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Using the Land Degradation Assessment in Drylands (LADA) and the World Overview of Conservation Approaches and Technologies (WOCAT) for scaling up good land management practices in Asia

Webinar, 17-18 October 2023

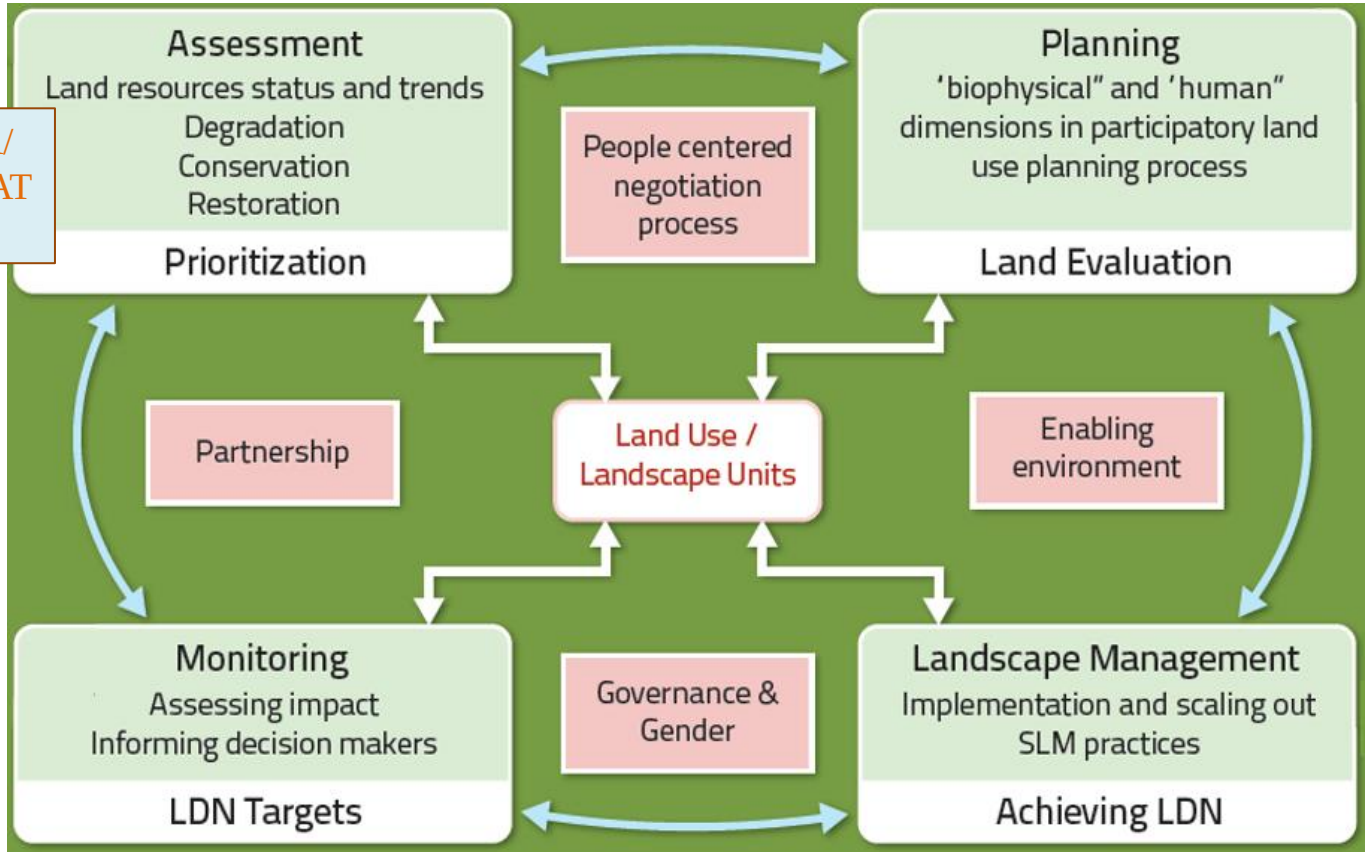
LADA Assessment of Land Degradation and Integrated Land Use Planning at Local Level

Feras Ziadat
FAO - Land and Water Division

Food and Agriculture Organization of the United Nations

Land Resources Planning

LADA/ WOCAT Tools



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Participatory land resources planning to promote the scaling out and mainstreaming of SLM in Morocco

From the diagnosis of land use systems, to

LADA/WOCAT Tools

Territorial planning, to

Scaling-out SLM in specific landscapes

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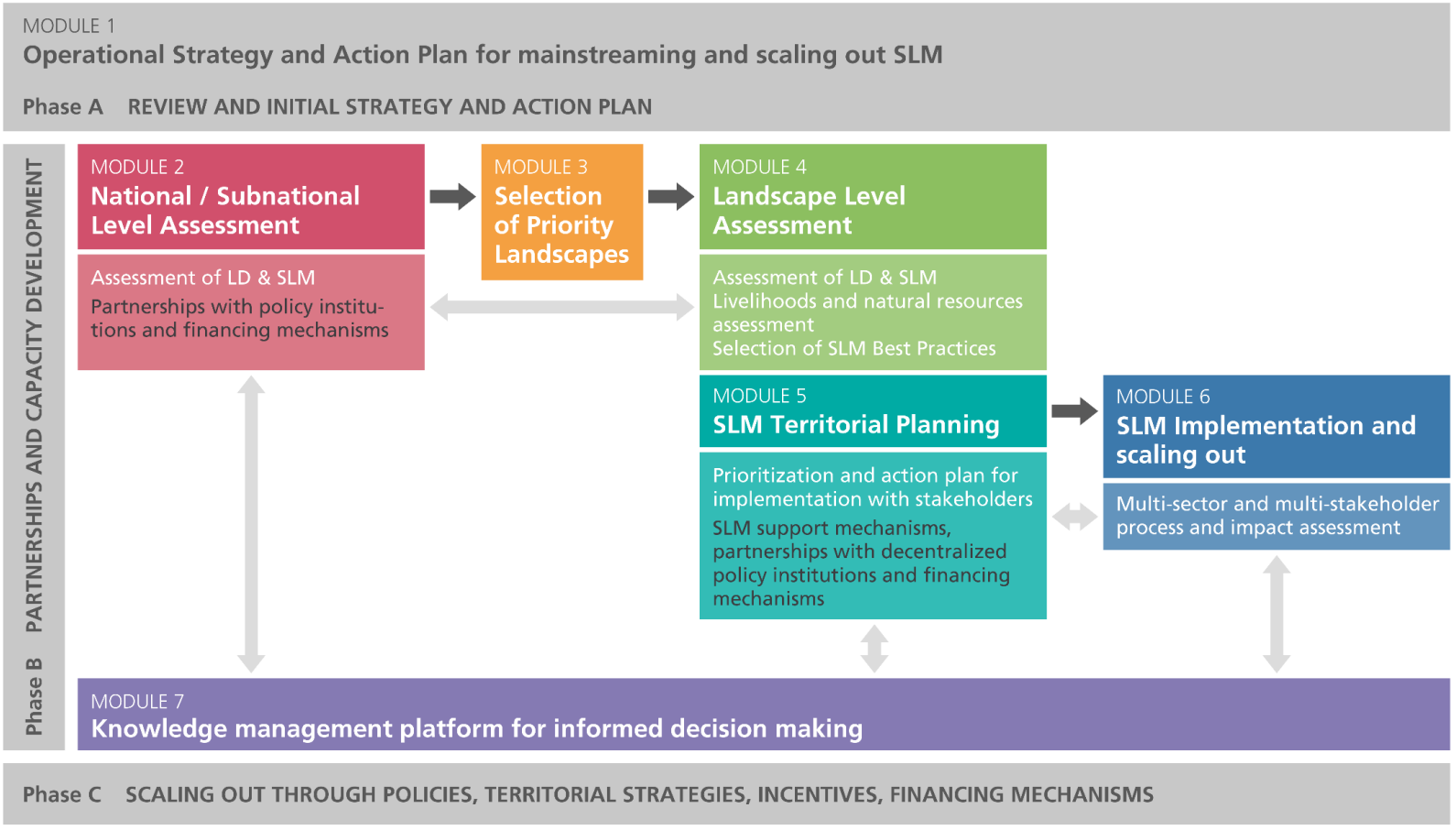
Decision Support Framework
for SLM mainstreaming and scaling out



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Module 2: LD & SLM Assessment at National / Subnational

MODULE 1
Operational Strategy and Action Plan for mainstreaming and scaling out SLM

Phase A REVIEW AND INITIAL STRATEGY AND ACTION PLAN

PARTNERSHIPS AND CAPACITY DEVELOPMENT

MODULE 2
National / Subnational Level Assessment

Assessment of LD & SLM
Partnerships with policy institutions and financing mechanisms

MODULE 3
Selection of Priority Landscapes

MODULE 4
Landscape Level Assessment

Assessment of LD & SLM
Livelihoods and natural resources assessment
Selection of SLM Best Practices

MODULE 5
SLM Territorial Planning

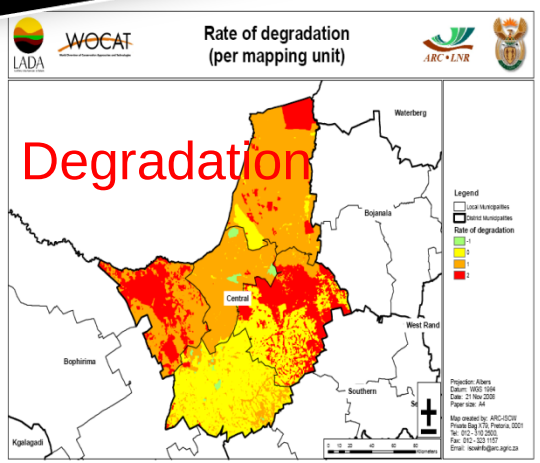
Prioritization and action plan for implementation with stakeholders
SLM support mechanisms, partnerships with decentralized

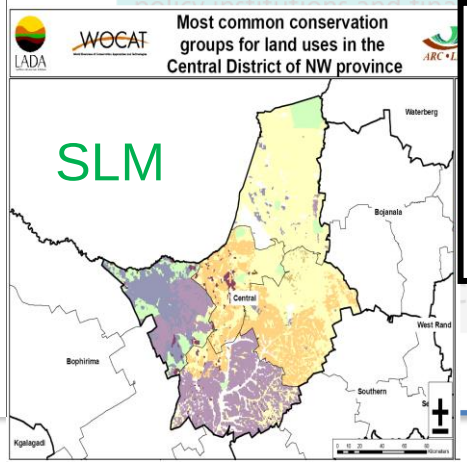
MODULE 6
SLM Implementation and scaling out

Multi-sector and multi-stakeholder process and impact assessment

LADA WOCAT
World Overview of Conservation Approaches and Technologies

LADA/WOCAT Mapping Tool (QM)





Where to invest?
hot spots
bright spots
… and their impacts

Phase C SCALIN … MECHANISMS

MODULE 7
Knowled…

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WOCAT

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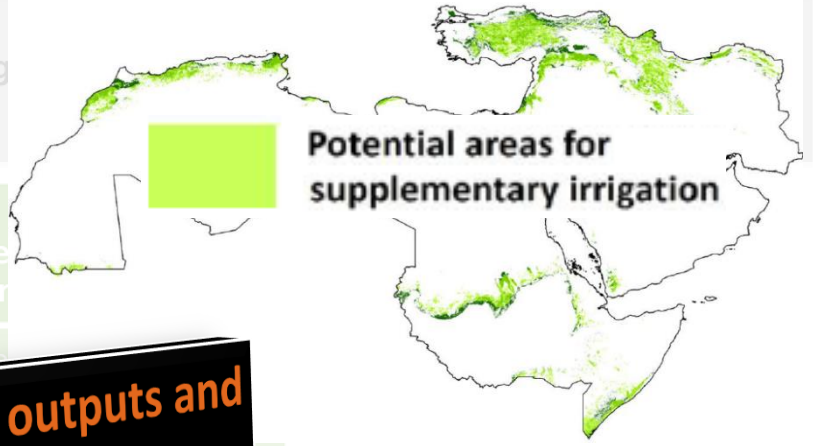
Module 3: Selection of Priority Landscapes



MODULE 2
National / Subnational Level Assessment

MODULE 3
Selection of Priority Landscapes

MODULE 4
Landscape Assessment

Define key **national expert criteria**

Identify **data** and execute **analysis**

Similarity maps at national level

LADA/WOCAT QM outputs and Similarity Analysis

MODULE 6
SLM Implementation and scaling out

Prioritization and action plan for implementation with stakeholders

Multi-sector and multi-stakeholder process and impact assessment

Decision-support to target selected priority landscapes for SLM implementation

LADA/WOCAT QM outputs

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Module 4: Landscape level Assessment

MODULE 1
Operational Strategy and Action Plan for mainstreaming and scaling out SLM

Phase A REVIEW AND INITIAL STRATEGY AND ACTION PLAN

MODULE 2
National / Subnational Level Assessment

Assessment of LD & SLM
Partnerships with policy institu-

MODULE 3
Selection of Priority Landscapes

MODULE 4
Landscape Level Assessment

Assessment of LD & SLM
Livelihoods and natural resources assessment
Selection of SLM Best Practices

MODULE 5
SLM Territorial Planning

Prioritizati
implement
SLM suppo
partnership
policy insti
mechanism

LADA

WOCAT
World Overview of Conservation Approaches and Technologies

LADA/WOCAT tools at **LOCAL** level (landscape) to assess LD and SLM for different LUS

LADA tools LOCAL LEVEL &QT/QA

Prioritization of areas/communities For **Implementation**

Selection of SLM Best Practices from **WOCAT (QT/QA)**

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Module 5: SLM Territorial Planning

Local knowledge, LADA assessment and **WOCAT** database to identify SLM options **LOCAL LEVEL**

Suitability Analysis

Participatory Negotiated Territorial Development and Land Use Planning (PNTD/PLUP)

Community Participation

Participatory and Negotiated Territorial Development

MODULE 5
SLM Territorial Planning

Prioritization and action plan for implementation with stakeholders

SLM support mechanisms, partnerships with decentralized policy institutions and financing mechanisms

MODULE 6
SLM Implementation and scaling out

Multi-sector and multi-stakeholder process and impact assessment

Community-based participatory selection of SLM options for Implementation

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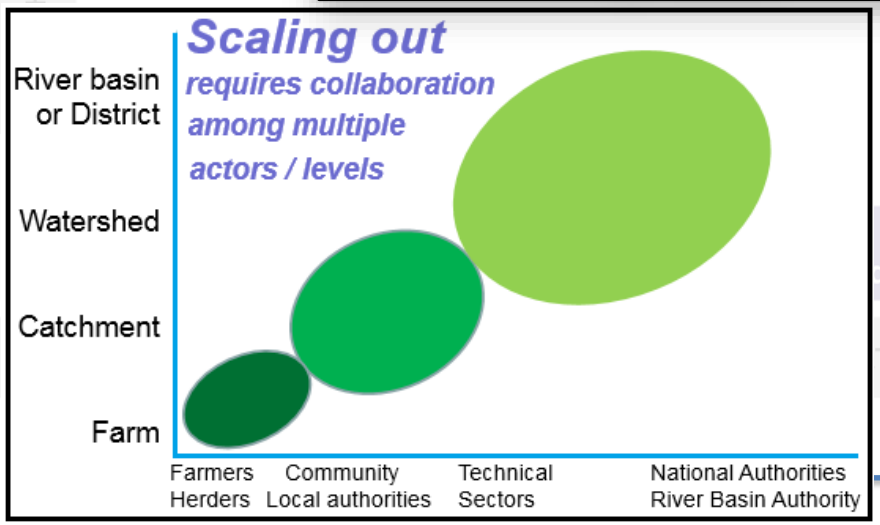
Module 6: SLM Implementation and Scaling Out

National capacity on DS tools: **LADA LOCAL, QM, WOCAT QT/QA, PNTD & PLUP**

Integrate DS tools at National Level: **Multi-Sector; Multi-Stakeholder; Impact Assessment** process

SLM Scaling Out using the DS TOOLS

MODULE 6
SLM Implementation and scaling out
Multi-sector and multi-stakeholder process and impact assessment



SLM Implementation Scaling Out, and **Mainstreaming**

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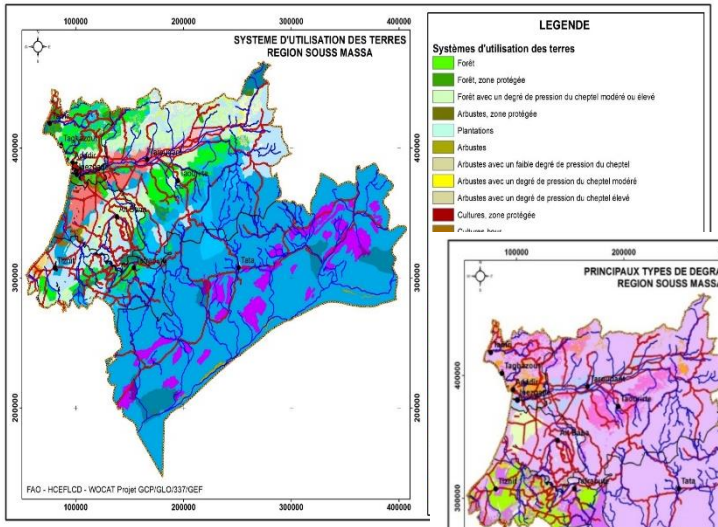
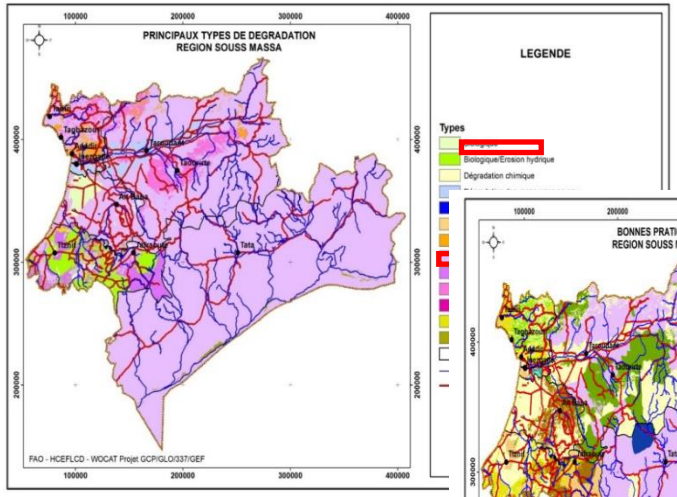
Assessment of land degradation and sustainable land management at sub-national and local level

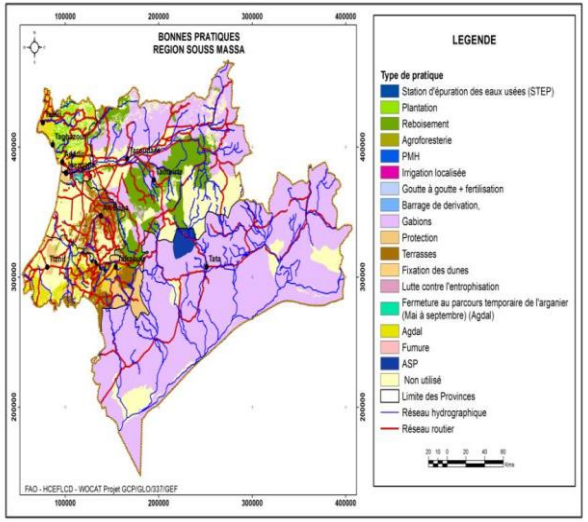
Land Use Systems



Main types of degradation



SLM practices



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LADA
Land Degradation Assessment in Drylands

Objectives of the assessment at Local Level

1. Improved **knowledge and understanding** (→ baseline for monitoring):
   - on **LD status and trends**, driving forces and impacts on land resources/ecosystems and on livelihoods
   - on **effects of land use/management practices** of different land users (nature, extent, effectiveness, constraints)

2. Analysis **effectiveness of SLM interventions** and identification of SLM measures for scaling up and improved SLM design and planning

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LADA Local Level Assessment

- Participatory stakeholder process
- Integrated: biophysical & socio-economic
- Sampling strategy, tools & methods (simple & robust; comparisons)
- Status & trends NR (degradation, conservation, restoration)
- Analyze impacts of LD & land use/ management on livelihoods & ecosystem services
- Structured report & feedback for decision making

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Methodological Steps

1. Planning and area selection with national and local resource persons
2.1 Identification of key stakeholders
2.2 Collection of secondary information
3. Focus group discussion, community mapping and wealth ranking
4. Location and conduct of transect walks with land users
5. Biophysical assessment (soil, water vegetation, onsite and offsite/landscape)
6. Livelihood interviews with land users and other households (commercial, smallholder; poor, medium, better off)
Data entry into database
7. Analysis of findings and preparation of draft recommendations
8. Feedback and discussion with community and resource persons to develop potential LD/SLM responses
9. Preparation of the report, policy brief and completion of database

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Assessment of impacts on livelihoods

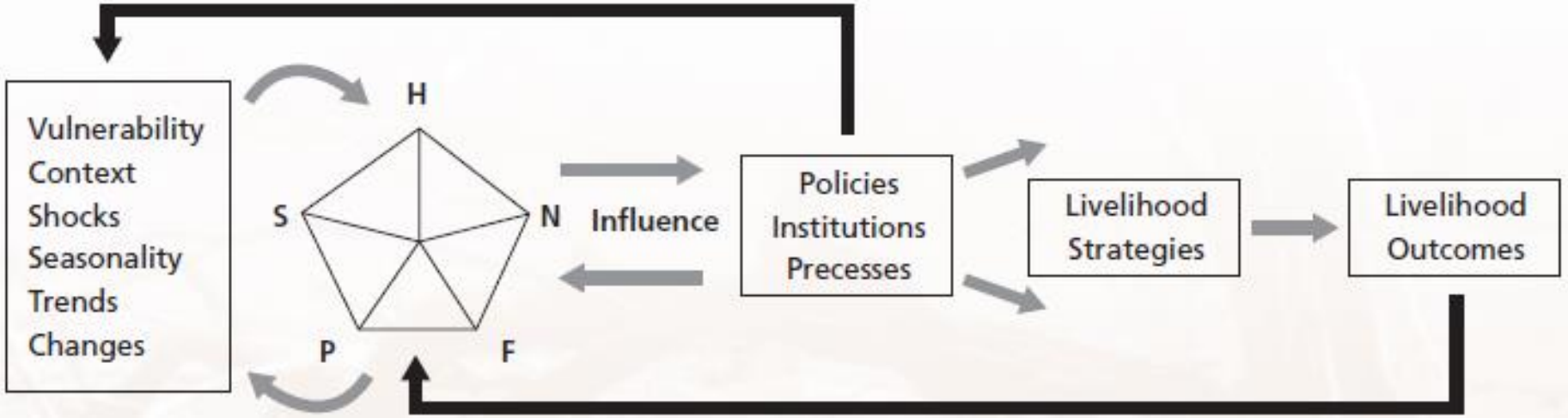

FIGURE 2 **The Basic Livelihoods Framework** *(Source: Ade Freeman, Ellis & Allison, 2004)*

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Multidisciplinary Team

Ideally the **team members** should have expertise in:

- Soil science and agronomy
- Water resources management
- Animal production (settled/ pastoral systems, livestock, wildlife, etc.)
- Social sciences (and tenure, laws, gender, etc.)
- agricultural economics (costs & benefits, tradeoffs)
- Ecology (vegetation, forest, rangeland management)

Socio-economic assessment: at least one person with experience of participatory rural appraisal (PRA) tools such as focus group discussions, community/territory mapping, organizational analysis, household interviews

Local experts from the local assessment area; if not possible (e.g. lack of capacity or training in the assessment methods), the assessment team should be guided and supported by local representatives, technical staff from the district/provincial offices or relevant projects on the ground.

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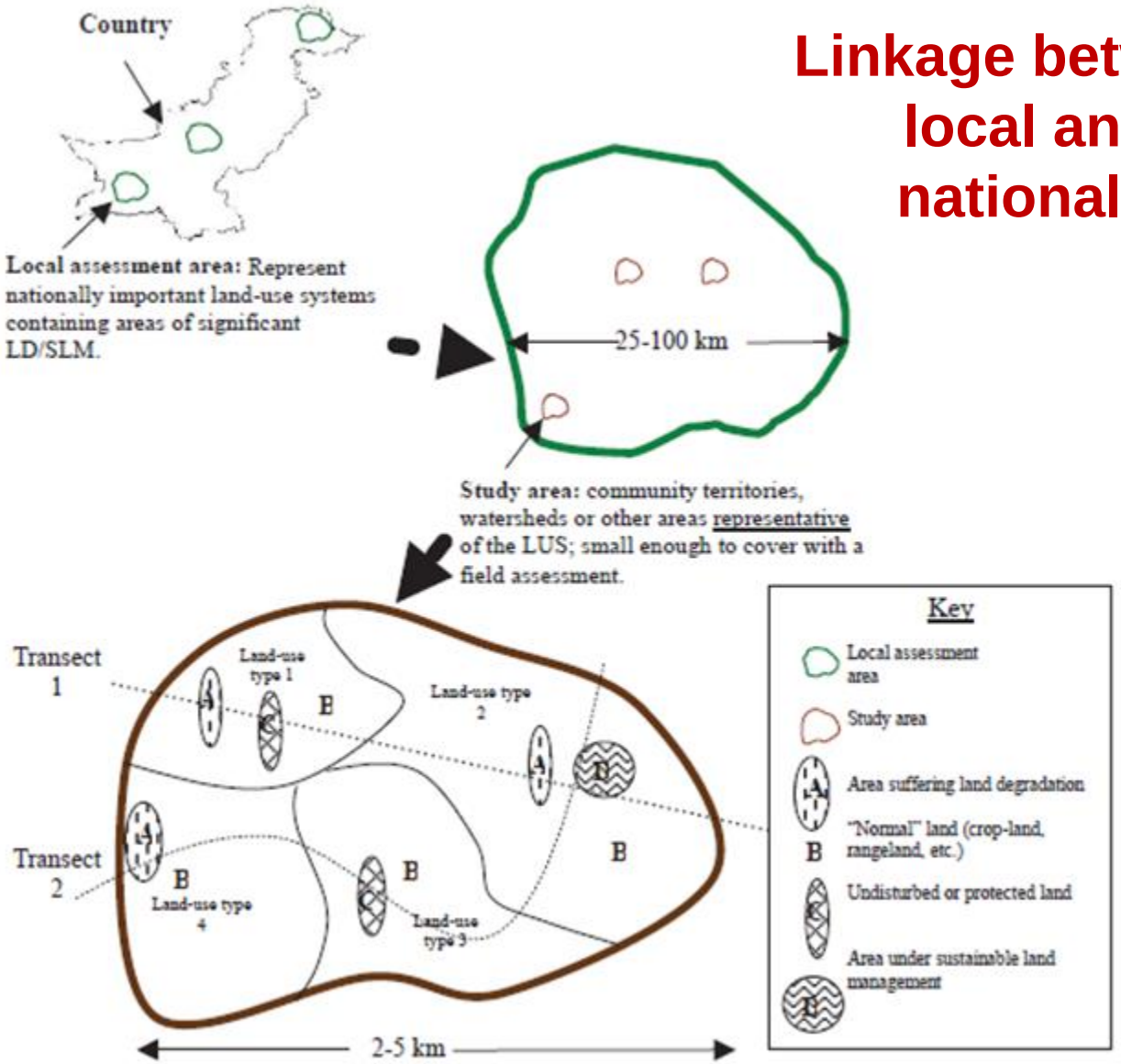
Sampling strategy

Linkage between the local and the national level



LADA
Land Degradation Assessment in Drylands

Characterisation of the study area

TABLE 6 **List of secondary information for collection and review**

Categories	Contents
Maps, satellite images and photos	• Maps: administrative boundaries, soil, terrain, land-use, vegetation, watersheds, agro-ecological zones, land use systems (LUS), roads etc • Aerial photographs • Time series satellite images (SPOT-NDVI) • Land use and water resources plans
Climatic (including natural disasters) and meteorological records	• Rainfall amounts and variability; temperature; humidity • Trends in rainfall and temperature over recent decades • Incidence and impacts of drought and flooding etc. • Information and studies on the impacts of climate change including likely future impacts on water resources (Sources: National Meteorological Office, projects, IPCC 2007 reports)
Human Population	• Total population and recent trend(s); age, gender and ethnic minority distribution • Household and family composition information • Employment by sector; labour force; migration information; settlement patterns etc. • Poverty and food security etc.
Land use types	• Size of land use types in the local assessment area and community territory; farm land and protected areas • Areas and proportions under different land use types (including forest and protected areas) • Land cover and land resources surveys, etc.
Farming system information	• Existing agricultural plans, programmes and projects • Crop and livestock and forestry systems information • Presence & extent of local and introduced practices for land management / land degradation control • Information on livestock numbers, distribution, ownership, actual and recommended stocking densities, management
Water resources	• Water resources records over the last decade (Sources: water boards / authorities) to show - water flow regimes in rivers - water storage capacity and water reservoirs - sedimentation load / rates • Incidence of water borne diseases an sector and water authorities) etc.
Economy and livelihood	• Household income information; com contribution from farming and othe • Household consumption information • Poverty and food security profiles (p poverty line, % of food insecure, ma • Credit / loan availability, etc.
Land Tenure	• Information on land-holdings: owne • Type and prevalence of renting/lease • Legal status of holdings (civil, cooper titles) etc.
Institutions, policies, regulations, byelaws	• Relating to land, agriculture, livestock, water resource, environment, rural development, technical sectors, extension • Relating to implementation of the multilateral environmental conventions (UNCCD, UNCBD, UNFCCC, Ramsar, etc.) • Access to services ((official/informal), private / public sector), application / effectiveness of regulations / policies, mandates / capacities of actors, etc. • Presence, roles and activity of NGOs, community based organisations in their implementation, etc.
Basic infrastructure and investments	• Road and market access; input supply • Schools; health centres; • Water points (wells, boreholes, piped / tap water); • Irrigation systems; reservoirs;
Planning reports and other relevant documents	• Land use planning; water resources planning; agriculture and forest management plans; livestock / environmental management; etc.

FIGURE 2 **Community territory map drawn by Diagaly community, Barkedji, Senegal**

Transect planning and recording

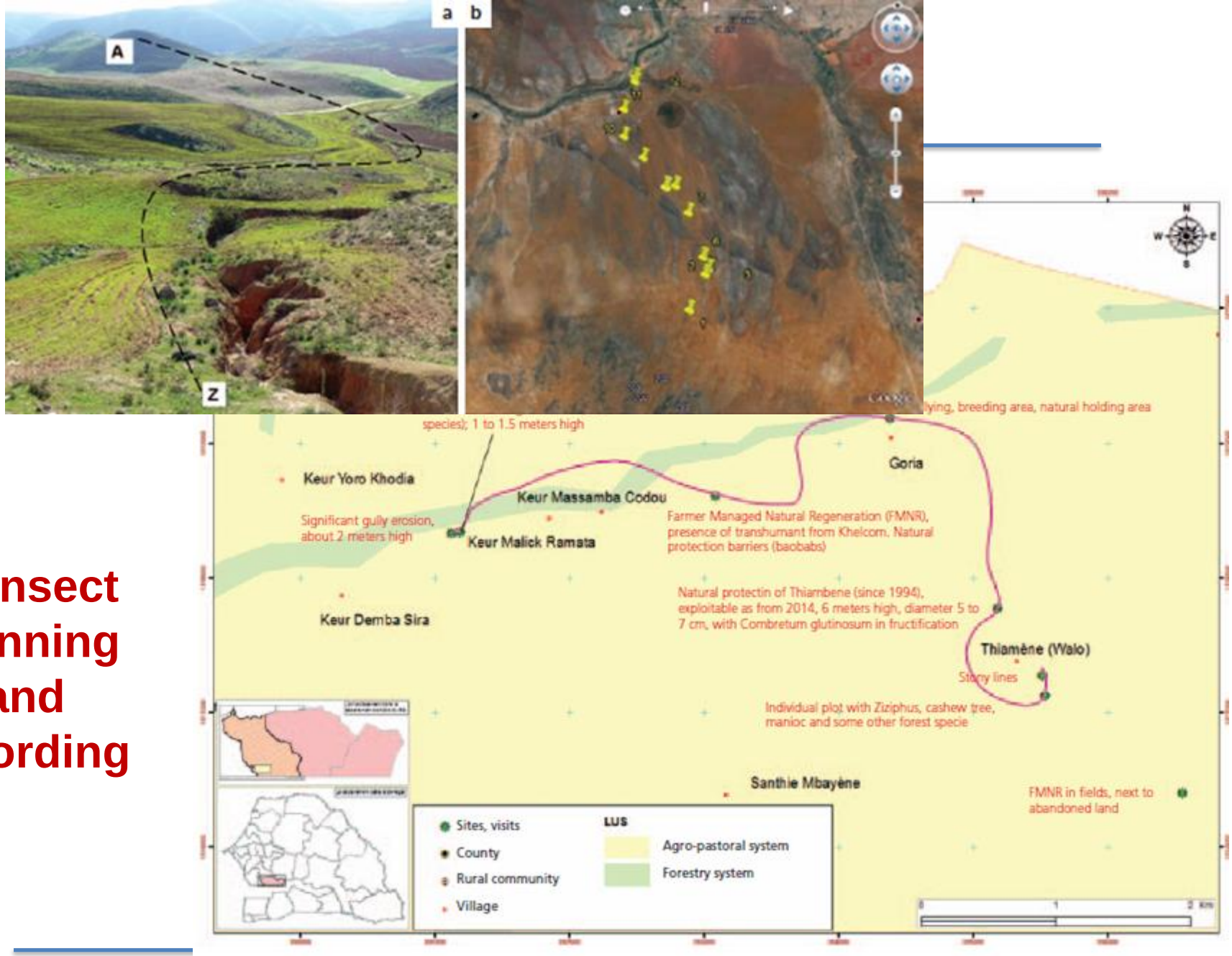


Image showing a transect walk cutting across two land use types and indicating detailed assessment sites in Senegal

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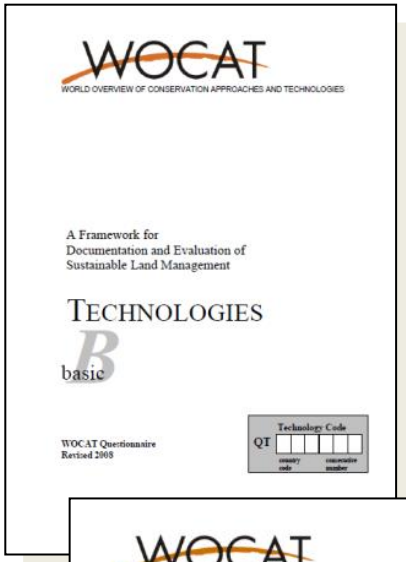
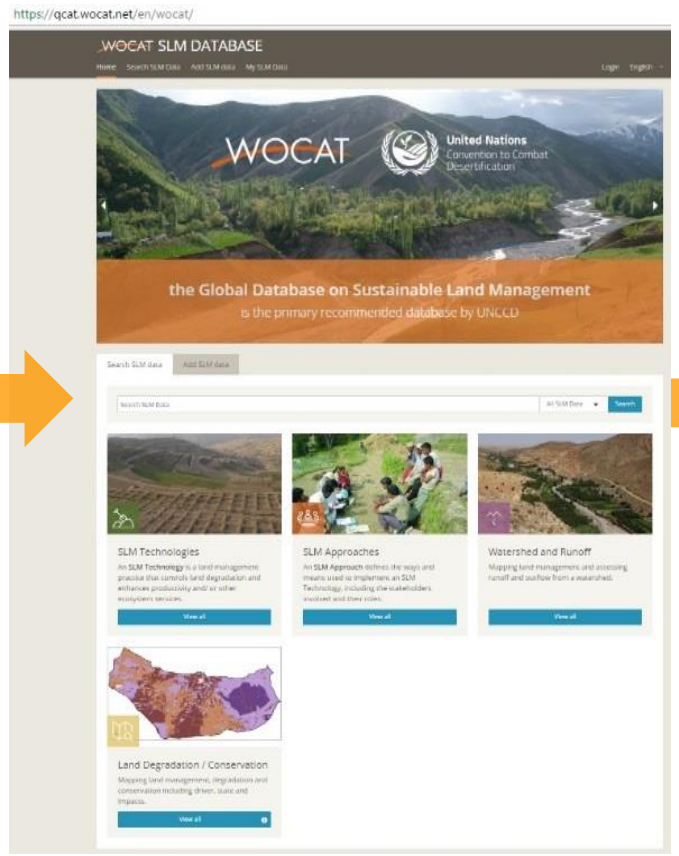
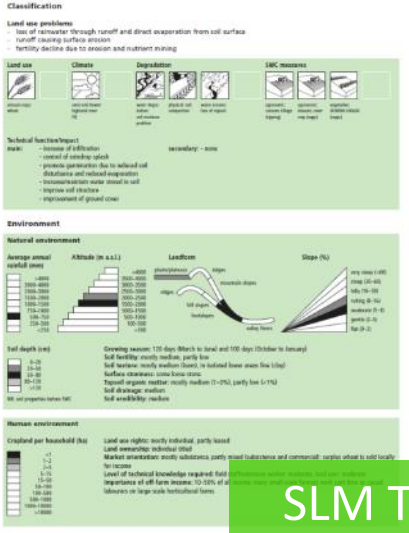
Assessment of Sustainable Land Management (SLM)



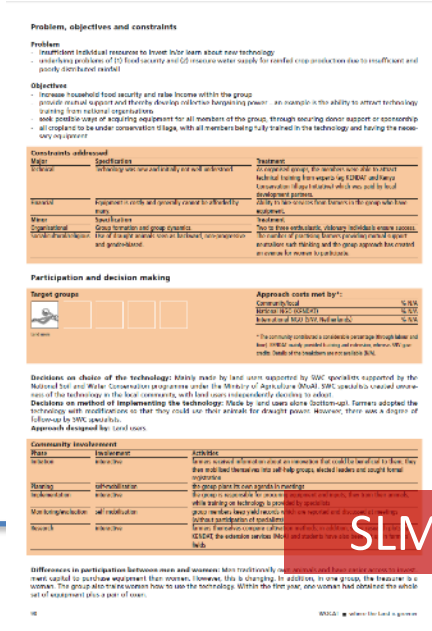


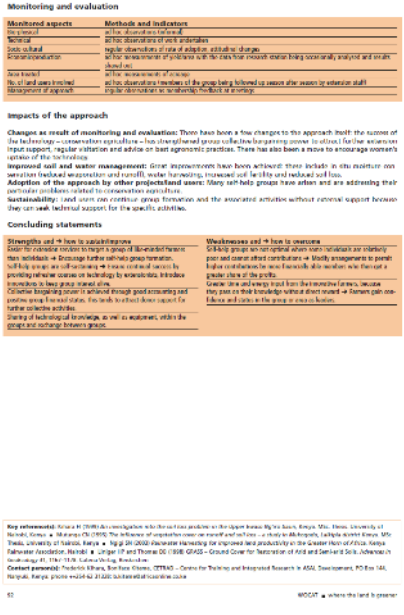
WOCAT Questionnaires (QT / QA) and global SLM database

Results documented and presented in standardized WOCAT format



SLM Technologies





SLM Approaches

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LADA
Land Degradation Assessment in Drylands

Analysis and Reporting

The proposed structure of the local assessment report is as follows:

- Introduction of the Assessment
- Methodology
- Characterization of the Study Area
- State of the Land Resources (and trends)
- Driving Forces & Pressures
- Impacts on Ecosystem Services
- Impacts on People and their Livelihoods
- Responses
- Conclusions and Policy Recommendations

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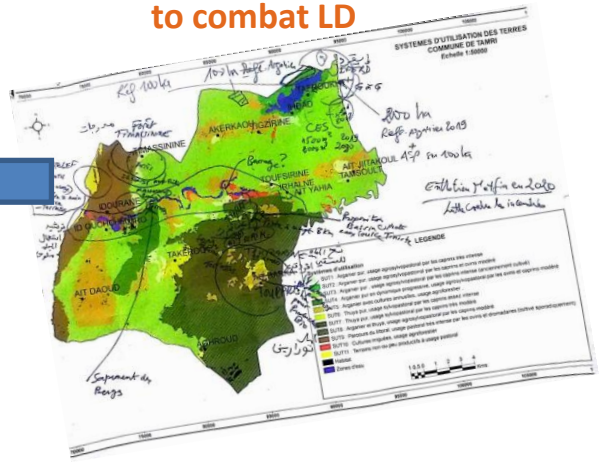
LD assessment and SLM practices to combat LD

Negotiation process

Participatory identification of communities' SLM priorities to combat LD



Support from desicion makers through the Sustainable Food and Agriculture multi-stakeholders Dialogue

TERRITORIAL DEVELOPPEMENT PACT

Implementation

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Conclusions

LADA
Land Degradation Assessment in Drylands

- Improve knowledge on status and trends of land degradation and improvement (including biodiversity and climate change interrelations)

- Assist countries in
  - monitoring and reporting progress in implementation LDN
  - assessing the effectiveness of interventions,
  - prioritizing actions and targeting investments

- Guide decision making on where to invest in prevention, mitigation, adaptation and restoration

THANK YOU

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