WP4 – Land system dynamics assessment at local scale

Maria Helena Guimarães, LABS, ICAAM, Evora, Portugal

Sylvie Lardon, INRA & AgroParisTech, UMR Territoires, Clermont-Ferrand, France
The place of the WP4 in the DIVERCROP project

7th of December 9h30-10h30 (10 min)
WP 4 AGENDA

1. To define the linkages between WP1, WP2, WP3 and WP4 (based on the results achieved so far)

2. To define the case studies of each partner

3. With this discussion define the objectives of WP4 in each case study as well as the methodological approach more suitable in each case

4. Provide/discuss a 1st trial to structures WP4 training week (9 to 13 of April 2018)

5. Present the option of using report templates to systematize the outcomes of WP4 in all case studies and further discusses possible uses (i.e. publication) driven from WP4 outcomes.
Aims of the WP4 in the proposal – we need to go further in detail during this meeting

To identify and assess what are their strengths and potentials in face of the main drivers of change, which have been identified at regional scale in WP2

To analyze farm systems at the local scale, to characterize local dynamics in case-studies sampled through the assessment of the farm systems that are characteristics of each case-study area.

To develop, in interaction with local stakeholders, possible future pathways for these farming systems to adapt and respond to these drivers, from climate change to policy orientations for WP5
Deliverables of the WP4

Is the calendar still the same?

Methodological pathway
Farm system analysis

Methodological training
Participatory approach

Farm system characteristics, potentialities and threats

Visions for change
Possible pathways

Possible adaptation pathways
Land management
Local food systems

Month 12 = March 2018

Field work

Month 24 = March 2019

Synthesis?

Month 27 = June 2019

Publication
## WP 4 - Land system dynamics assessment at local scale

<table>
<thead>
<tr>
<th>Participant number</th>
<th>P1</th>
<th>P2</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant short name</td>
<td>INRA</td>
<td>ICAAM</td>
<td>LSB</td>
<td>INRAT</td>
<td>RNAMS</td>
<td>MCAST</td>
<td>UPM</td>
<td>SSSA</td>
</tr>
<tr>
<td>France</td>
<td>Portugal</td>
<td>France</td>
<td>Tunisie</td>
<td>Algeria</td>
<td>Malta</td>
<td>Spain</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Person month per participants</td>
<td>10</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

### Local case-studies
- Algeria
- Italy
- France
- Malta
- Portugal
- Spain
- Tunisie

### Territory game
- Algeria
- Italy
- France
- Malta
- Portugal
- Spain
- Tunisie

### Accompagniment from France and Portugal for participatory approach
- = training in April 2018

**What is the budget and when the others countries will plan their participatory approach?**
Articulation among WPs and objectives of the participative action of the WP4

7th of December 15h30 – 17h00
How to implement the articulation between WPs?
The example of the TASTE Project
Smart Agriculture in Mediterranean urban regions
Rosalia Filippini, Stephano Corsi, Sylvie Lardon
The example of the TASTE Project
Multiscale model

Figure 1: modèle initial

Regional level QUANTITATIVE Model WP3

Regional level QUANTITATIVE/QUALITATIVE Model WP3

Regional level QUANTITATIVE/QUALITATIVE Model WP3

Tool for policymakers

To formalize archetypical models

To give some indicators

To evaluate smart dvpt

Case-studies QUALITATIVE analysis WP3

WP5 Participatory approach

To identify processes

To identify conditions of smart development
The example of the TASTE Project
Mixed methods
The example of the TASTE Project
Transdisciplinarity

Scenario 1: Floating Food in Pisa

- Food boats distribution
- Urbanisation cancelled
- Forest with sheeps
- Cereals and legumes
- Vegetables for the cities
- Olive and wineyard with terraces
- With goats
- Break the limit between urban and periurban
- Links with outside

5 km

[Map of Pisa with various symbols and labels indicating different scenarios and locations]
## Participatory approach

### TASTE grid of participatory process

For each CS, answer the upfront **questions to discuss the relevance of going into a participatory process**

<table>
<thead>
<tr>
<th>Project objective</th>
<th>Expected products</th>
<th>Working scale</th>
<th>concerned stakeholders</th>
<th>contacts</th>
<th>time available</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problematic &amp; level of research actors participation in the participative process</td>
<td>GIS maps, action plan, map of the territory, explanations of issues etc</td>
<td>local, regional, national, international</td>
<td>public actors, municipal councillors, associations, industries actors, inhabitants, etc.</td>
<td>already active</td>
<td>to get</td>
<td>for me</td>
</tr>
</tbody>
</table>

Contribute to a **general discussion about the diversity of methodologies** and types of local actors-researchers interactions in the Taste Project.

<table>
<thead>
<tr>
<th>Group</th>
<th>Objective</th>
<th>Limits</th>
<th>To be continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Each country fulfill the taste Grid: participatory approach

- What is my project objective?
- What are my expected products (GIS maps, action plan, map of the territory, explanations of issues, etc)?
- Which is my working scale (local, regional, national)?
- What are actors do I want to involve?
- How much time is available?
Tasks of the WP4 and training week (April 2018)

8th of December 10h45 – 12h15 (45 min)
Task 4.1: Local farm systems

Questions to be discussed
Task 4.1: Local farm systems

we will characterize the particularities and dynamics of farm systems and the main changes taking place, at the farm and at the territorial levels.

**QUESTIONS:**

→ Define the farms (all production systems? A sample? )
→ define the territory (scale, limits, characteristics)

This will be done through **farm based surveys** and **data-driven analysis** combined with **interviews to key-informants** (farmers’ representatives in professional organizations, technicians from agricultural administration, policy decision makers, local food traders...)

→ Questionnaire
→ Guide d’entretien
→ Échantillon d’acteurs
→ Literature review

From January 2018 up to April 2018 we will propose and work with all partners a guiding questions that should be follow in all case studies so that we can later compare results

Arrive at a final version by April to be ultimate at the beginning of the training week
Task 4.1: Local farm systems

so that we identify **network relations** and the **functioning of socioecological processes**, such as farm operations, inputs and practices, farm connections with different forms of collective action (professional organizations, cooperatives, farm-to-farm formal and informal networks...), commercialization of farm output, with special attention to local food chains, participation in quality schemes/green labels, etc.

**QUESTIONS:**
→ What about the link to the WP3 on species diversity?

This will improve the analysis developed at regional scale with more detailed data and assess potential future change, both from existing database and interviews with local actors.

**QUESTIONS:**
→ What are the results of the WP2: drivers of land systems dynamics?
→ How can we identify qualitative questions to rely to quantitative indicators?
Task 4.1 Local farm Systems

Characterize the particularities and dynamics of farm systems and the main changes taking place, at the farm and at the territorial levels.

1st stage: Stakeholders and institutional mapping to understand who should be involve and not to miss anyone

Categories: farmers’ representatives in professional organizations, technicians from agricultural administration, policy decision makers, local food traders...

Land use system and Δ

Land management practices or proxies

WP5

1st stage: Stakeholders and institutional mapping to understand who should be involve and not to miss anyone

Create capital to task 4.2.

Fill the gaps

Exploratory interviews with key informants

Data-driven analysis, used the data and analysis of other projects

Questionnaire (?) not sure if this will be possible due to budget constrains and also the dimension of the local case studies
Task 4.1 Local farm Systems

To identify (?), *are these the most important questions?*

- Network relations
- Farm operations, inputs and practices,
- Farm connections with different forms of collective action (professional organizations, cooperatives, farm-to-farm formal and informal, networks...),
- Commercialization of farm output, with special attention to local food chains, participation in quality schemes/green labels, etc.

What questions would you like to pose at the local level and to the stakeholders.

To improve the analysis developed at regional scale with more detailed data and assess potential future change.

Needs to characterize the land and food system – Yet how does this integrates the work developed in WP1, 2 and 3? Maybe it doesn´t.

Maybe understand if stakeholders perceive the small changes in the land system that **WP2** detects.

Or

Understand the driver of the changes detected
Task 4.1 Local farm Systems

We need to go deeper into this information:

- Network relations

- Farm operations, inputs and practices,

- Farm connections with different forms of collective action (professional organizations, cooperatives, farm-to-farm formal and informal, networks...),

- Commercialization of farm output, with special attention to local food chains, participation in quality schemes/green labels, etc.
Task 4.2: Participatory approach

Questions to be discussed
Task 4.2: Participatory approach.

After this land system analysis

An evaluation of the possible engagement of the local stakeholders will be done prior to the launching of this work, so that consistency within all case studies is secured.
→ during Tunis meeting, we can discuss on the conditions to use participatory approach (see TASTE grid1)

to discuss possible future territorial scenarios, both of the local farming systems and of the rural territories
→ We have to decide which territory and which actors

The participatory approach is the “territory game”
→ We will organize a training session on the Portuguese case study in April 2018
Task 4.2: Participatory approach.

The objectives are twice:

1. At local and territorial level:
   a higher awareness and empowerment of the local stakeholders, in relation to the drivers of change their territory is subject to,
   → To be consistent with the interests of the actors (questions and actions) and the possibilities for them to define and follow their specific pathway, in accordance with the potentialities and constrains of their territory.
   → Productions of the territory game (dynamics and issues)

2. At regional and global level:
The visions and pathways identified with the stakeholders will then be used to enrich and built the scenarios for future local food system improvement, which will be generalized at the regional scale (WP5).
   → What about the biodiversity model (WP3)?
   → How to upscale relations on land and food systems?
   to progress to a more focused definition of visions and pathways for the future, which will be targeted within the boundaries of the regional and global changes
   → Prospective model: scenarios
Going back to the questions

WP4:
- Define the farms (all production systems? A sample?)
- Define the territory (scale, limits, characteristics)
- What about the link to the WP3 on species diversity?
- What are the results of the WP2: drivers of land systems dynamics?
- How can we identify qualitative questions to rely on quantitative indicators?
WP4
Task 4.1: Local farm systems
Task 4.2: Participatory approach

Training proposal
Portuguese possible case studies

Montado

Olive production
**Schedule of a week training on territory game (see Pisa winter schools)**

**Alternative 1: participants stay all the week**

<table>
<thead>
<tr>
<th>day</th>
<th>activity</th>
<th>comments</th>
</tr>
</thead>
</table>
| monday    | Overall presentation
Background concepts and methods case-study presentation | Local farm systems (task1)                        |
| tuesday   | Background concepts and methods Methods and field trip preparation       | Participatory approach (task2)                     |
| wednesday | Field trip and analysis                                                   | Local farm systems (task1) and Participatory approach (task2) |
| thursday  | Territory game preparation
Territory game                                                              | Participatory approach (task2)                     |
|           |                                                                          | TG can be done in the evening                      |
| friday    | Territory game analysis
Difficulties and generalisation on other cases studies                  | Local farm systems (task1) and Participatory approach (task2) |
|           |                                                                          | Adaptation for the others case studies             |
Schedule of a week training on field analysis and territory game

**Alternative 2: participants stay 2 first days or 3 last days or a week**

<table>
<thead>
<tr>
<th>day</th>
<th>activity</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Background concepts and methods for local farm system analysis</td>
<td>Local farm systems (task1)</td>
</tr>
<tr>
<td></td>
<td>Field trip</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>Local system analysis</td>
<td>Local farm systems (task1)</td>
</tr>
<tr>
<td></td>
<td>Difficulties and generalisation on other cases studies</td>
<td>Adaptation for the others case studies</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Background concepts and methods for territory game</td>
<td>Participatory approach (task2)</td>
</tr>
<tr>
<td>Thursday</td>
<td>Field trip (?)</td>
<td>Participatory approach (task2)</td>
</tr>
<tr>
<td></td>
<td>Territory game</td>
<td>TG can be done in the evening</td>
</tr>
<tr>
<td>Friday</td>
<td>Territory game analysis</td>
<td>Participatory approach (task2)</td>
</tr>
<tr>
<td></td>
<td>Difficulties and generalisation on other cases studies</td>
<td>Adaptation for the others case studies</td>
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</table>
Schedule of the WP4 training week  
**Alternative 3: integration of the WP4 into the global project**

<table>
<thead>
<tr>
<th>day</th>
<th>Morning</th>
<th>Afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>monday</td>
<td>General project discussion</td>
<td>Task 4.1 Ultimate the final guiding questions to be applied in each case study</td>
</tr>
<tr>
<td>tuesday</td>
<td>Background concepts and methods for Local farm systems (task1) and Participatory approach (task2)</td>
<td></td>
</tr>
<tr>
<td>wednesday</td>
<td></td>
<td>Field trip</td>
</tr>
<tr>
<td>thursday</td>
<td></td>
<td>Territory game</td>
</tr>
<tr>
<td>friday</td>
<td>Territory game analysis</td>
<td>How to use the outcomes for the publications envision by the project</td>
</tr>
<tr>
<td></td>
<td>Difficulties and generalization on other cases studies</td>
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</tr>
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This part will be defined with Marta and Claude

This part can be useful also for WP valorization that will be discuss later on
Publications of the WP4

8th of December 13h45 – 15h100
(15 min)
Deliverables of WP4

D4.1- Methodological training for project participants, for farm system analysis and for the participatory work. This will be developed and validated with the pilot cases, and will be available at month 12.

D4.2- Report on farm systems characteristics, potentialities and threats, for all case studies, and on visions for change, and possible pathways, for all the case study areas where the participatory work is applied, due in Month 24. A common publication of this comparative work will be prepared for the next year.

D4.3- Report on the possible adaptation pathways for the local areas to increase resilience of farm systems, land management and local food systems, due Month 27.

Reporting templates where each case study provides the necessary information for the report and also for the comparative analysis we need to do.

Reporting templates are documents that pose a sequence of questions that provides the team that needs to do the reports and the common publication the necessary information on what was done at each case studies and the results achieved.
Deliverables of WP4

D4.1- Methodological training for project participants, for farm system analysis and for the participatory work. This will be developed and validated with the pilot cases, and will be available at month 12.

Proposal:
• Report for each case study on the participatory grid

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</tbody>
</table>

• methodological itinerary of the training week
• leaflet of the portugese case study from the training week

→ Available month 18 (september 2018)
Deliverables of WP4

D4.2- Report on farm systems characteristics, dynamics and projects, for all case studies, and on visions for change, and possible pathways, for all the case study areas where the participatory work (territory game) is applied, due in Month 24. 
A common publication of this comparative work will be prepared for the next year.

Proposal:
• « portrait » of each case study (characteristics, dynamics, projects) 
  (See pisa case study for the TASTE project)
  ➔ Available month 18 (september 2018)

Territory games in different case studies between april 2018 to june 2019

• leaflet of the territory games (for case-studies which have done it)
  ➔ Available month 30 (september 2019)

➔ article on comparative work month 36 (march 2020)
Deliverables of WP4

D4.3- Report on the possible adaptation pathways for the local areas to increase resilience of farm systems, land management and local food systems, due Month 27.

Proposal:
• Use the results of the territory games to identify main issues for the local stakeholders to increase resilience of farm systems, land management and local food systems
  → Available month 30 (september 2019)

Do a Territory game with researchers of all the WPs of the DIVERCROP project in 2019

• Report on the possible adaptation pathways for the local areas, in interaction with global changes
  → Available month 36 (march 2020)

  → articles (book?) on integrative framework in 2021?