# Mauritania Technology Fosters Tradition (TFT)

Presentation at the World Bank 23 September 2004

> Lars T. Soeftestad Supras Consult, Norway

> > with

Geodatasenteret / UNEP-GRID, Norway

Email: mail@supras.biz URL: supras.biz/library/web/tft



## CONTENT

- 1. Presentation of TFT
- 2. Analytical framework
- 3. Drivers and trends
- 4. Property and use rights
- 5. Methodology
- 6. Data
- 7. Conclusions

# 1. Presentation of TFT, Overview

- Location, environment and people
- Objective and character
- Approach
- Output
- Scales and stakeholders
- Partners

### Location, environment and people

- Location
  - SE Mauritania, near town of Aïoun
- Environment and ecology
  - Semi desert and emphemeral wetlands
  - Isohyet for 400 mm precipitation moves south
- People
  - Mostly Maure and Haratins/Black Maure, some black Africans

# Objective and character

- Objective
  - Document and formalize traditional property- and use-rights to resources, specifically rangelands, together with local people, and through using GIS/GPS and ICTs
- Character

Not investment, but research-cum-action

#### Approach

- Area assessment (survey)
- Identify land-use (interviews)
- Codify in local languages, translate into Arabic and French
- Establish a legal rural registry
- Set up new local and national comanagement institutions
- Create GIS maps, publish on Internet

### Output

- Body of trad. knowledge pertaining to natural resource management.
  Available in print form in relevant languages and on the Internet
- Institutional and legal reform
- Decrease in the amount of conflicts
- Dissemination elsewhere in the Sahel
- World Bank policy paper

#### **Stakeholders**

Users and beneficiaries at various scales:

Global - Donors, Law com., Sahel countries

National - Donors, Govt., Public sector

**Regional** - Courts, Donors, Regional adm.

Local - Donors, Farmers, Herders, Trad. leaders

#### Partners

National:

• Government

International:

- CBNRM Net
- GLIN (and NASA)
- GTZ
- World Bank

## 2. Analytical framework

Law and legal paradigms:

- Legal pluralism
  - Trad. law, Islamic law, French law
  - Problems of application and coexistence
- Characteristics of codes
  - Written and unwritten
  - Roles of interpretation, translation and use
  - Applicable to a certain area/scale of society/culture

# Power and empowerment

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

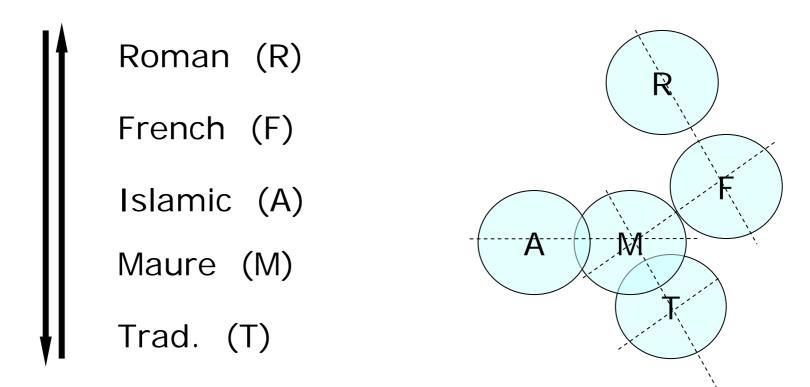
- Ethics knowledge be used by whom and for what?
- Consensus-building, Consultation, Governance, Involvement, Participation, Transparency, etc.
- Trad. knowledge as means and goal
- Scaling of knowledge bottoms-up approach

# Institutions and institutional analysis

- Understood both as organizations and in the sense of institutional economics
- Facilitates and constrains the flow of knowledge and data between scales
- Important for understanding and assessing power and empowerment

#### Legal paradigms in Mauritania

Legal paradigms and relations:



#### Knowledge systems in Mauritania

Knowledge systems and relations:

Western knowledge (W)

French knowledge (F)

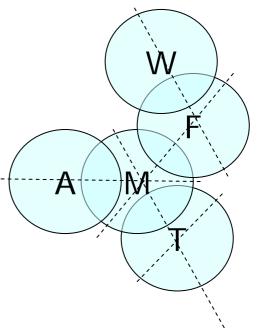
Arab knowledge (A)

Maure knowledge (M)

Trad. knowledge (T)

Wash DC, 23-09-04

**RIM Technology Fosters Tradition** 



#### 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, as well as production of new knowledge

# 3. Drivers and trends

Drivers:

- Population increase
- Desertification

### Trends, I

These trends are partly overlapping, and the causalities are complex:

- Ecological system under stress
- Deforestation
- Decentralization and role of the State
- Diminishing role of traditional law
- Privatization
  - Of land (fencing)
  - Of water (dams, access to wells)

### Trends, II

- Change in production systems
- Absentee pastoralism/agriculture
- Sedentarization
- Valuation of land
- Infrastructure developments
- Increase in conflicts
- Increased focus on biodiversity – RAMSAR

## 4. Property and use rights

- The property rights system has to be understood through the role of pastoralism in history:
- Reciprocal adaptation between pastoralism and environment
- Immigration, wars and rulers
- The French colonial legacy

#### Characteristics

- A system well adapted to the specific characteristic of the 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

# Systemic changes

- The trad. property rights system was a common property system for the original users, members of the Maure tribe Ould Nacer, Faction Abdel Wahab
- Lack of a fit between the trad. system and today's situation is growing
- Today's situation can be characterized as open access

## 5. Methodology, Overview

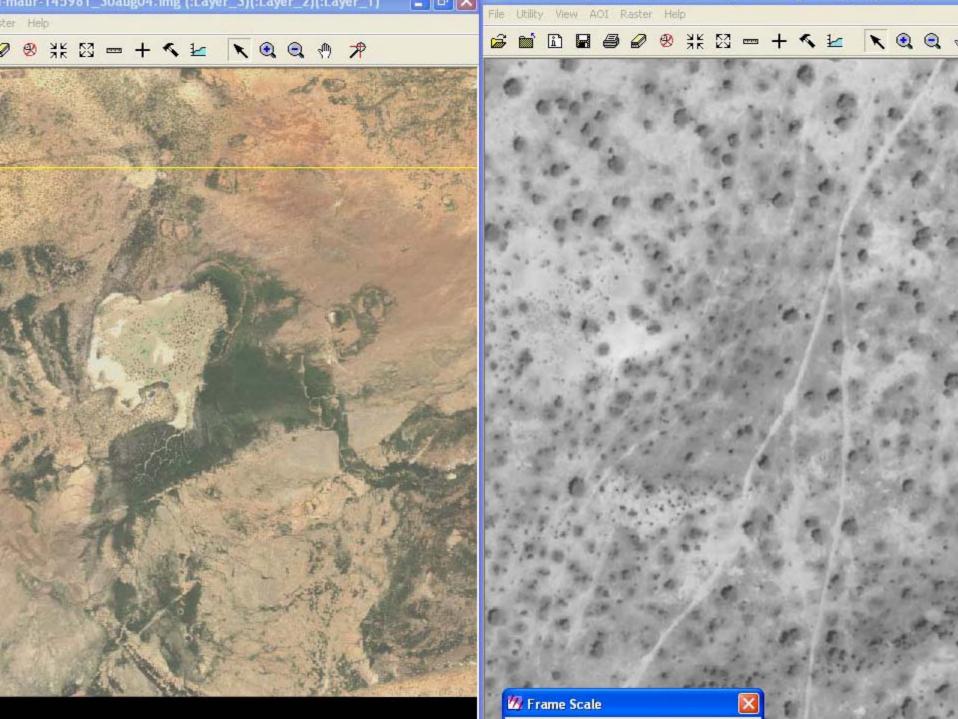
- Character of operation determines the methodological approach, the bundle of methods used, and their sequencing
- Adapted to purpose and location

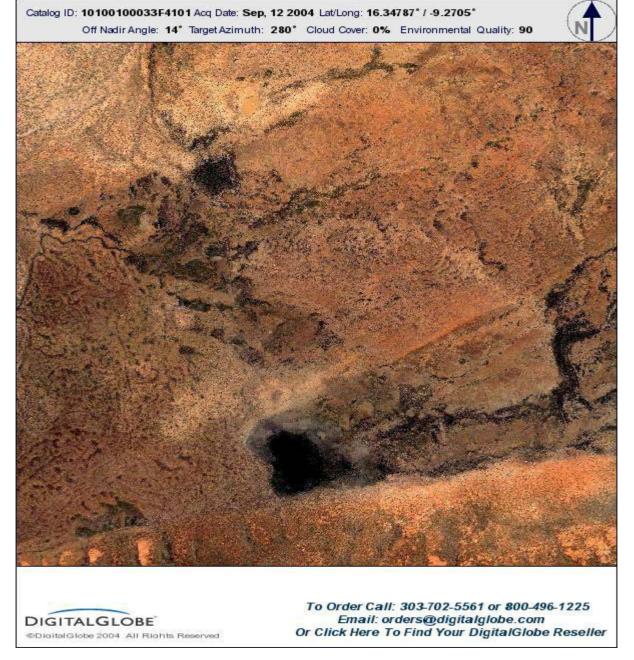
### Methodology

- Mix of qual and quant
  - Focus groups, interviews, surveys, ICTs, GIS/GPS, satellite imagery
- Participatory Research Mapping (PRM)
  - Local people help identify research issues and collect data
  - Elements: (1) socio-economic survey, (2) toponymy survey, (3) resource use survey, (4) property and use rights

## 6. Data, Overview

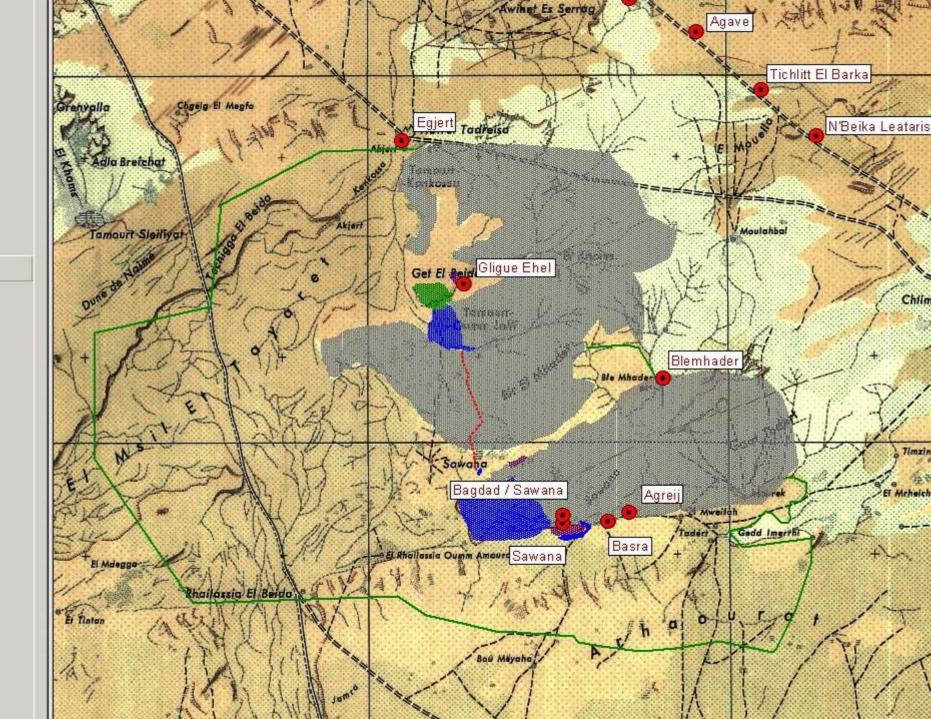
- PRM ongoing since May 2004
- Focus on two wetlands (Oum Lelli and Sawana) and one village (H. Tadreissa)
- Satellite imagery
- Toponymy and resource use
- Agricultural and gathering production

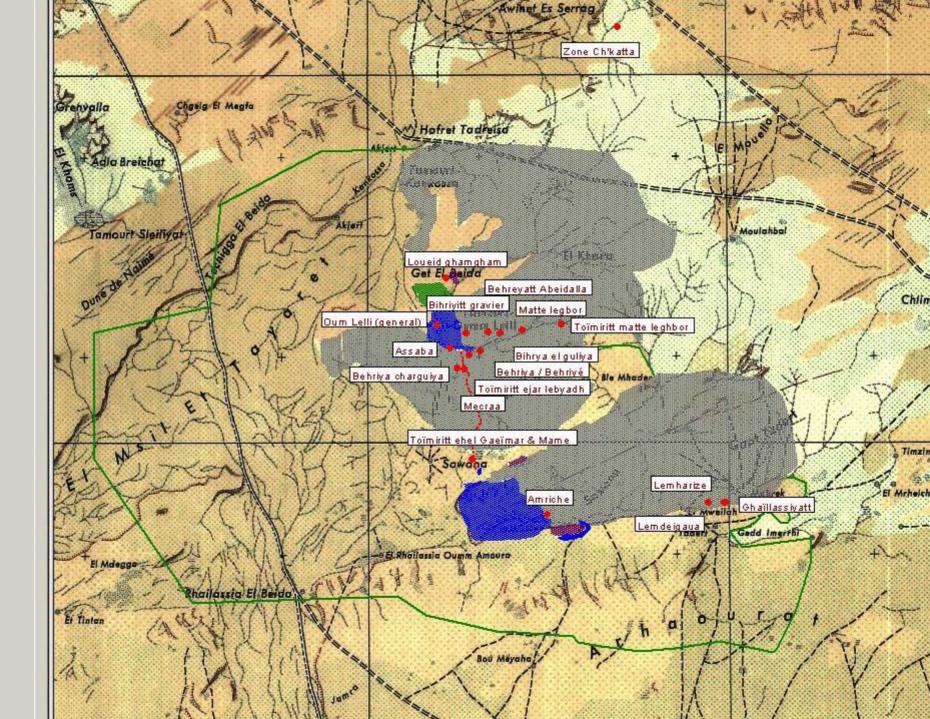


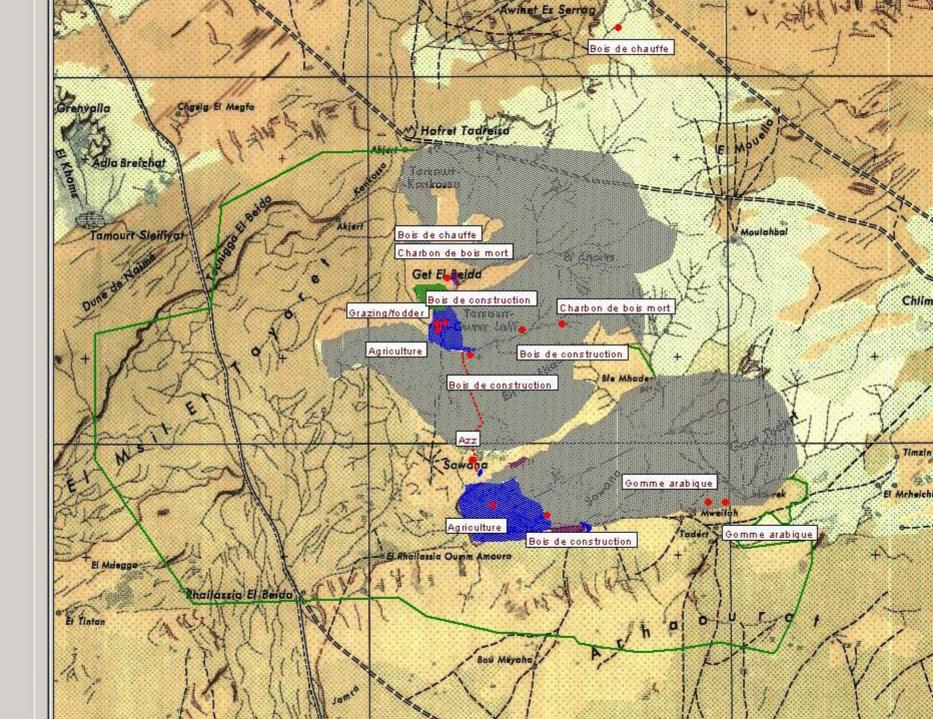


Wash DC, 23-09-04

**RIM Technology Fosters Tradition** 







#### Agricultural produce: quantities

	Produit 1 <sup>[076]</sup> Sorgho (mil)	Produit 2 <sup>[077]</sup> Petit mil	Produit 3 <sup>[078]</sup> Haricots	Produit 4 <sup>[079]</sup> Pastéque	Produit 5 [080] maïs	Produit 6 [081] autre ( <i>spécifiez)</i> R'haya
Quantité totale <i>(kg)</i>	12.854	3480	3037	1275 ,5	0	3500
Quantité vendue (kg; argent famille)	3040	1230	742	101	0	960
Quantité vendue (kg; argent exclusivemen t femme)	360	240	160	100	0	320
Quantité consommée (kg)	3717	700	562	682	0	581
Quantité conservées <i>(kg)</i>	4639	1063	1490	292,5	0	1394
Quantité donnée en aumône <i>(kg)</i>	419	90	78	100	0	235
Quantité donnée en zakat <i>(kg)</i>	679	157	45	0	0	50
Autre (kg; spcifiez)						

Wash DC, 23-09-04

# Gathering of forest products: quantities

	Quantité collectée par année	Quantité vendue	Produit forestier	Quantité collectée par année	Quantité vendue
Jibjib <i>(kg)</i> [084]	2670,5	1062,5	Maru riz Mauritani e <i>(kg)</i> [090]	0	0
Azz <i>(kg)</i> [085]	1270	100	Plantes médicaux <i>(kg)</i> [091]	1782	1105
Bois de chauffe (m <sup>3</sup> ) [086]	6050	3800	Salaha <i>(kg)</i> [092]	1036	815
Bois de construction <i>(m)</i> [087]	778	550	Tilba ndiri <i>(kg)</i> [093]	16	0
Charbon <i>(kg)</i> [088]	46500	33100	Autre ( <i>spécifiez</i> ) <sup>[094]</sup> Touga	540	415
Gomme arabique <i>(kg)</i> [089]	1999	1747	Autre <i>(spécifiez)</i> [095] Togba	Brique en banco : 2024 togba : 52	Brique en banco : 400 togba : 42

# 7. Conclusions

### Code Pastoral

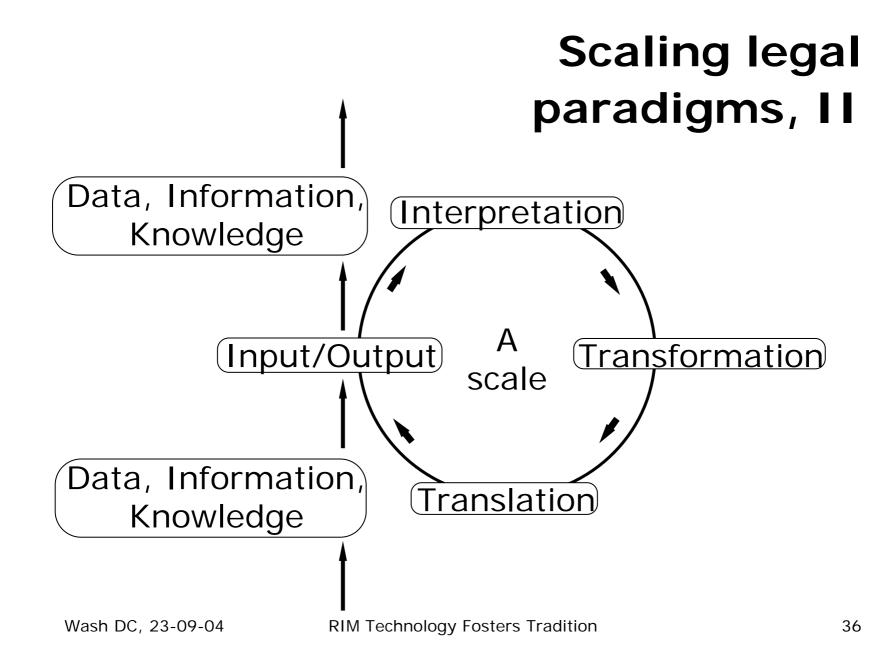
An example of modern law-making:

- National law on nomadism/herders, initiated by local NGOs, supported by GTZ/World Bank
- Characteristics: Participatory process followed, Based on Sharia/trad. law, Good language that is easily understood, Conflict resolution mechanism
- TFT aims to implement it in its project area, and emulate its drafting methodology

### Scaling legal paradigms, I

On each scale three operations are involved in dealing with knowledge:

- Interpretation
  - Analysis of incoming knowledge/data
- Transformation
  - Adaptation to present scale
- Translation
  - Enabling transfer to next scale



#### Next steps

- Data collection continues
  - Quant extend to Chlim
  - Qual on conflict: causes and implications
- Prepare maps
- Build collaboration, locally and internationally
- Extend partnerships, international