« Restoring value to grassland: lessons for practice change » Workshop hosted by Cirad in Montpellier, France, from 13 to 15 May 2014

The effect of global changes on range lands and livestock in the north western costal zone of Egypt

Mona A. Osman ¹, E.S. Abdel-Aal ¹, I. Daoud ², V. Allery ³ and JF. Torrand ³

¹APRI, ARC, Cairo, Egypt - ²MRMP, Matrouh, Egypt

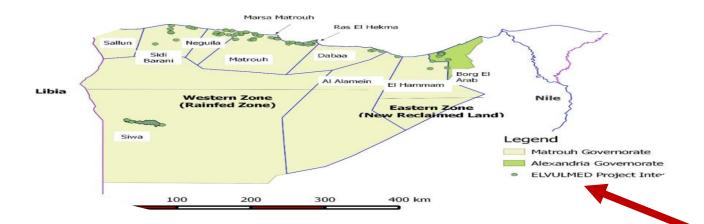
³CIRAD, France







The Case overview



The case study: "Research"



Stakeholders - Local authority - local communities - tribe leadership - Bedouin groups + Others

 Agricultural association for introducing some varieties of imported barley and allowing delayed payment for concentrates (maize, meal)



General situation of the case

- The main area under investigation encompassed the northern part of the Matrouh governorate.
- Low population density, high poverty rate.
- Poor infrastructure especially in the depth of the desert.
- Good infrastructure in the coastal area due to tourism activity.
- Nowadays Bedouins are living in concrete houses and depend on cisterns & water trucking.

Production structures

- Agriculture (crop and livestock) is the main source of living for 70% of the Bedouin population.
- The cultivated area is roughly 16 % of the total area, rangelands (48%), and bare lands (not usable for agriculture) (36%).
- Crops (mainly barley), horticulture (mainly fig and olive).
- Livestock: (sheep and goats, and some camels) with low productivity.
- Free market

Current pastoral management

• Grazing rangelands and pastures for sheep, goats and camels, some barley ripping.

Challenges and issues

☐ Low rainfall (less than 140 mm/year) through 15 consecutive years of drought

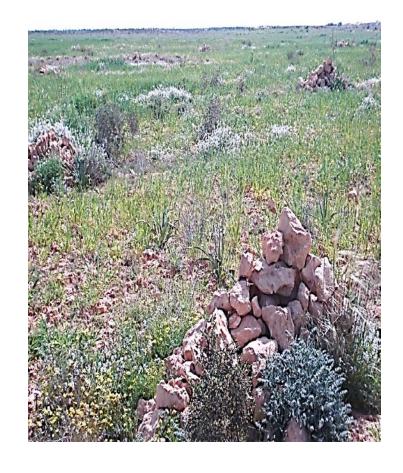


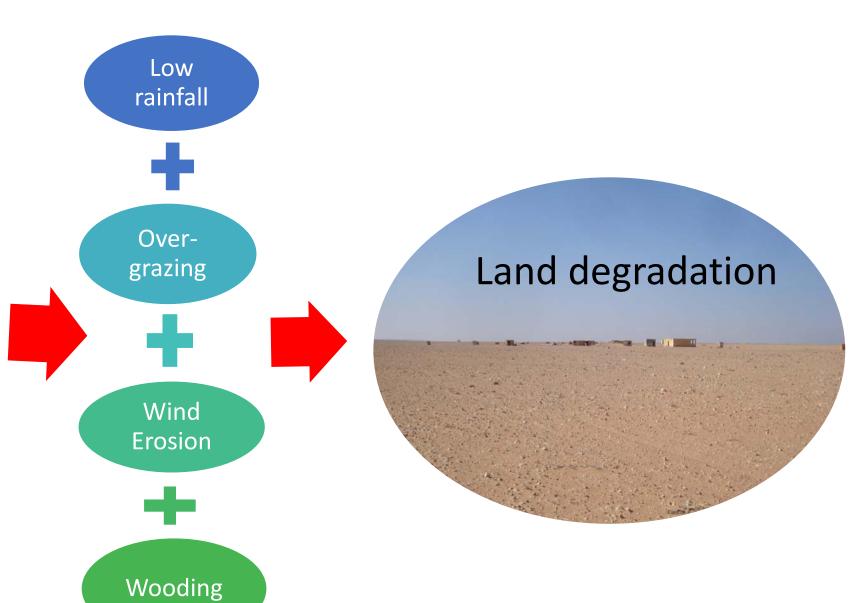
Degradation of quality and quantity of range land and increasing demand for alternatives of feed stuff for livestock and decrease of flock size

☐ Importance of range land for Bedouin community not formally recognized by the government

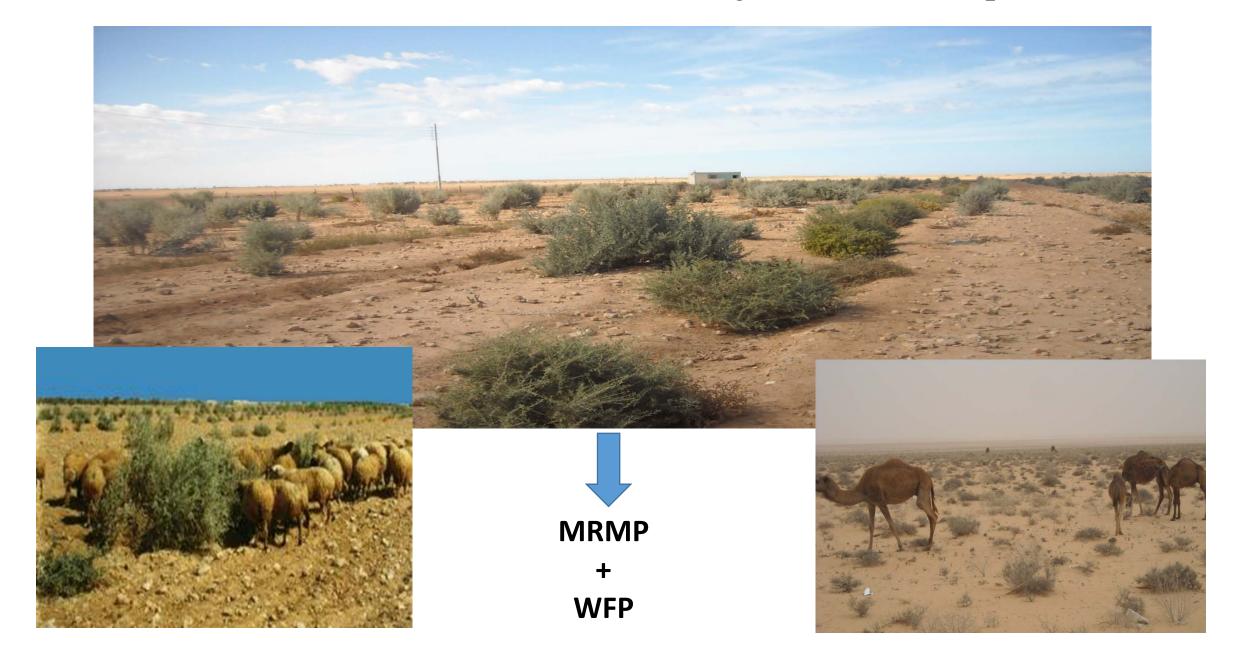
Management of available range land was not taken into consideration

Good pasture





Different trails to re-cultivate the range land with Atriplex



Monitoring and Evaluation

Objective (using field survey to gather all information relevant for understanding the multifaceted characteristics of the NWCZ)

- Family structure, housing and off farm activities.
- Land and cropping system.
- Range status, grazing practices, feeding, management and livestock structure.
- Animal performance and marketing.
- Constraints and perception of climatic changes.

Procedures

- Better understanding for the Bedouin society to alternatives to face drought.
- Workshop including stakeholders with local authorities and the national decision makers to discuss about the situation of pasture lands and governmental subsidies especially within drought periods.
- Analyzing the collected data, then try to introduce suitable solutions for Bedouin problems.

Lessons learned

• Finding new alternative —by the national authorities—to face the effect of climatic changes on the rangelands and therefor the livestock production will be very important "support digging deeper wells — freshening sea water"

• Increasing the awareness of the Bedouin to add value to their products either crops, milk or meat.

• Organizing the use of rangeland during season between grazing herds (within the tribe) to avoid over-grazing and deterioration of the range.

Knowledge exchange

- local authorities must cooperate with research agencies and with tribal leaders to achieves optimal management of rangelands.
- Research institutions should be careful for finding solutions to address the problem of the deterioration of pastures through Local and international projects.
- Make sure that the study will address flaws of the current policies and governmental strategies.
- It is very important that the sustainable and efficient results from better management of rangeland need to be aware by Bedouins themselves, other than stakeholders and local authorities.

Sustainable development of livestock production and better management of rangeland is a very important issue for surviving this community.

Thank You

