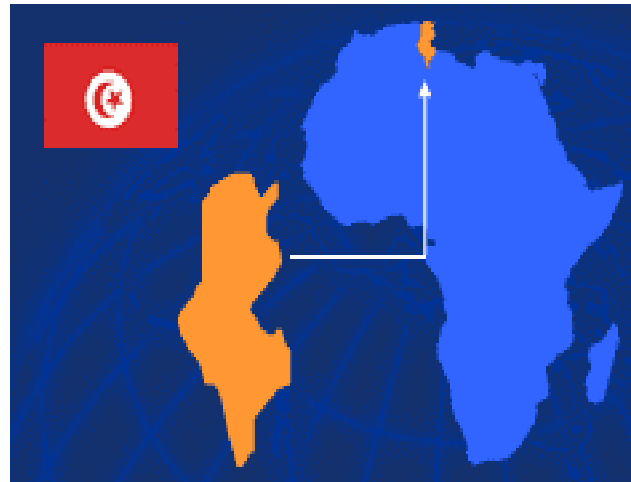


CBBIA PRE-MEETING and IAIA ANNUAL CONFERENCE



BIODIVERSITY AND IMPACT ASSESSMENT IN TUNISIE

Rachid Nafti, CITET-TUNISIA
April 24, 2004 - IAIA , Vancouver -
CANADA

Presentation outline

- Basic data
- State of BD
- pressure and threat factors
- Responses for integrating BD in EIA
 - Shortcomings
 - Recommendations for the future

BASIC DATA

- Tunisia covers an area of 16.4 million hectares
 - only 5.4 million hectares are agricultural land,
 - 4 million hectares are forest and grazing land.
 - 75% of the country may be considered as being under the threat of desertification.

BASIC DATA

- Tunisia is a mosaic of landscapes that is diverse and fragile:
 - forests
 - steppes
 - plains
 - deserts and dry river beds
 - lakes
 - lagoons
 - the sea.

ENVIRONMENTAL MOSAICS



Green oak and " genévrier "
. Jebel Châmbbi (Tunisian Dorsale)



corals



Lake ichkeul



wetlands



Matmata






Smi arid central Tunisia



oasis

Situation

Forests		843,000 ha
Flora		758 species listed
Birds		362 species
wetlands		250
Mammels		78 species

PRESSURE & Threats factors



Soil degradation



Water erosion and
desertification



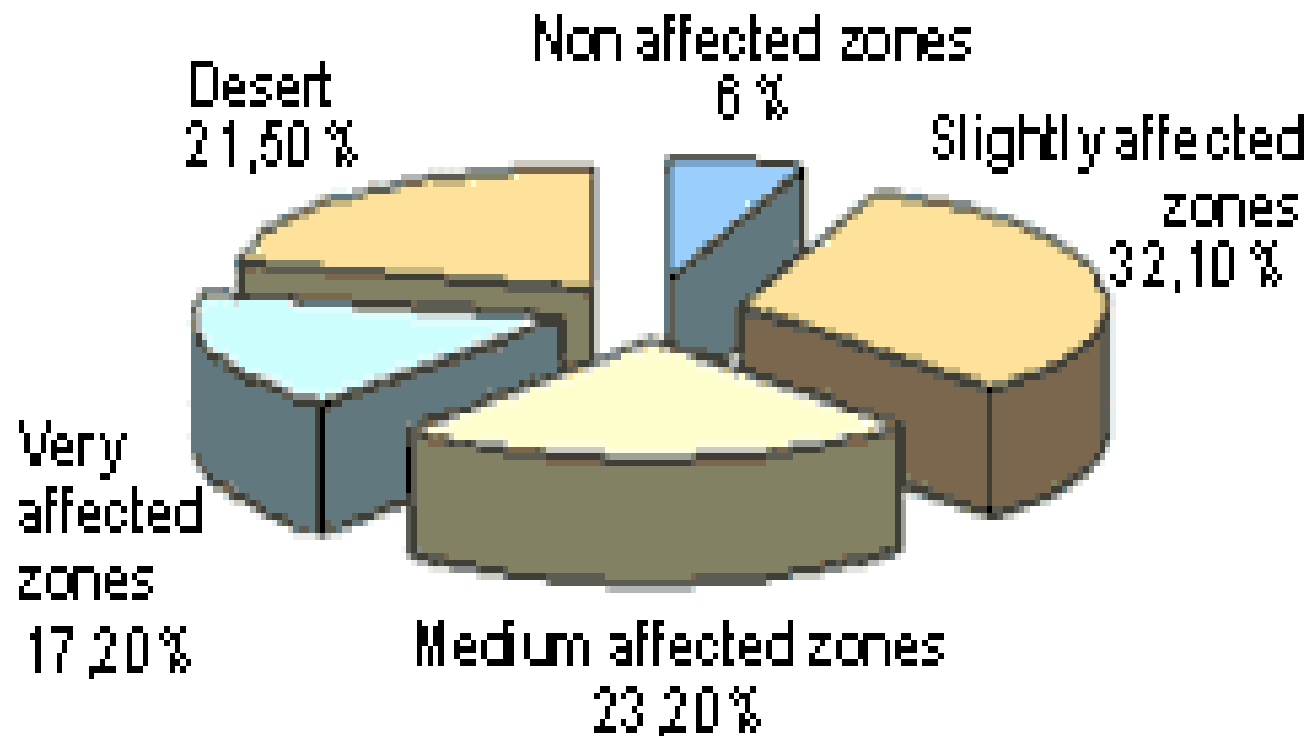
overgrazing

Examples

- Birds
 - 39 bird species are at risk
 - 19 threatened
 - 5 vulnerable at international level
- Wild mammals
 - 10 threatened with extinction

Desertification in Tunisia: current situation

75% of the country may be considered as being under the threat of desertification.



IMPACTS OF DESERTIFICATION

- This situation leads to
 - decrease in soil fertility and loss of agricultural land
 - risk of silting-up or sanding-up of agricultural infrastructure works, including dams
 - major loss of surface water and deterioration in soil quality of the plains because of run-off
 - increase in flood risk and other damage.

RESPONSES



establishment of strips of artificial dunes with palm-leafs



Combating water erosion



Women participation in combating desertification



Combating eolian erosion

Responses

- **Inventory** of national biological, land, aquaculture, and marine resources completed in 1998
- Adoption of a **national strategy**

Responses

- Action plan for biodiversity conservation:
 - ○ the setting up of 26 protected areas
 - ○ the review of legislation on authorized activities and management approaches
 - ○ measures for improving the living conditions of populations within and in the vicinity of protected areas
 - ○ ongoing reinforcement of scientific identification and conservation methodologies (gene bank, botanical gardens, ...).

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Responses

- **Environmental impact assessment is required for projects including aspects related to biodiversity**
- **EIA focus on:**
 - - **analysis of ecological aspects**
 - - **and social and economical impacts**

Lessons learned from practices

- **Mistakes include:**
 - **inadequate determination of the spatial context of the project;**
 - **poor or insufficient baseline information**
 - **treatment of biodiversity as simple “lists” of species found in a project area;**
- - **Biodiversity is not considered outside protected areas**
- - **and insufficient attention to implementation and monitoring of mitigation measures and environmental management plans.**

Suggestions for the future

- Provide for better integration and generalization of BD in EIA
- Set up a mechanism for the monitoring
- Reinforce national and local capabilities in the various areas related to the management of the elements of biodiversity.

Suggestions for the future

- - **Building capacity for integrating biodiversity conservation into EA and strengthening public involvement needs priority attention.**
- - **guidance for improved performance in undertaking EA as a means to protect the functional performance and resilience of natural habitats and ecosystems (and thereby their biodiversity) during project preparation and implementation is needed**
- - **the functions and services of natural habitats and ecosystems should be systematically assessed and evaluated, and the ecological, social, and economic value of such functions quantified as part of the cost/benefit analysis of programs and projects**

Suggestions for the future

- **Ensure sites protection through management planning:**
 - ○ **Ensure legal protection status of site**
 - ○ **Establish participatory management structures at local level**
 - ○ **Divert threats away from sensitive areas**
 - ○ **Regulation enforcement**
 - ○ **Intersectorial planning**

- **Establish pilot operations with local people**



Constraints

- insufficient or lack of qualified and experienced biodiversity specialists
- weak institutional ,capacity to implement or monitor conservation measures
- weak legal framework and enforcement

Capacity building needs

Strengthen capacity and ability to implement appropriate conservation measures through,

- ○ Strengthen capacity of responsible institutions
- ○ Developing regulations and strengthening enforcement
- ○ Awareness raising among policymakers and technical staff

And undertaking research.

**THANK YOU
FOR YOUR ATTENTION**