Restoring value to Grasslands
“To maintain, restore and enhance environmental and economic value of grasslands, while promoting their social and cultural functions globally”.

9 SDGs: 1,2,3,5,6,8,13,15,17
Key Areas of focus for AN2 over the last year

- **Output 1**: Finalise a database on grassland management case studies. Lessons learnt.

- **Output 2**: Design and test an integrated assessment framework of multiple benefits from livestock grazing systems.

- **Output 3**: Capacity building of stakeholders on multiple benefits from grasslands.
AN2 : Since 2013. 95 members
Methodology for multiple functions model development

Design an integrated methodological framework for assessing the contribution of grassland systems to multiple functions and values in relation to the SDGs and test on ground

- Literature review : 2016
- Conceptual model : Participative approach (Montpellier May 2016, IRC Canada July 2016)
- Participative films : mid 2016 - 2017
- Test and develop with partners on the field using case studies from Brazil, Uruguay, Argentina, Mongolia, Senegal, France, New Zealand, Vietnam
From conceptual model to an “Ontology” of the domain of “Multifunctionality of Grazing Systems”: 4 dimensions identified

Social point of view

Local development point of view

Production point of view

Ecosystem services point of view
HOW
to take into account contrasting – if not conflicting – points of view to build an ontology based on different perceptions of a same reality?

Using editing techniques to ENHANCE and OVERCOME the discrepancies between different stakeholders:

• addressing different understandings of multifunctionality
• looking beyond keywords to analyze and integrate their various meanings

Overview in 2'00

→ Strong need for methodological support to build partnerships between stakeholders at a local scale

Using video as a research tool to allow stakeholders to reframe current debate (not to communicate on pastoralism towards the general public)

Multifunctionality:

A cornerstone of the European model of agriculture
A matter of public debate in the French Mediterranean context
Ontology with 4 dimensions: Detailed components and processes for each value set
Conceptual Model: Contribution of livestock to the values

Social

Local development

Production

Environment

Synergies and trade-offs?
### Outputs

- Academic publication (Rangeland paper submitted)
- Indicator library with each indicator mapped to an SDG
- UML diagram for each domain

#### Table: Indicators and SDGs

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>SDG</th>
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</table>
| Local development | Services
| 2.1            | nb and diversity of extension services                        | 17  |
|                | nb local services related to livestock activities          | 15  |
|                | credit availability to resource users                      | 8   |
|                | number of processing units (dairy, slaughter,…)            | 8   |
| Value chain    | distribution of added-value amongst stakeholders           | 5   |
|                | marketing channels for pastoral products                   | 8,2 |
|                | % production in short channels                             | 8,3 |
|                | added value                                                | 8   |

#### Diagram: UML for dimension: ecosystem
Use of Ontology

Rich background of knowledge and diverse world views gives confidence in ontology robustness to be used in the:

- Assess impact of livestock in case studies through provision information on the four dimensions (Vietnam, France, Uruguay, Mongolia, New Zeland,…)
- Help design of Policy (Vietnam, Senegal,…)
- Education of students (Brazil, France,…)
- Help to form and strengthened transdisciplinary teams (Argentina, New Zeland,…)
- Simulation models to explore the impact of “what if” strategies and scenarios (Senegal, Brazil, Uruguay, France,…)


Organizing Dairy production and delivery to be less dependent on importations

« Laiterie du Berger » collects milk in a large traditional pastoral area of north Senegal but needs to average production over the year and bad seasons

• Issue: understanding the multi-dimensional impact of introducing some additional small extensive farms in the area (nd, size,....?)
Pasture biomass availability

Milk production
Traditional and mini-farms

Revenues
traditional and mini-farms

The simulation model: in progress
Document, standardise and share information on lessons learnt on sustainable grassland management

• Database on the GASL website: share knowledge and lessons (web master)
Database utility

Number of Projects by Region:
- TOTAL: 17
  - Asia: 7
  - Latin America: 5
  - Africa: 3
  - North America: 1
  - Africa/Middle East: 1

Projects by type of land ownership:
- Private: 2
- Collective: 7
- Public with rights of way: 6

Projects by Type of Livestock system:
- Farmers: 9
- Pastoralism: 3
- Sedentary Farmers: 1

Projects by Type of Landscape:
- Grazlands: 10
- Rangelands: 6
- Wetlands: 1

Type of Interventions:
- Capacity...
- Research...
- Land...
- Livestock...
- Ecological...
- Poverty...
- Watershed...
- Broader...
Good practice Booklets

- Synthesis of case studies: lessons and evidence for sustainable grassland management
More information on AN2

- **Next session:**
  - You can get more information on simulation model
  - Get information on video as a research tool
  - Look at AN2 Database information
  - View some of the case study posters
  - See some of our cases as videos (extra session)

- **AN2** we will meet as an action network over the next days (Open on Friday 8:00 am)
  - Contribute through some of your own cases
  - Identify contribution to Work Areas for future AN2 Action plan

- Complete our case studies (diversified evidence, model robustness, other on ground applications)
Next Step for AN2

- Progress with present pilots to assess robustness and utility of the Ontology and Conceptual Model

- Complete our case studies (diversified evidence, model robustness, other type of on ground applications)

- Co-financed activities: French contribution to GASL and other sources (Pilots, Projects,..)

- Disseminate results and guidelines

- Complete Database of Case studies on lessons learnt

- Capacity building on Multifunctionnality of Grasslands Systems