

Mauritania Technology Fosters Tradition (TFT)

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CONTENT

1. Presentation of TFT
2. Analytical framework
3. Drivers and trends
4. Methodology
5. Data and maps
6. Conclusions





1. Presentation of TFT

- Environment
 - Semi desert and ephemeral wetlands
 - 400 mm precipitation isohyet moves south
- People
 - Maure, Haratins/Black Maure, black Africans
- Objective
 - Document and formalize trad. property rights, with local people and using GIS



Scoping: problem areas

- Environmental destruction
- Increase in conflicts between farmers and pastoralists
- Weakened position of tribes
- All collective property rights abolished
- State and public sector do not realize present problems



Stakeholders and scales

Users and beneficiaries at various scales:



Global - Donors, Law com., Sahel countries

National - Govt., Public sector

Regional - Courts, Regional adm.

Local - Farmers, Herders, Trad. leaders

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Output

- Body of trad. knowledge pertaining to natural resource management, in local languages. In print and on the Internet
- Maps of resource use patterns
- Institutional and legal reform
- Increased stakeholder involvement
- Decrease in the amount of conflicts



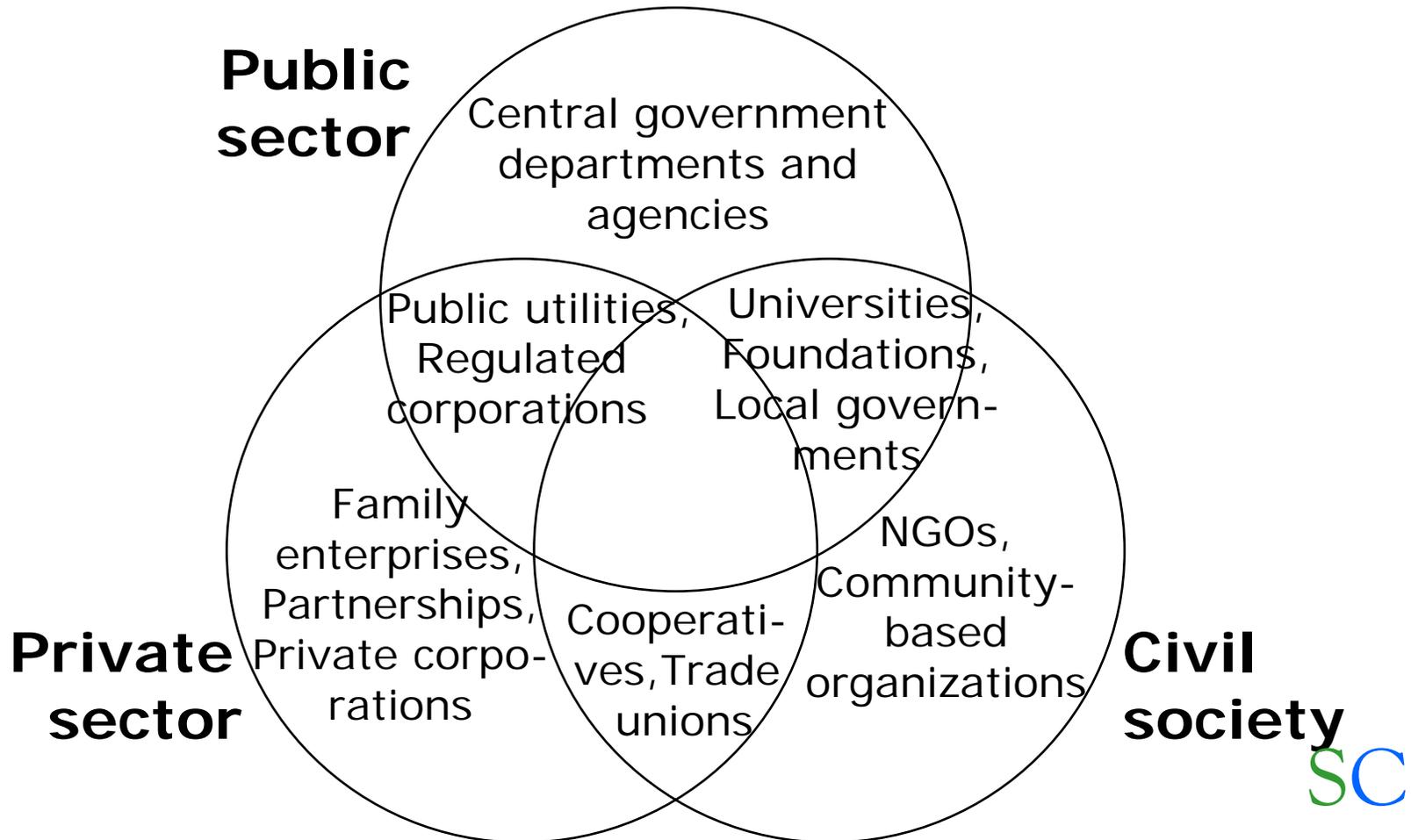
2. Analytical framework

Key elements:

- Stakeholders and power
- Law and legal paradigms
- Cultures and knowledge systems
- Knowledge and knowledge management
- Property rights systems and use rights



Societal sectors and stakeholders



Power and empowerment

How to address power – and achieve empowerment – follows from the methodological approaches chosen:

- Ethics - knowledge be used by whom and for what?
- Consensus-building, Consultation, Governance, Involvement, Participation, Transparency
- Trad. knowledge as means and goal
- Scaling of knowledge, bottoms-up approach



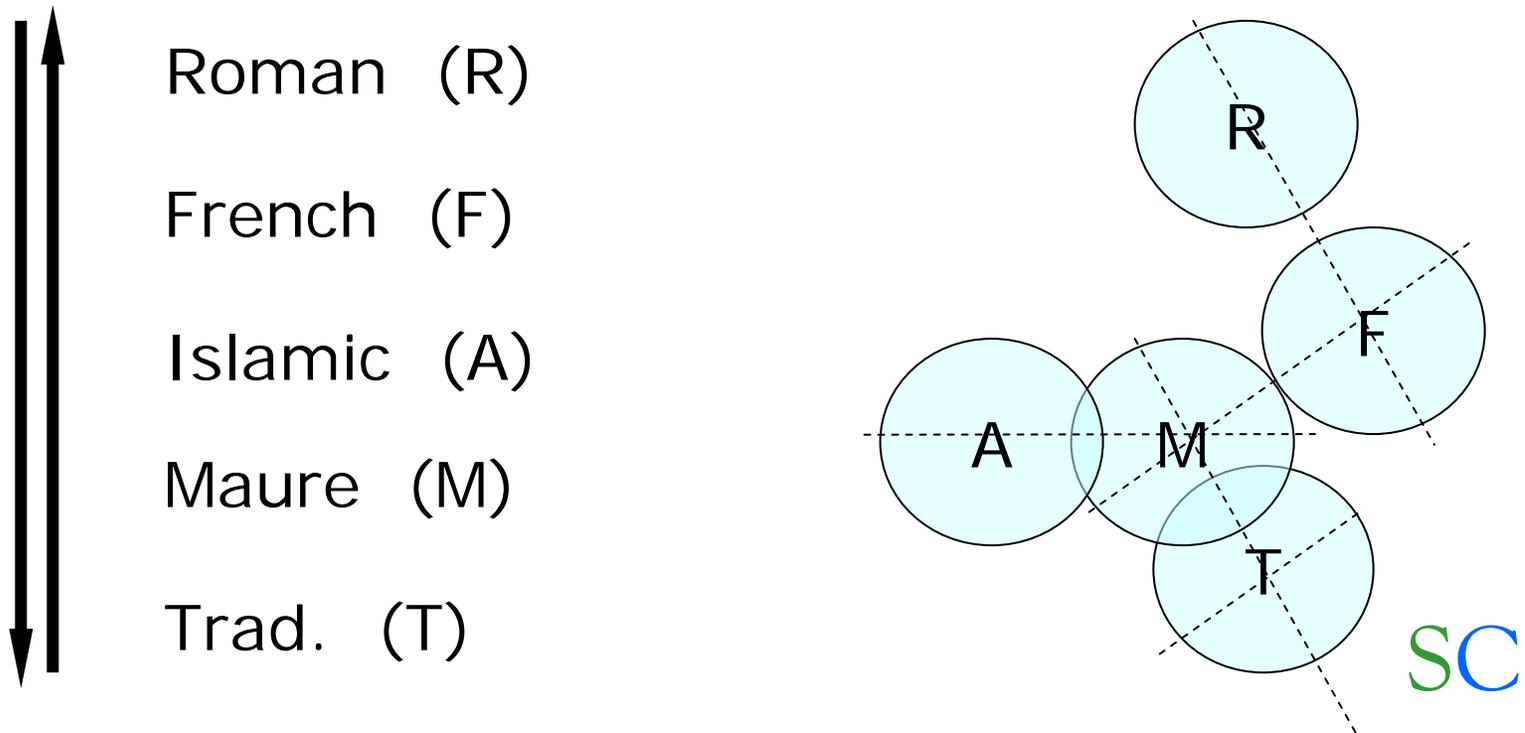
Law and legal paradigms

- Legal paradigms
 - Traditional (tribal) law
 - Islamic law
 - French law
- Legal pluralism
- Problems of application and coexistence



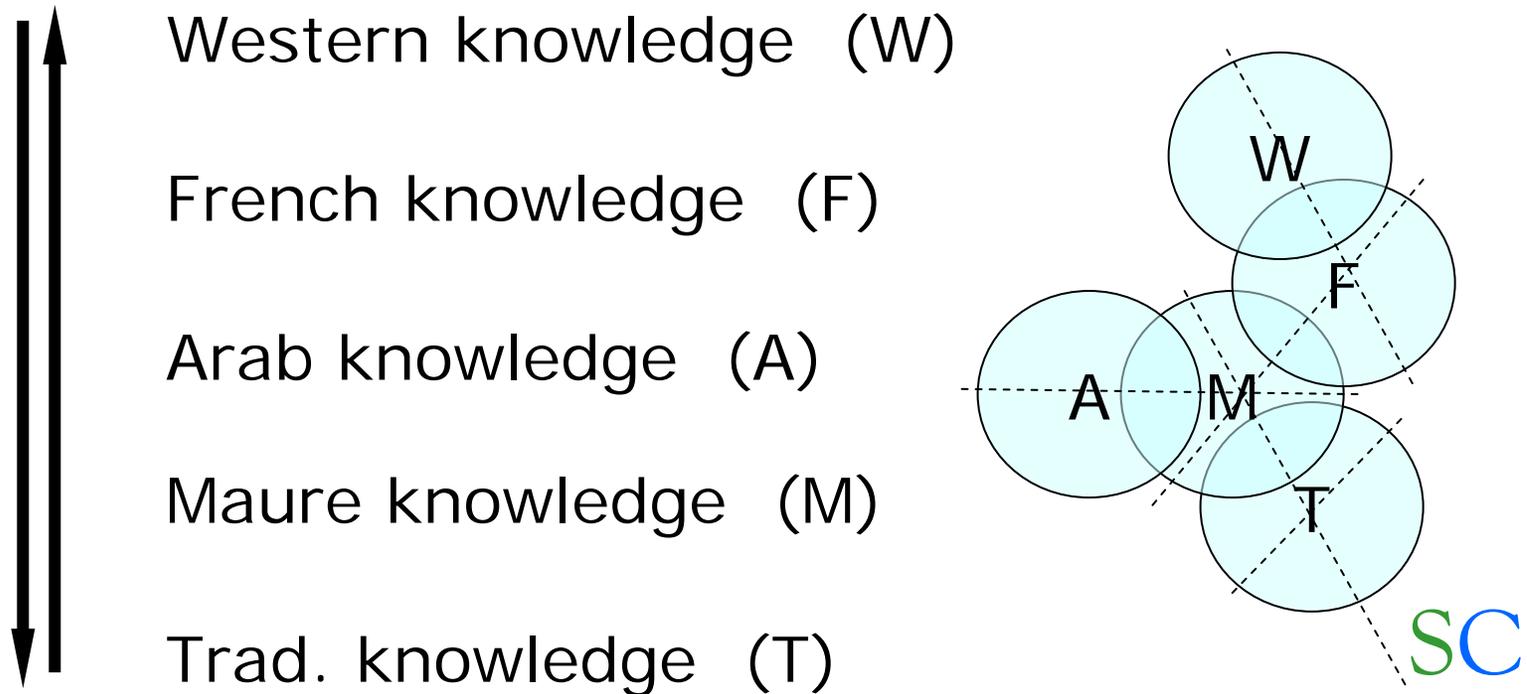
Legal paradigms in Mauritania

Legal paradigms and relations:



Knowledge systems in Mauritania

Knowledge systems and relations:



What is knowledge?

- Sum total of a culture's accumulated experience, incl. transfer, views on itself, the environment, and relationships with the environment
- Knowledge and culture
 - Knowledge is part and parcel of culture



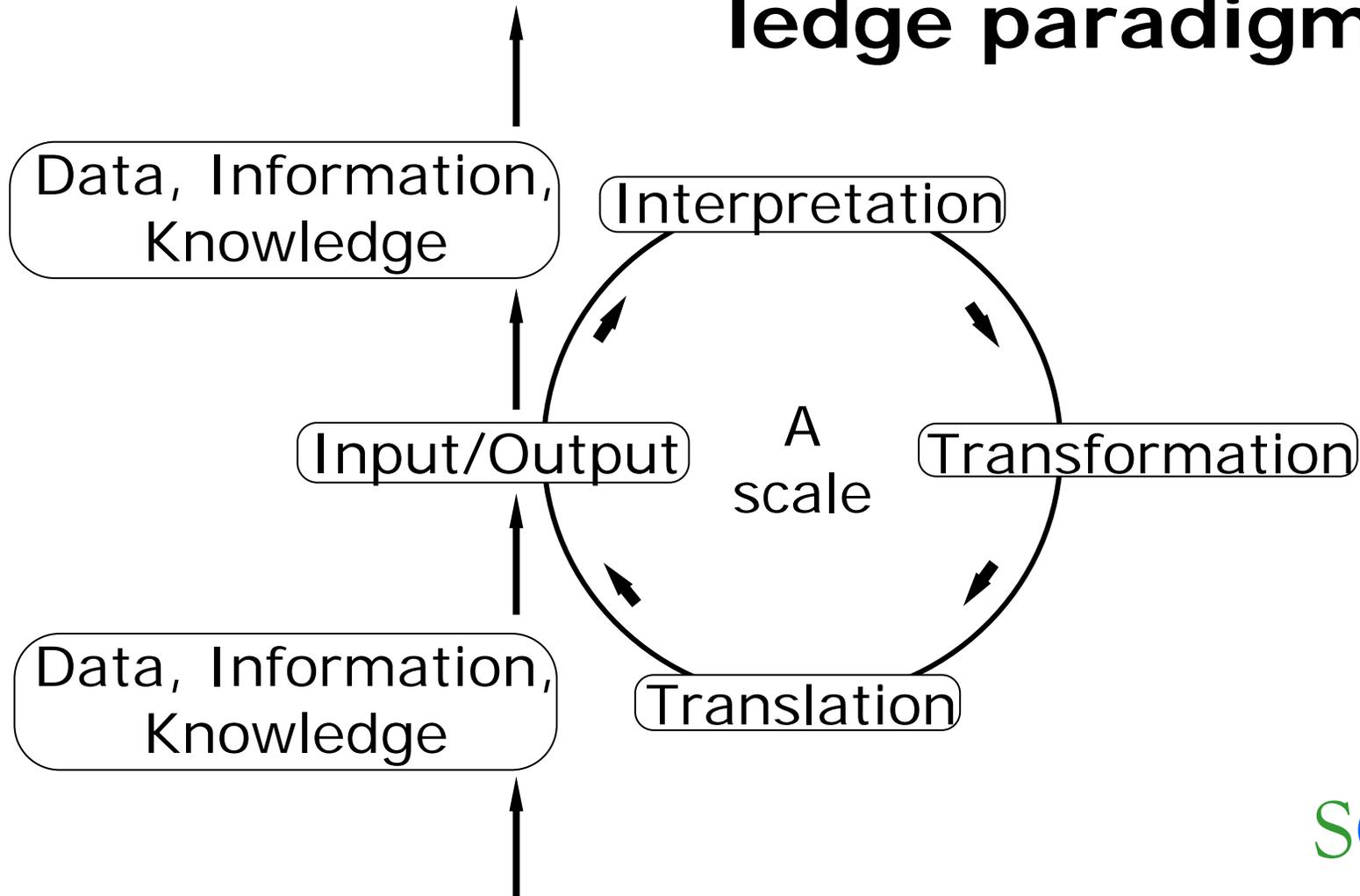
Knowledge management

Aspects of managing knowledge within and between scales:

- Dimensions
 - With whom to share, What to share, How to share
- Tasks
 - Collection, Evaluation, Categorization, Storage, Retrieval, Dissemination, Production of new knowledge

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Scaling legal and knowledge paradigms



Trad. property rights system

- Common property rights system for involved tribes, private property rights for others
- Well adapted to the specific characteristic of local ecosystems
- Emphasis on making resources available to those that need it
- A non-equilibrium system
 - Availability of water – when, where, how long, and how much – determine the operation and productivity of the system

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3. Drivers and trends

- Drivers and trends interact, and operate within and between the interacting natural and social systems, at several levels
- Causalities between the trends are very complex
- The drivers are:
 - Population increase, specifically farmers
 - Desertification



Trends

- Ecological system under stress
- Deforestation
- Decentralization and role of the State
- Diminishing role of traditional law
- Privatization of land and water
- Changes in production systems
- Absentee pastoralism / agriculture
- Sedentarization
- Increase in valuation of land
- Infrastructure developments
- Increase in conflicts
- Focus on biodiversity protection



4. Methodology

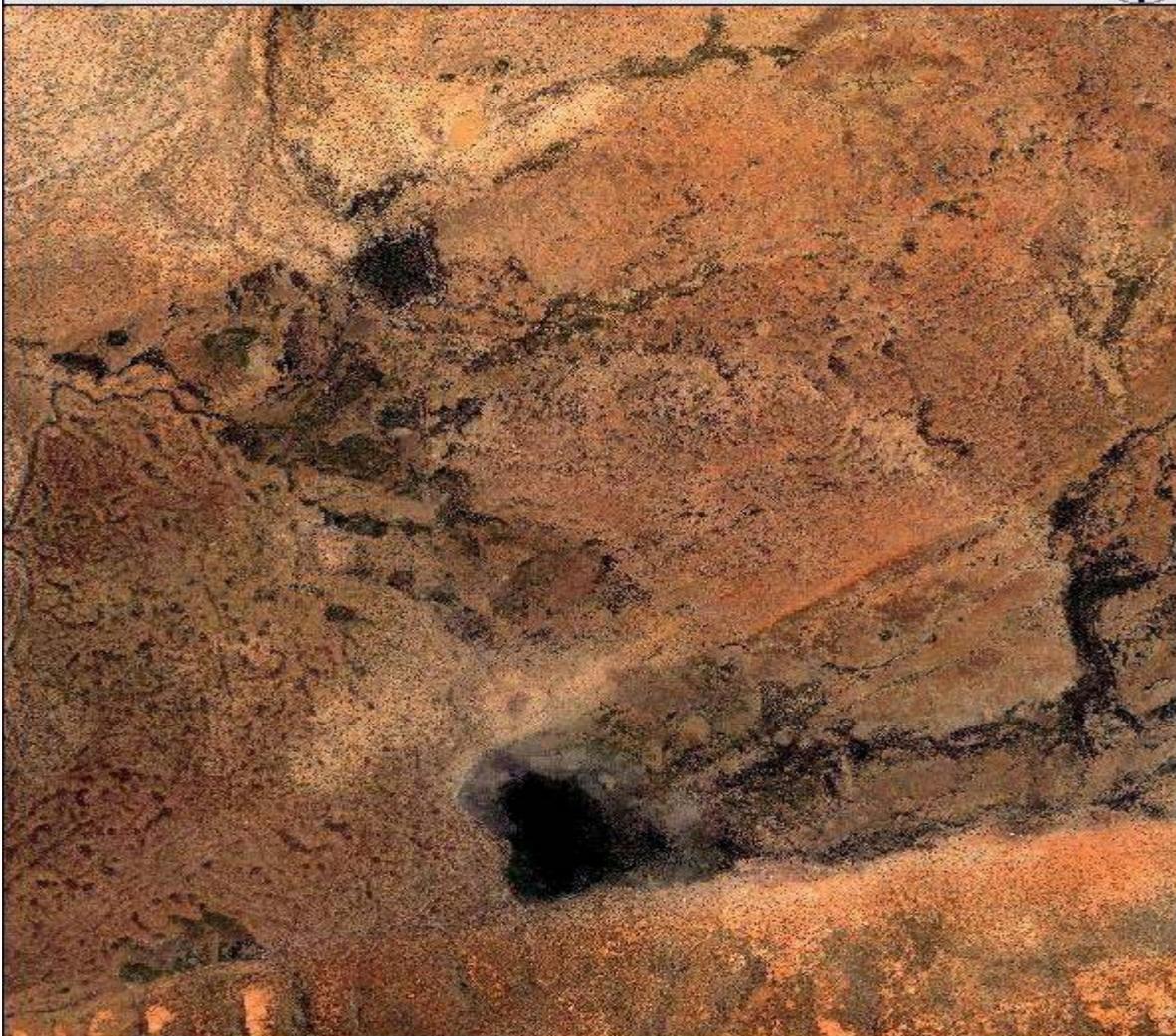
- Participatory Research Mapping (PRM)
 - Local people help identify research issues and collect data
- Mix of qual and quant
 - Focus groups, Interviews, Surveys, GIS/GPS, Satellite imagery

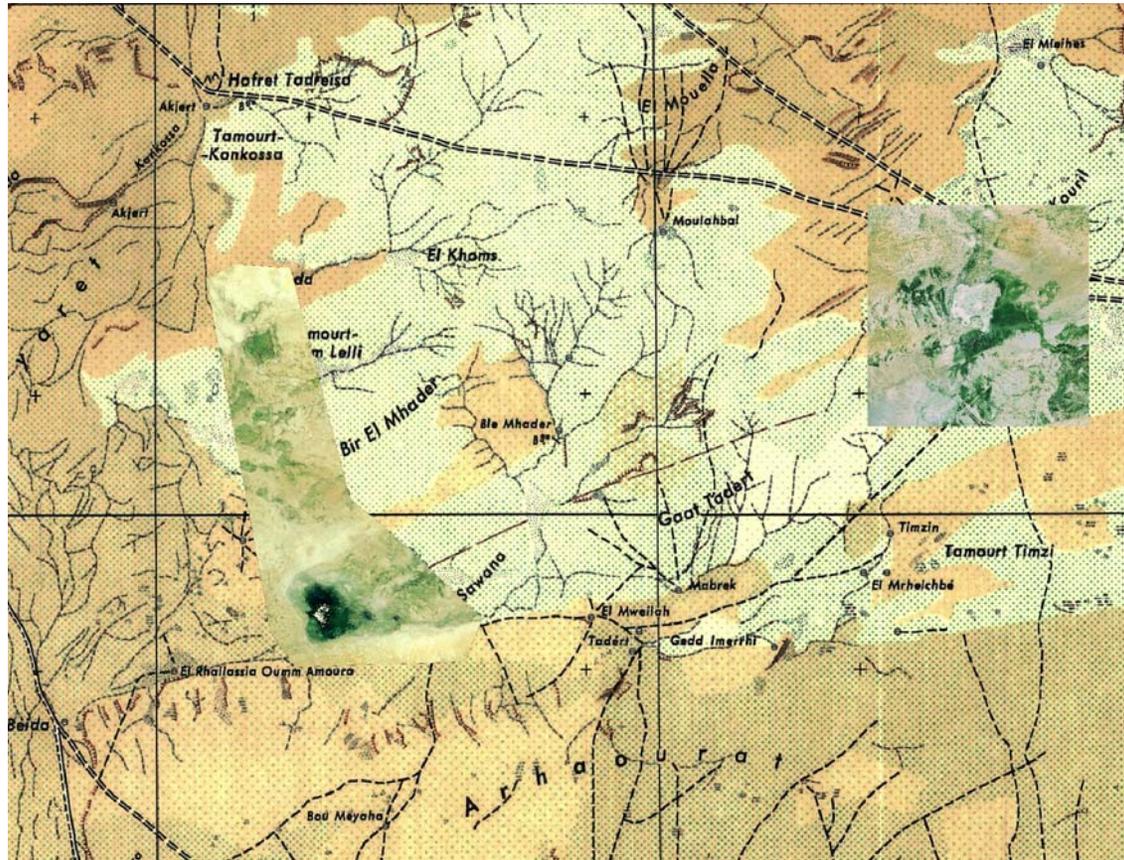
5. Data and maps

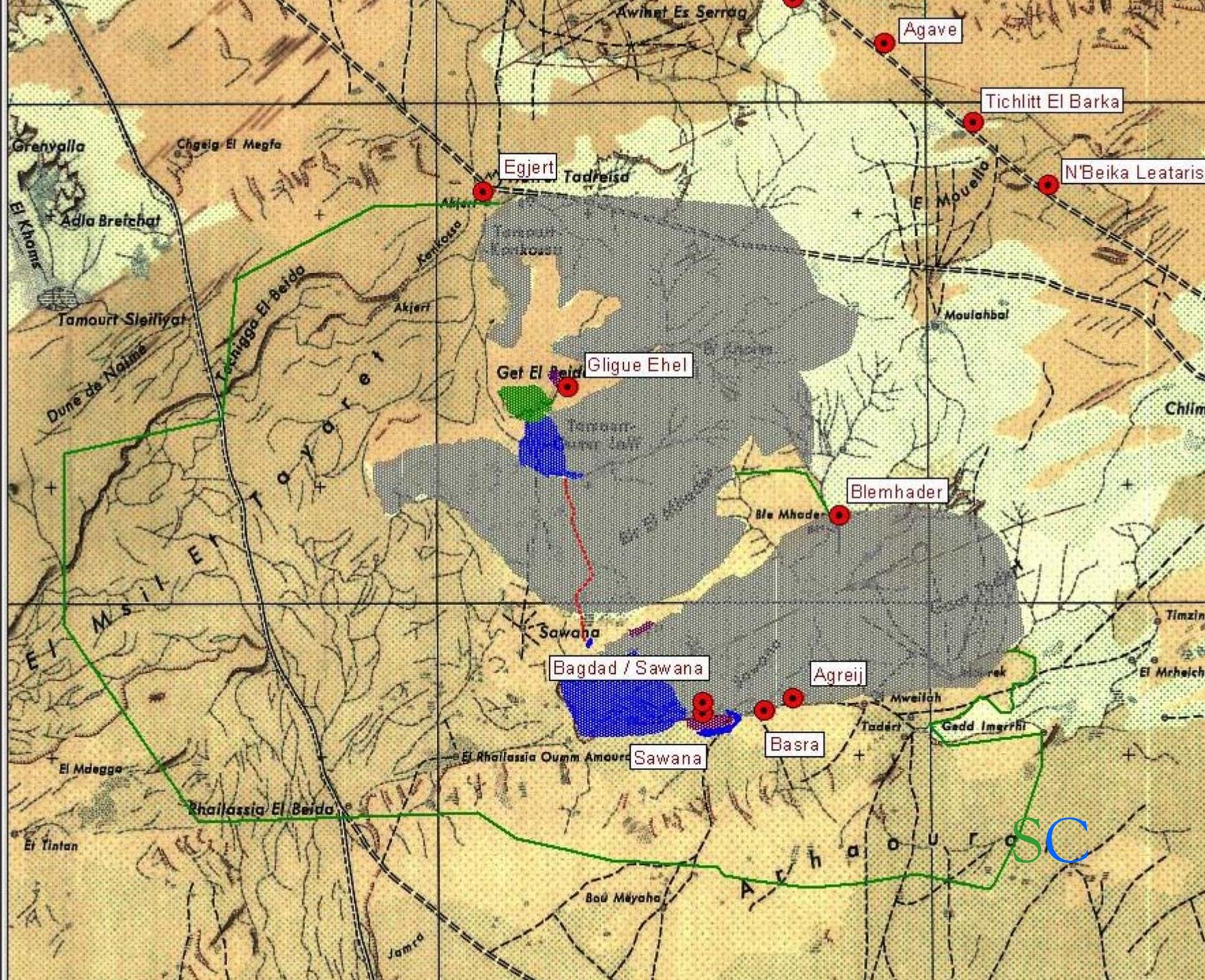
Data include:

- Satellite imagery (Quickbird)
 - Digital pansharpned color images, 0.6 m res.
- Survey data:
 - Socio-economics, incl. productive activities in agriculture, pastoralism, hunting and gathering
 - Toponymy
 - Resource use - What, Whom, When, Where, Why, How

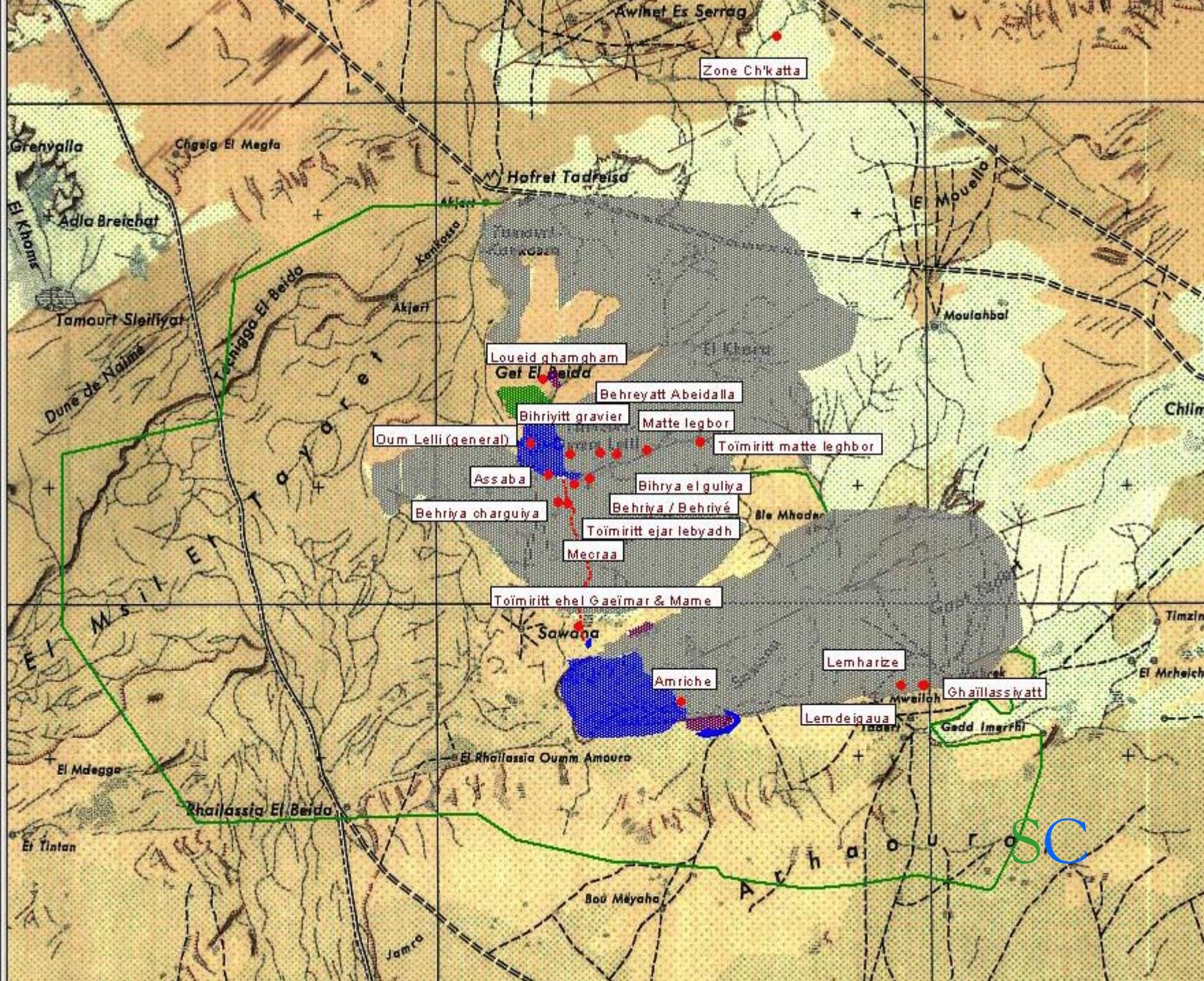
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Zone Ch'katta

Hafret Tadfeiso

Loueid qhamgham
Get El Beïda

Behriyatt Abeidalla

Bihriyitt gravier

Matte legbor

Oum Lelli (general)

Toimiritt matte leghbor

Assaba

Bihrya el gulya

Behriya charguiya

Behriya / Behriyé

Toimiritt ejar lebyadh

Meeraa

Toimiritt ehel Gaeïmar & Mame

Sawana

Amriche

Lemharize

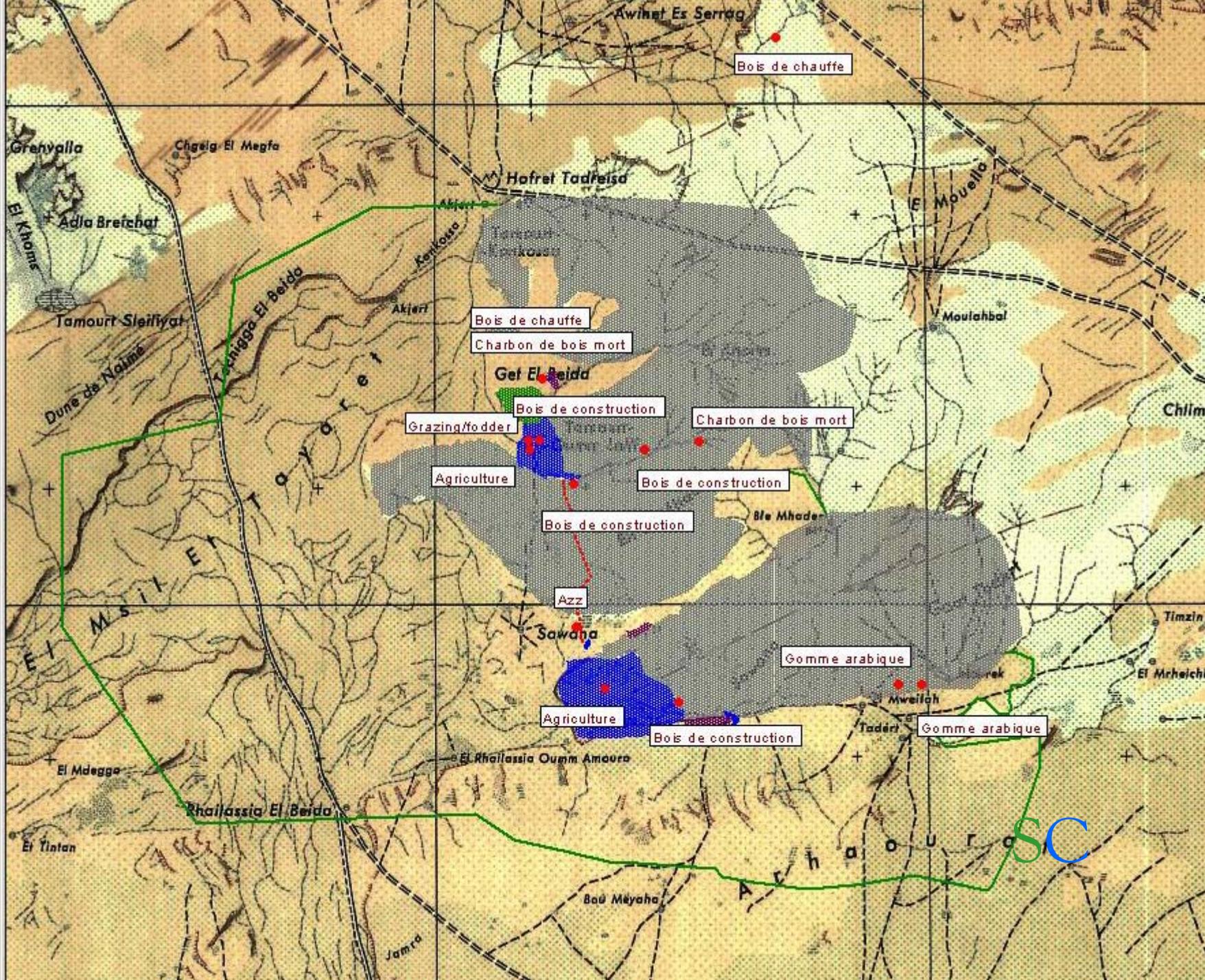
Ghaïlassiyatt

Lemdeigaua

Rhailassia El Beïda

Boü Mâyaha

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6. Conclusions

On the project:

- Next steps: produce maps, hand-over
- Problem: achieving public sector buy-in, maps to be used in strategic communication towards this
- Project to close in early 2006
- URL: supras.biz/library/web/tft



On NRM

- Resource distr., tenure & access are spatially defined within broader social, economic and env. contexts, and have to be understood within these same social and geographic contexts
- If people are responsible for problems it makes sense that they also be involved in work aimed at seeking solutions



On social GIS

- Inter-disciplinary approaches crucial in doing GIS on resource distr., tenure & access
 - Premise: we all have questions – while the answers are oftentime found in other disciplines
- Focus and output to be understood as arguments in ongoing dialogues between the stakeholders involved
- Process-oriented
- Iterative

