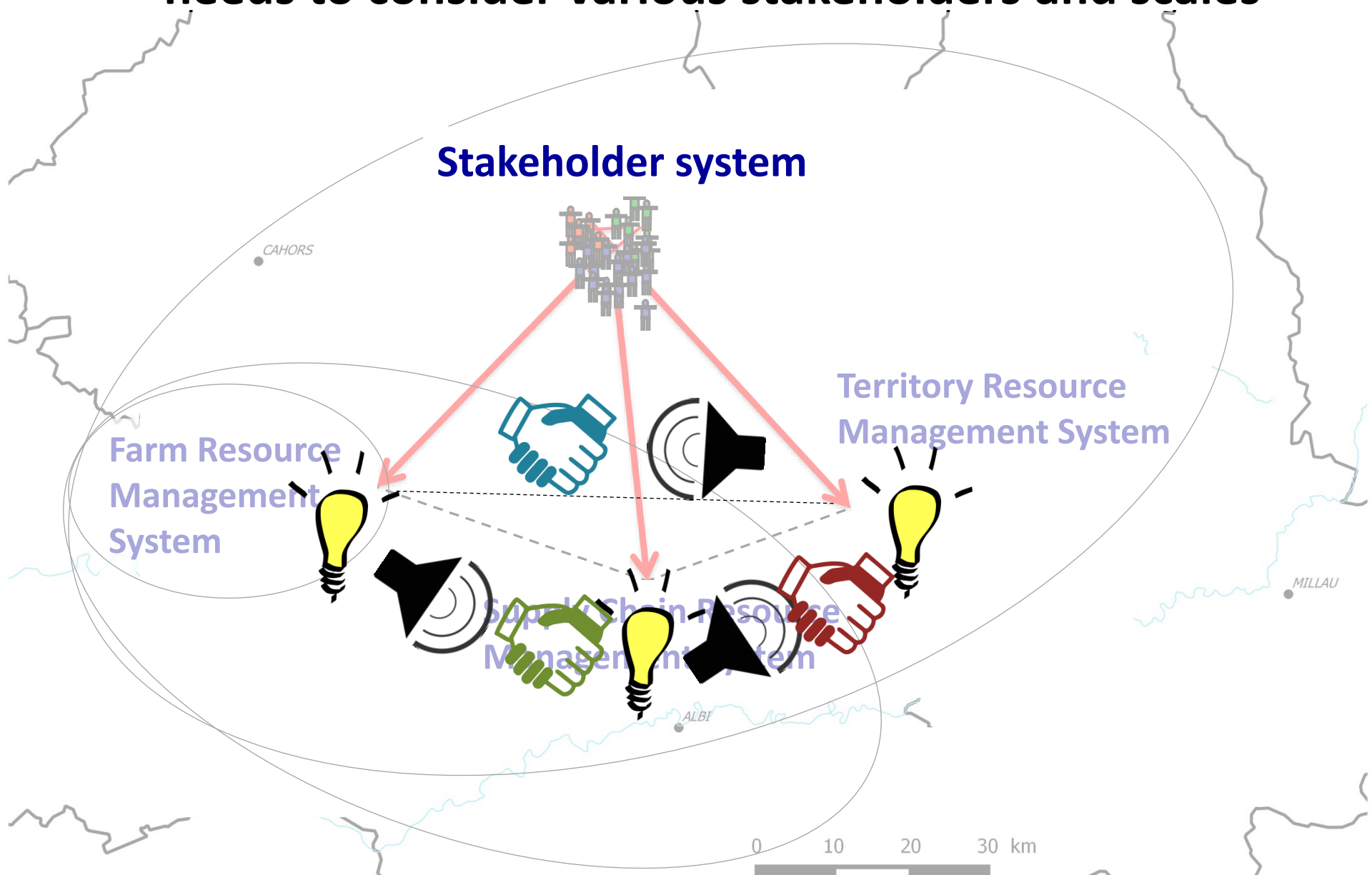
# Conceptual framework: agroecological transition needs to consider various stakeholders and scales



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# Conceptual framework: agroecological transition needs to consider various stakeholders and scales



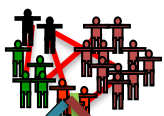
# Agroecological transition in a 5-step iterative process

Social and biological diversities and connectivities

Ecosystem services



Step 1  
Analysis



MR-  
Natural Resources

MR-  
Supply Chains

MR-  
Farming Systems

Currently

Medium term



# Agroecological transition in a 5-step iterative process

Step 2  
Scenarios



Social and biological diversities and connectivities  
Ecosystem services



Step 1



MR-  
Natural Resources

MR-  
Supply Chains

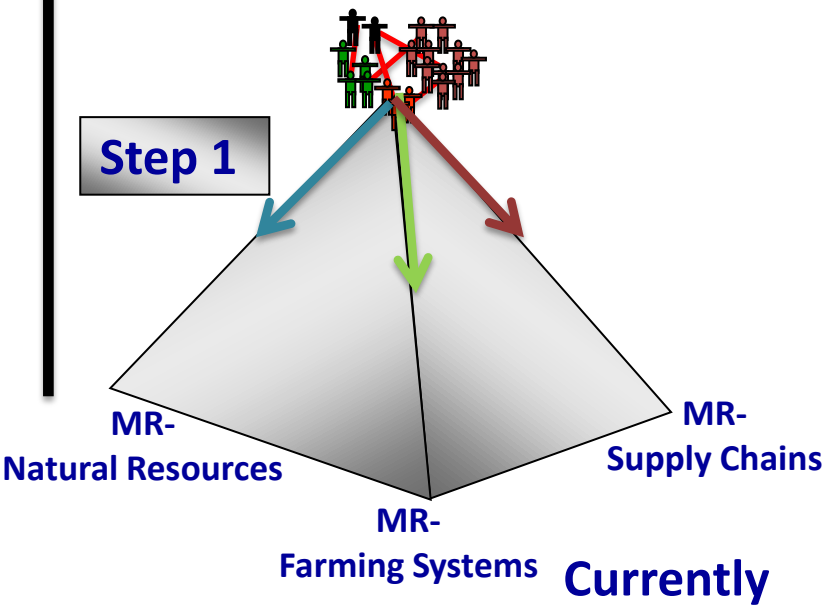
MR-  
Farming Systems

Currently

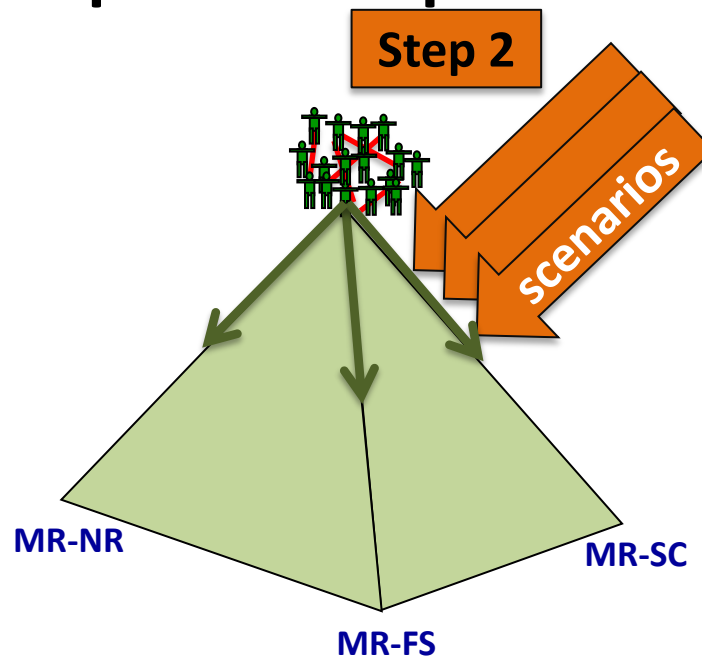
Medium term

# Agroecological transition in a 5-step iterative process

Social and biological diversities and connectivities  
Ecosystem services



**Currently**

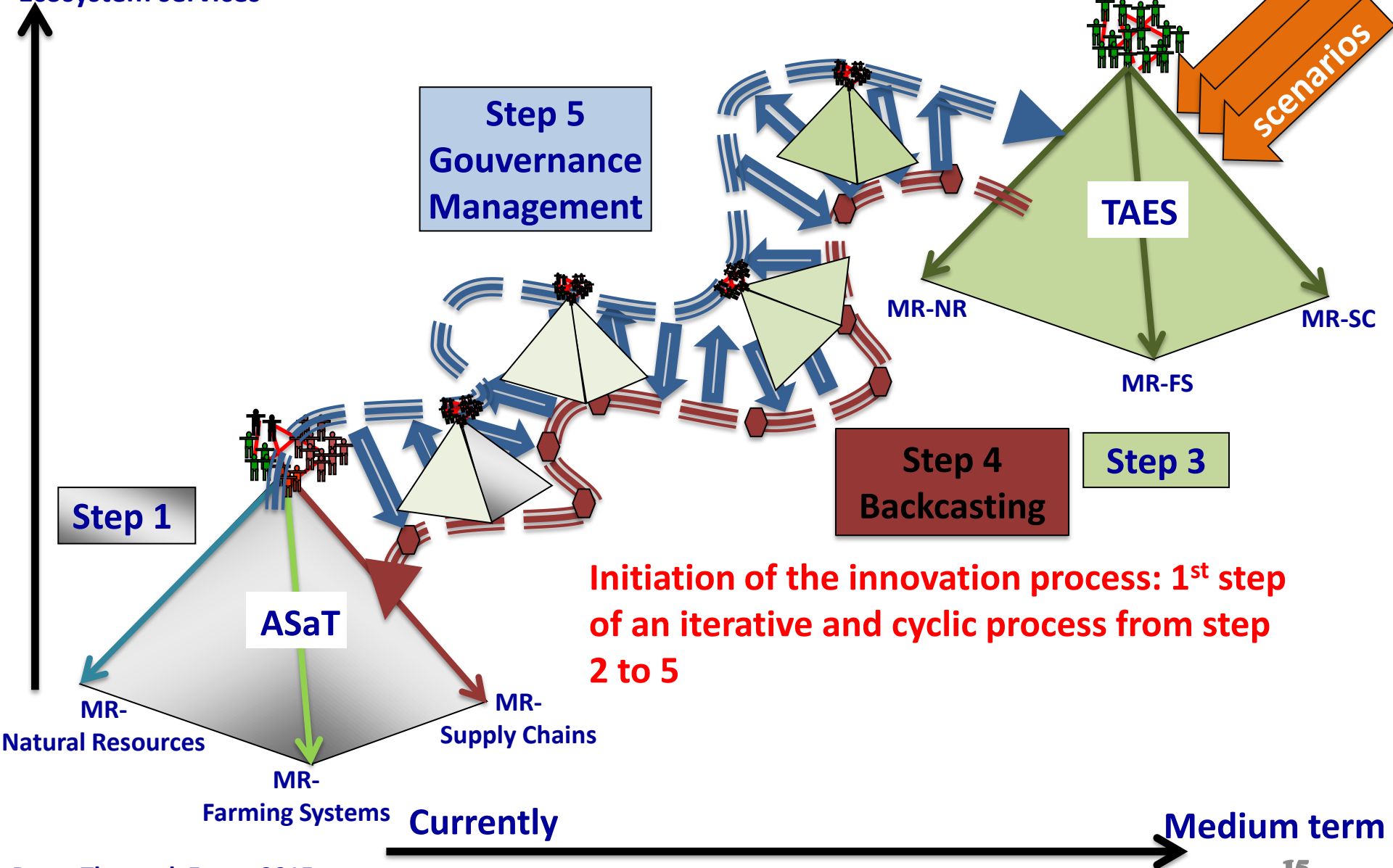


**Step 3  
TAES design**

**Medium term**

# Agroecological transition in a 5-step iterative process

Social and biological diversities and connectivities  
Ecosystem services



Initiation of the innovation process: 1<sup>st</sup> step of an iterative and cyclic process from step 2 to 5

# Almost as many researchers as participants

42 pluridisciplinary researchers



+ *Ergonomics* + *Sociology*



# Almost as many researchers as participants

42 pluridisciplinary researchers



+ *Ergonomics* + *Sociology*

Selection



le cnam



Territory partners:



**Pays Midi-Quercy**

Pôle d'Equilibre Territorial Rural



# Almost as many researchers as participants

42 pluridisciplinary researchers



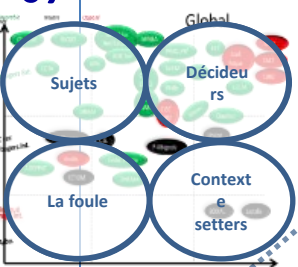
+ Ergonomics + Sociology

Selection



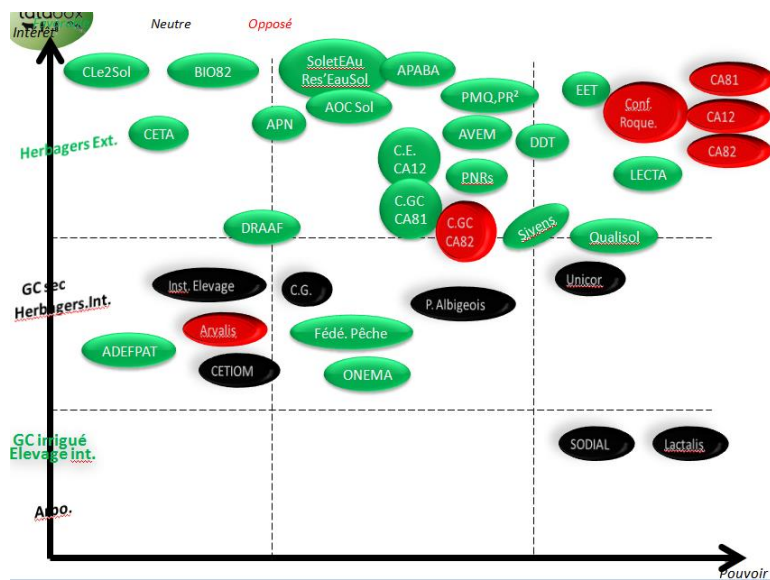
Territory partners:

Selection



Workshops' participants

# Key individual stakeholders part of a global representativeness of local agricultural system



Organisme	Agriculteurs	Fonction	Contact	Mail	Contact de	Tel	Adresse1
ADEAR Tarn		Animateur	Rémi Gachenot	adear.tarn@free.fr	Etienne	05 63 51 03 70	ADEAR Maison des associatio
ADEFPAT		Directrice	Anne Froment	anne.froment@adefpat.fr	Etienne		
Albigeois		Chef projet Plan Climat Territorial	Julien frat	ifrat@pays-albigeois-bastig	Etienne	05.63.36.87.01	Pays de l'Albigeois et des Bas
APABA	X	président	Olivier izard	olivierizard@hotmail.fr	Marc		
Bio82		animatrice	Virgil Bezin	techniquebio82@gmail.com	Guillaume		
CA12		Conseillers d'entreprise	Héloïse Gonzalo-Turpin	heloise.gonzalo-turpin@ay	Marc		
CA12		conseiller élevage bio	Stéphane Doumayzel	stephane.doumayzel@tajav	Guillaume	05.65.73.77.13	
CA12		conseiller agronomie fourrages	Benoit Delmas	benoit.delmas@tajaveyron.	Guillaume	05 65 71 37 00	
CA81		conseiller fourrages élevage	Jean-Bernard Mis	jb.mis@tarn.chambagri.fr	Guillaume	05.63.48.83.87	
CA81		Conseillère agronomie-environnement	Cécile Frayse	c.frayse@tarn.chambagri.f	Etienne	05.63.48.83.83	Chambre d'agriculture du Tar
CA81		Conseillère agronomie-environnement	Antoine Delaunois	a.delaunois@tarn.chambagri.fr	Etienne	05.63.48.83.83	Chambre d'agriculture du Tar
CA82		Conseillère Grande Cultures conventionnel et bio	Ingrid Barrier	ingrid.barrier@agri82.fr	Etienne	05.63.65.07.11	
CA82		Conseillère installation bio	Marie Cabarès	marie.cabares@agri82.fr	Etienne	05.63.63.09.95	
CA82		Responsable du pôle végétal	Didier Lafage			05.63.63.63.46	
CFPPA albi							
Clé 2 Sol							
CRAMP	X	présidente	Sarah Singla	s.singla@laposte.net	Etienne, JPS	05.65.73.61.70	
FDCUMAR2		Pôle économie et prospective	Nelly Grillet	nelly.grillet@mp.chambagri	Olivier, Etienne	05.61.75.75.81	
fédé pêche 12		Ingénieure	Martine Guilmet		Alexandre		
Fermes de Figeac		Directeur	Dominique Olivier	dominique.olivier@fermesdefigeac.coop			
GPLV		Animatrice (permanence le mardi)	benedicta Canredon			565451957 06 75 12 22 55	
Lactalis							
PMO		Chargé de Responsab					
QUALISOL		président					
Res'Eausol		directrice					
Ruthénois		directrice					
SODIAL							
Sol et Eau	X	Président					
UNICOR							

## Stakeholder analysis

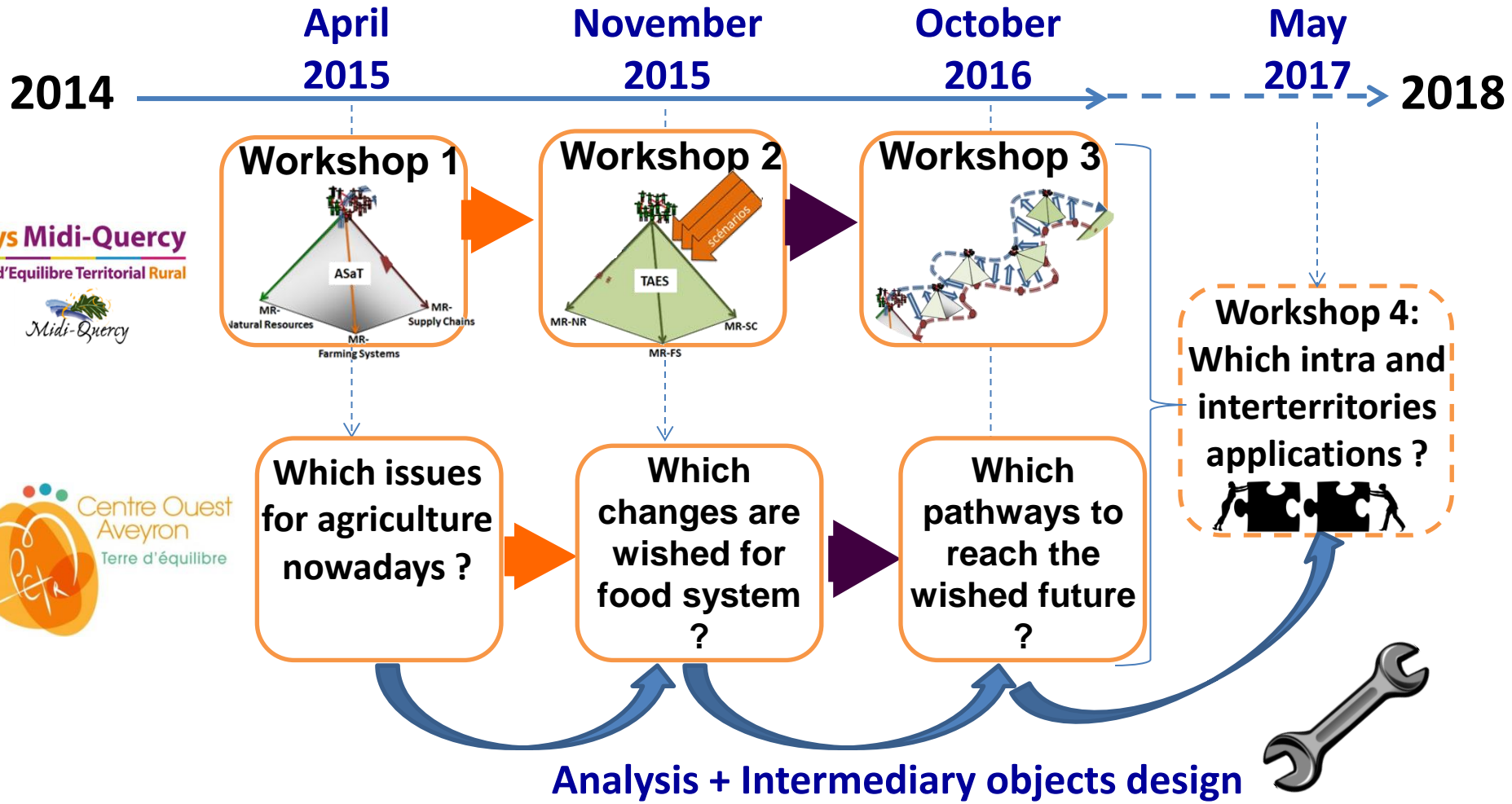
## Workshops' participants:

- Farmers
- Farmer groups
- Civil society (consumers or environmental associations)
- Advisory groups
- Institutions
- Supply chain (cooperative, label)



## Stakeholders data basis

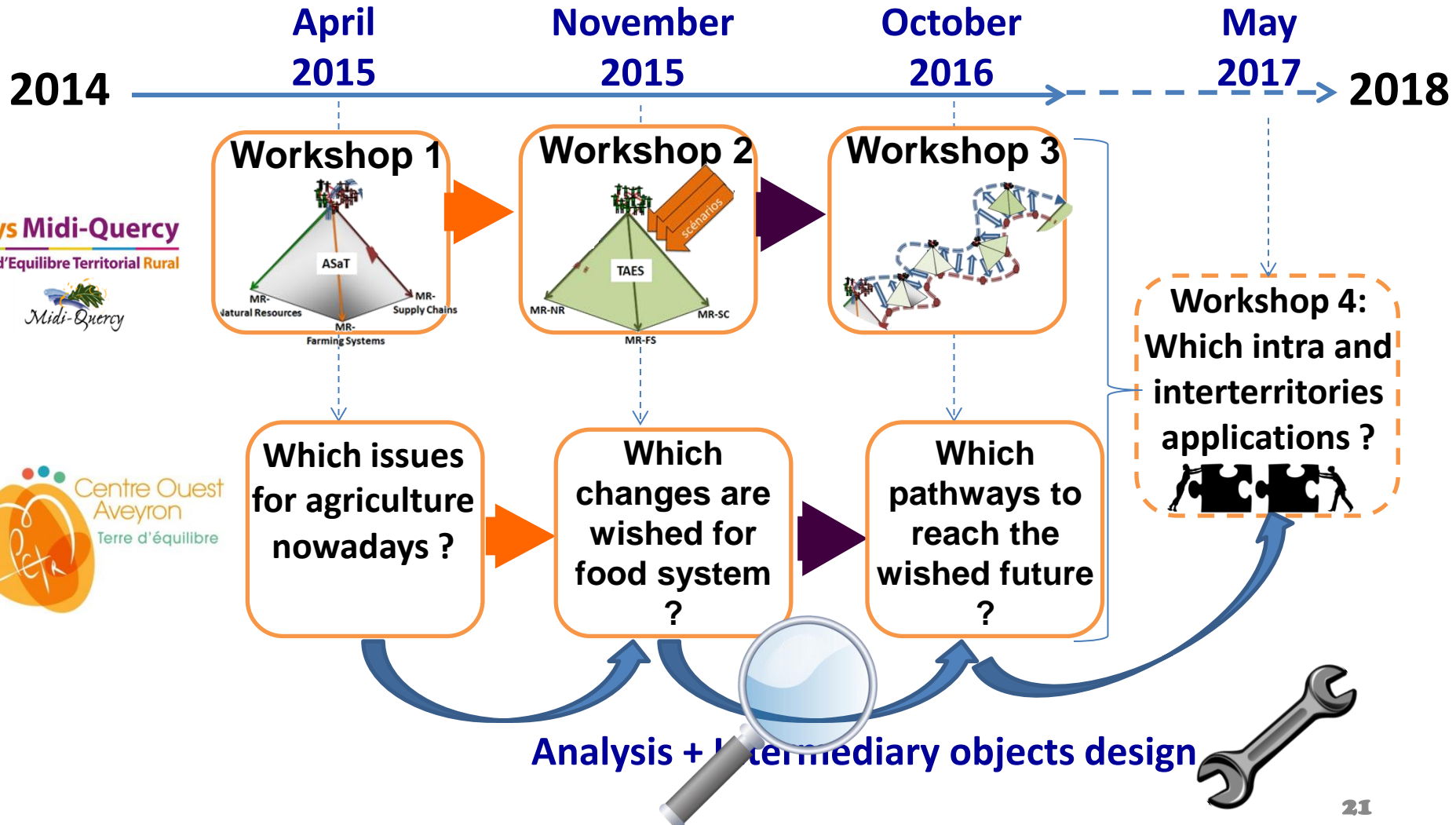
# An operationalization of the conceptual framework in 3+1 steps



**Pays Midi-Quercy**  
 Pôle d'Equilibre Territorial Rural  
 Midi-Quercy

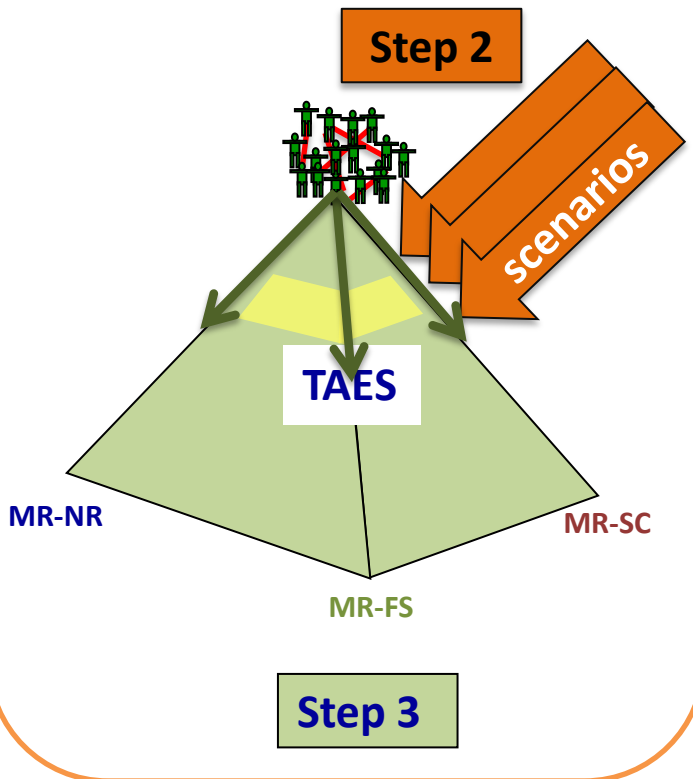
**Centre Ouest Aveyron**  
 Terre d'équilibre

# An operationalization of the conceptual framework in 3+1 steps



# 83+65 targets for an agroecological system in 2025 represented at different scales

## Workshop 2

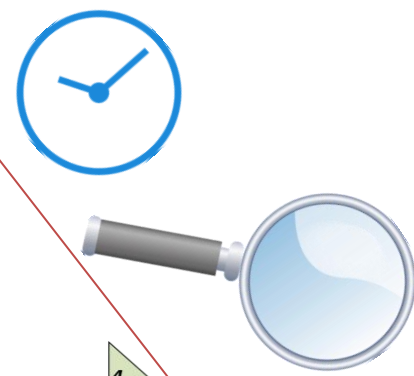
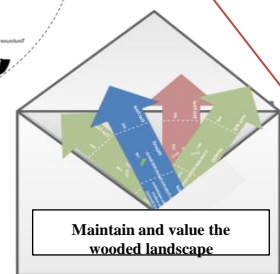
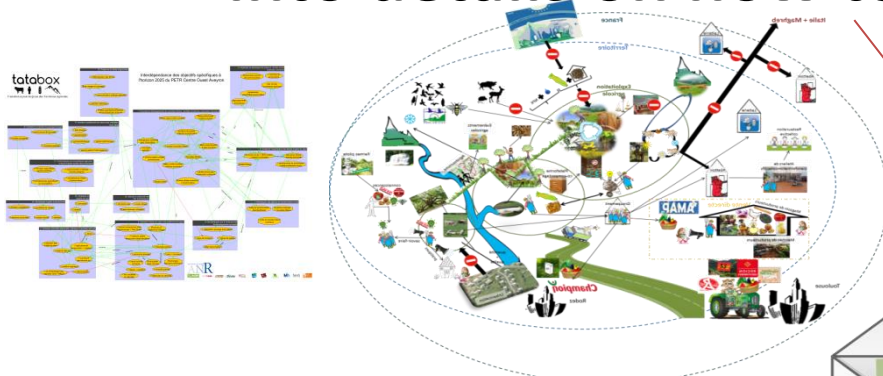


- ↗ crop rotation's length
- spread calving time to optimize the use of mountain lands
- create common compost platform
- ↗ pilot farm to test innovations
- ↗ direct selling
- ↗ certification label to export
- ↗ wooded network
- ↘ urbanization dynamics
- ↗ soil cover
- ...



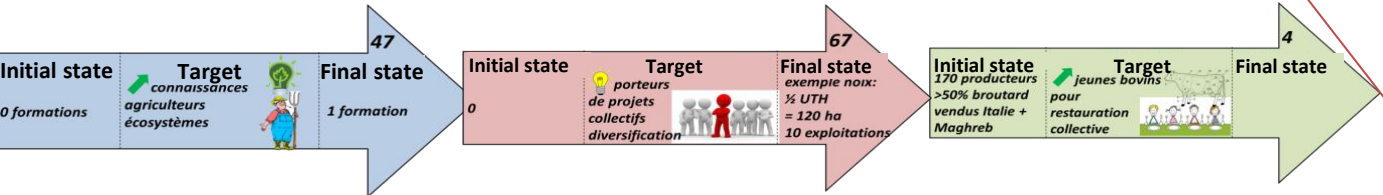


# A diversity of methods and tools to go progressively into details on how to reach the targets



What did you already produced?

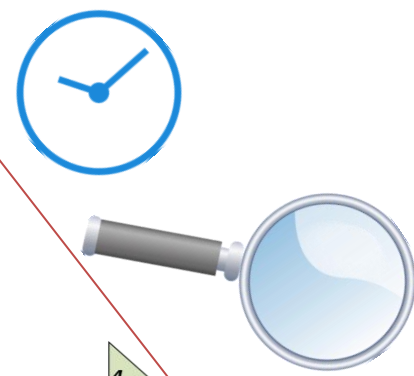
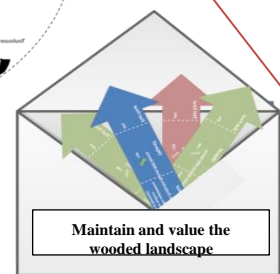
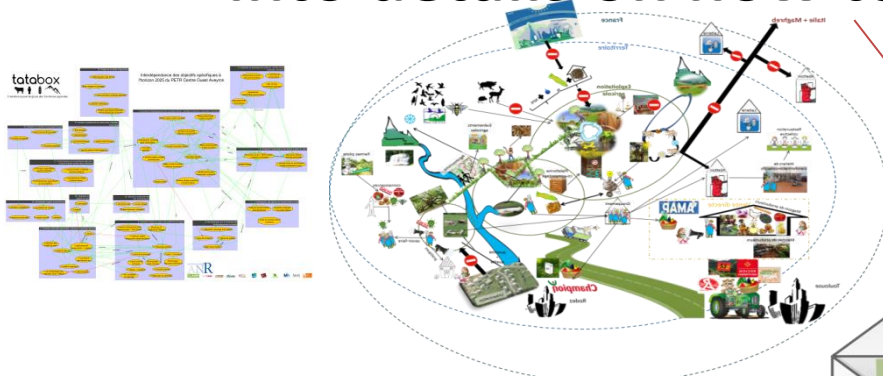
Are there priority clusters?



How do you organize the targets in each cluster?

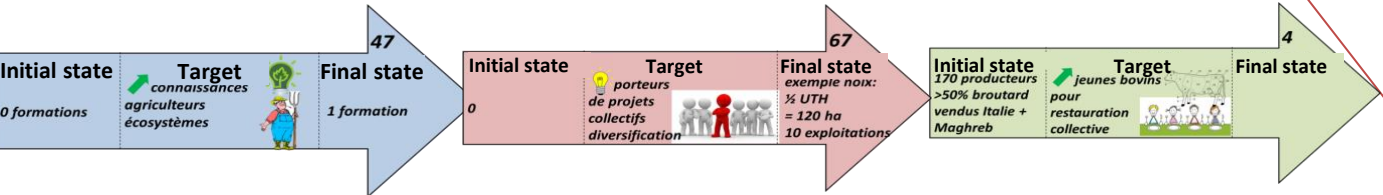


# A diversity of methods and tools to go progressively into details on how to reach the targets

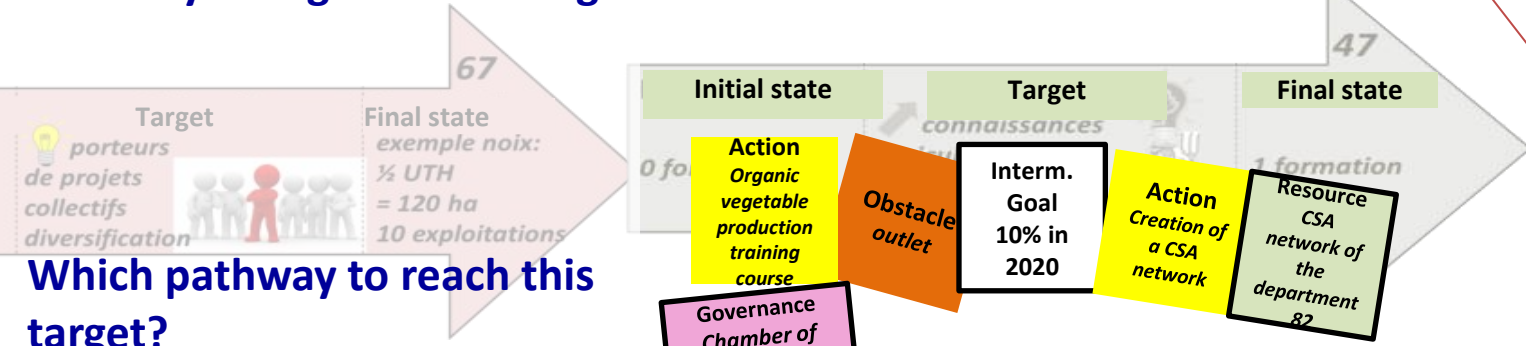


What did you already produced?

Are there priority clusters?



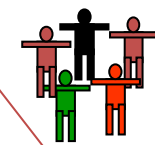
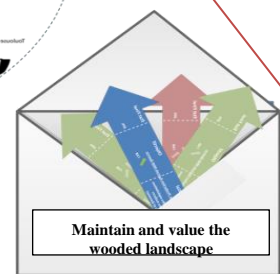
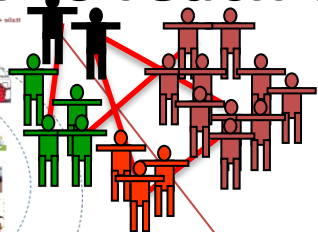
How do you organize the targets in each cluster?



Which pathway to reach this target?

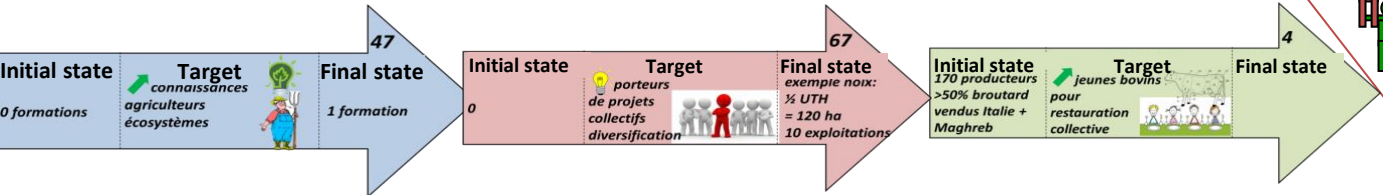


# A diversity of methods and tools to go progressively into details on how to reach the targets

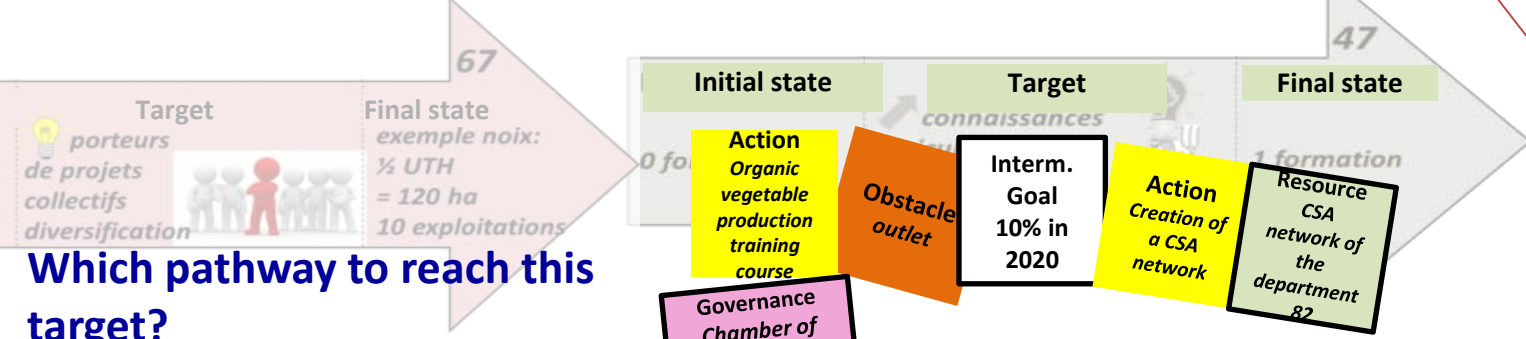


What did you already produced?

Are there priority clusters?

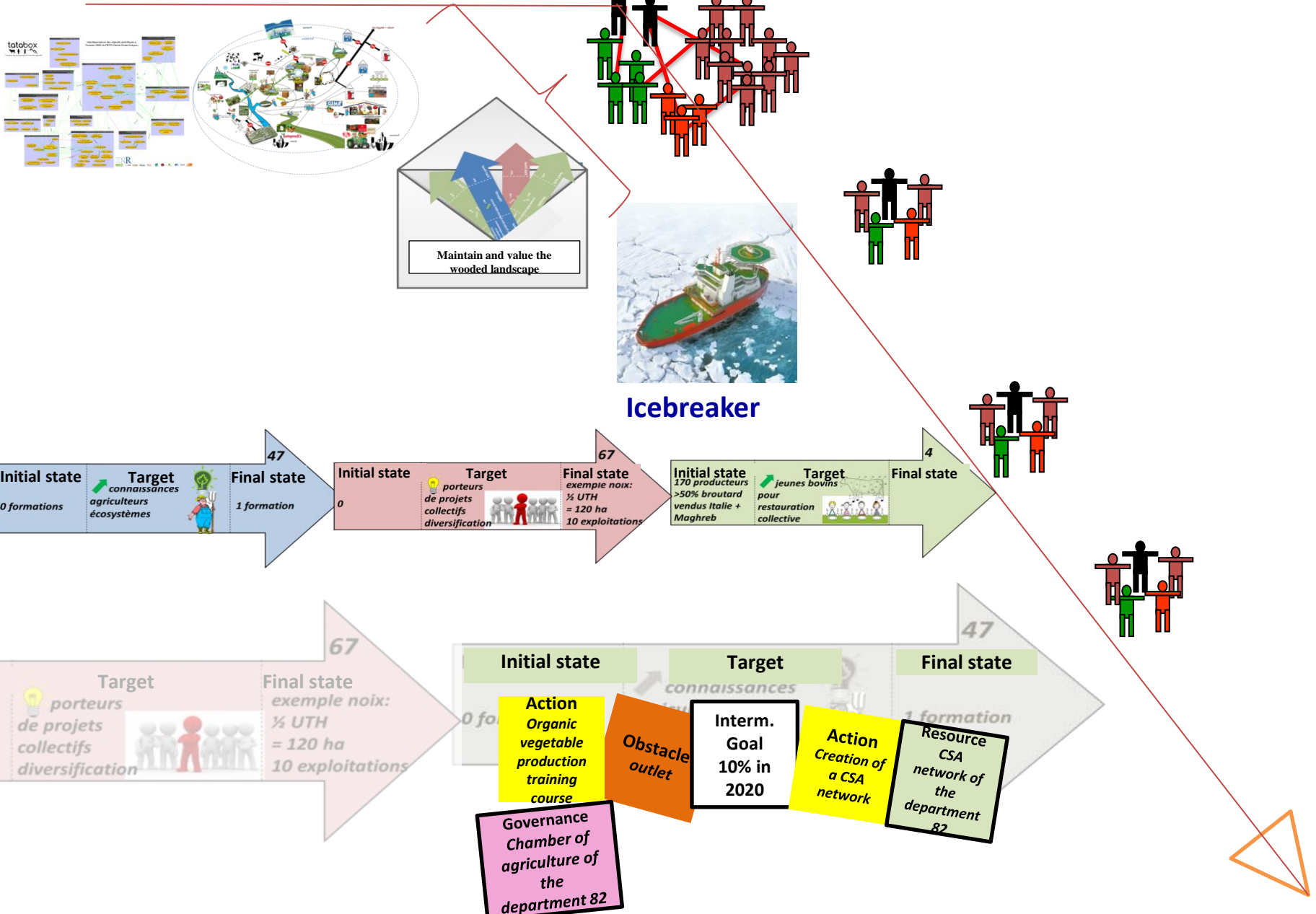


How do you organize the targets in each cluster?

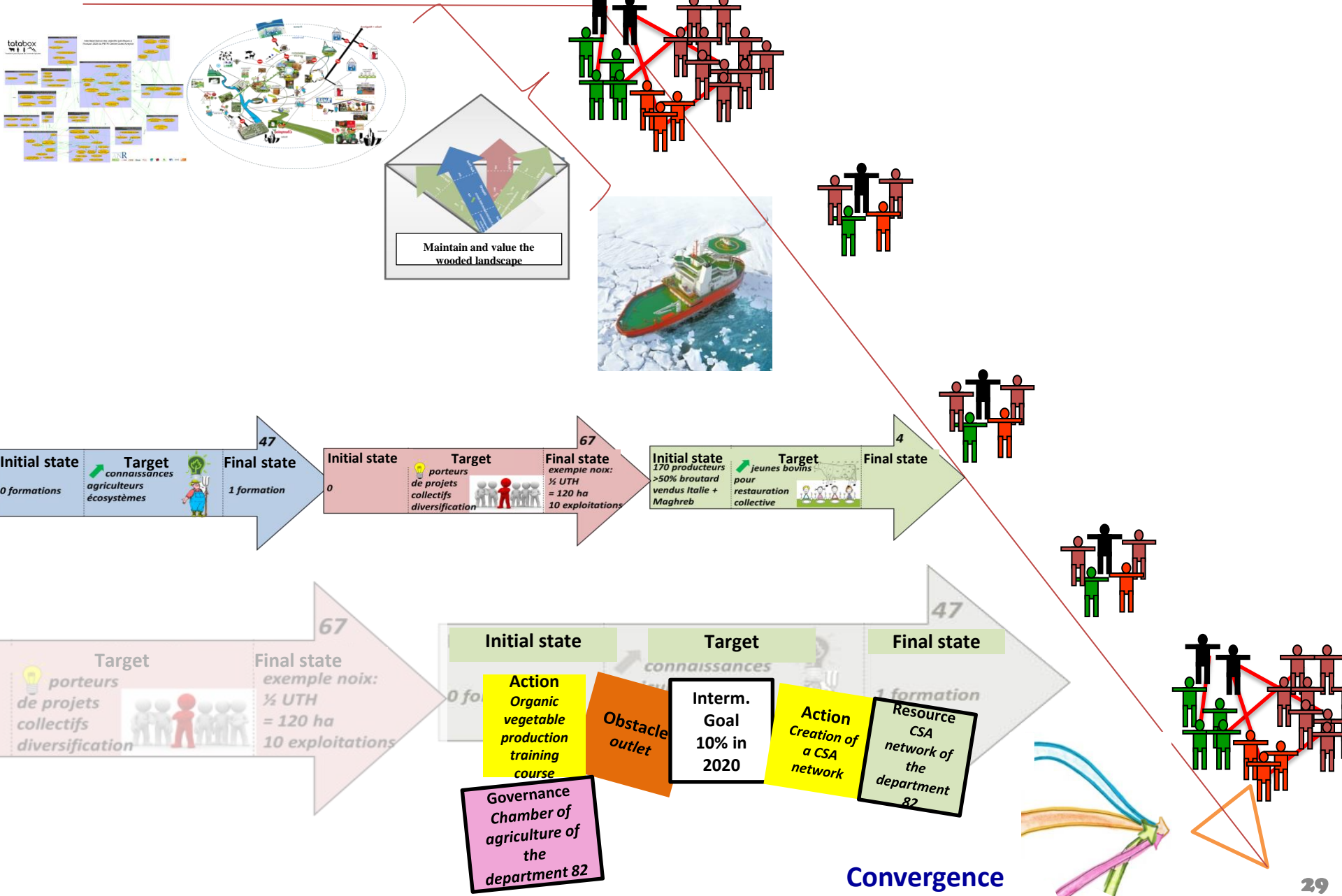


Which pathway to reach this target?

# A diversity of methods and tools to go progressively into details on how to reach the targets



# A diversity of methods and tools to go progressively into details on how to reach the targets



Convergence

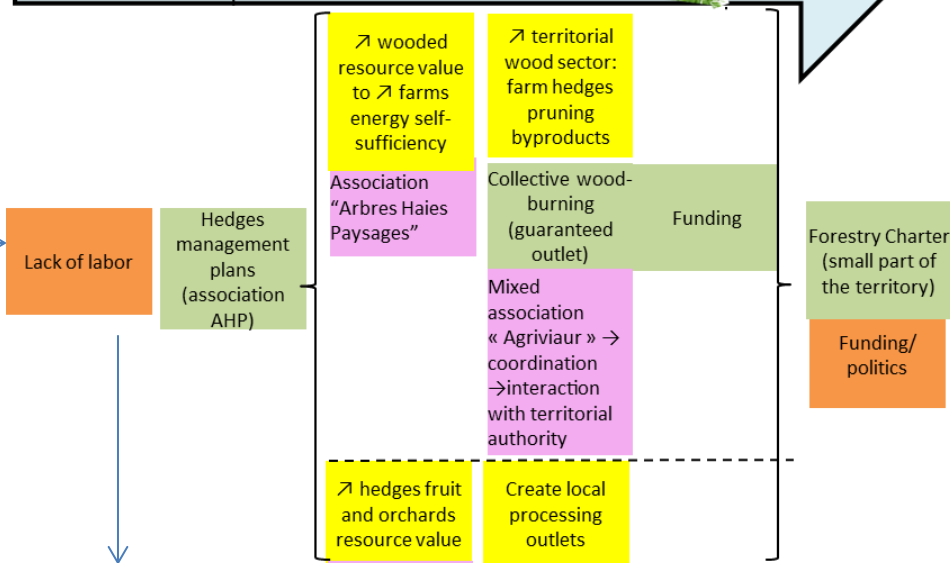
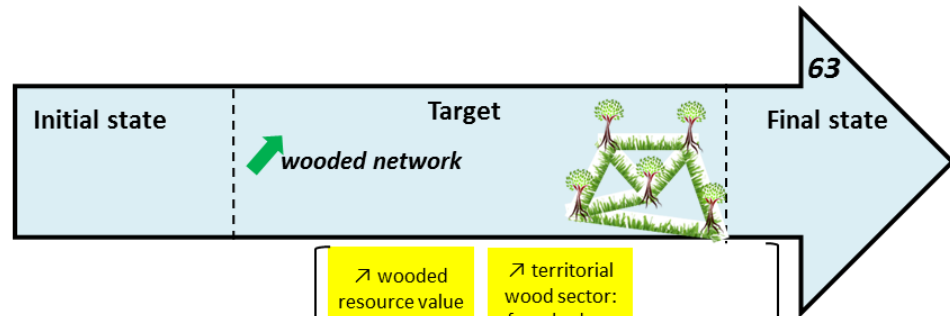


# Dense outputs





# Processing results to create useful tools for the territorial planning



## Action plan

Target cluster	Target	Semester jan-16	jan-17	jan-18	jan-21
Maintain and value the wooded landscape	Create a regular wooded network between farms	-> wooded resource value to > farms energy self-sufficiency	-> territorial wood sector: farm hedges pruning byproducts	-> hedges fruit and orchards resource value	-> territorial wood sector: farm hedges pruning byproducts
		Association "Arbres Haies Paysages"	Mixed association « Agriviaur » → coordination → interaction with territorial authority	Associations « Terres paysannes » and « Les amis du verger »	Association « Terres paysannes » and « Les amis du verger »
		-> hedges fruit and orchards resource value	-Create local processing outlets	Create employment to manage fruit trees in a farm network	Create employment to manage fruit trees in a farm network
		Associations « Terres paysannes » and « Les amis du verger »	Start up	Start up	Start up
		-Create employment to manage tree fruits in a farm network	Visit of successful examples	Visit of successful examples	Visit of successful examples
Limit shrub					



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