

Role of the society in combating desertification

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1. Definition

Desertification is defined by the

U.N. Convention to Combat Desertification as:

land degradation in arid, semiarid and dry sub humid areas resulting from various factors, including climatic variations and human activities.

2. Major Causes for Desertification

A. Human activities:

- 1. Mismanagement of land & water Resources**
- 2. Overgrazing**
- 3. Deforestation**

B. Natural environmental factors:

- 1. Climate Change**
- 2. Drought**
- 3. Soil erosion**

C. Others

- 1. Unsustainable irrigation practices – salinity**
- 2. Uncontrolled agriculture**
- 3. Logging for fuel**

Problem Tree of Desertification in Lebanon

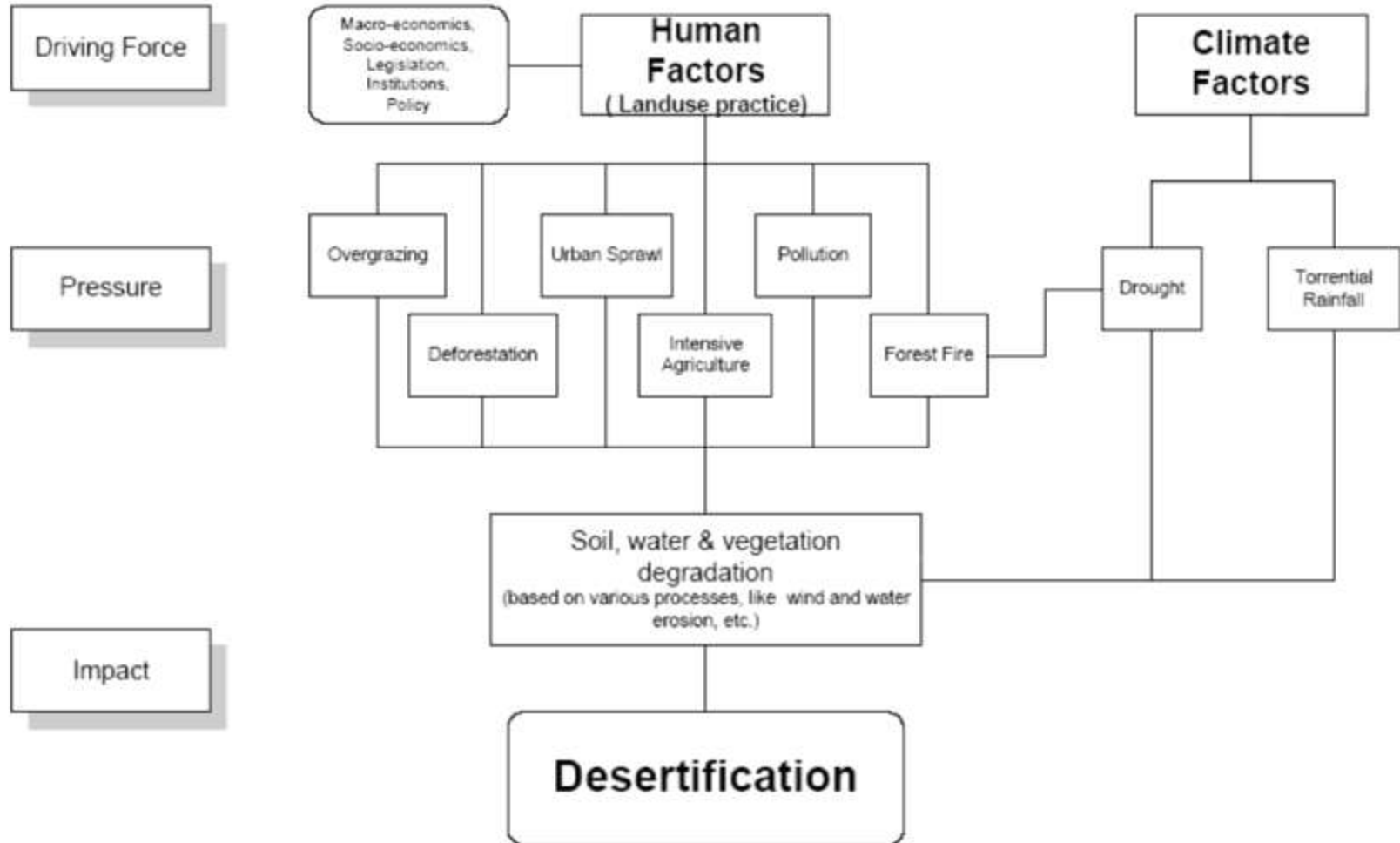


Table 6.7 Desertification risk of the various cazas and the entire country (as % of total Caza)

CAZA ⁴	Urban/ unproductive	Very low	Low	Moderate	High	Very high
Zgharta	7.3	0.0	9.1	44.3	35.8	3.5
West Bekaa	5.8	0.0	2.8	31.0	59.4	1.0
Jezzine	7.3	0.0	13.3	60.5	18.3	0.6
Nabatieh	14.2	0.0	0.5	5.2	60.6	19.5
Beirut	99.8	0.0	0.0	0.0	0.1	0.1
Metn	25.1	0.0	18.8	46.5	7.9	1.7
Kesrouan	18.6	0.1	34.2	43.0	3.9	0.3
Jbeil	11.8	0.1	22.6	59.1	6.0	0.4
Batroun	12.9	0.0	17.2	59.7	9.6	0.6
Tripoli & Dannieh	13.3	0.0	12.6	48.8	21.9	3.4
Akkar	4.5	0.0	0.1	19.9	55.0	20.5
Hermel	3.4	0.0	0.5	19.0	60.6	16.5
Baalbeck	3.9	0.0	0.1	5.7	67.5	22.8
Zahle	7.0	0.0	0.4	22.9	60.4	9.3
Rachaya	1.8	0.0	0.2	19.7	77.7	0.6
Marjayoun	7.0	0.0	0.1	6.7	75.5	10.7
Bint Jbeil	7.3	0.0	0.0	6.3	61.0	25.4
Sour	6.6	0.0	0.1	10.6	62.7	20.0
Saida	15.2	0.0	0.3	5.7	63.3	15.5
Chouf	12.8	0.0	8.8	52.8	23.8	1.6
Aley	19.8	0.0	11.4	55.2	12.4	1.2
Baabda	23.2	0.0	17.4	31.9	22.7	4.8
Koura	12.6	0.0	3.2	45.5	36.4	2.3
Bcharre	10.8	0.0	14.1	60.2	14.7	0.2
Hasbaya	2.0	0.0	2.7	34.1	60.7	0.5
LEBANON	8.6	≈ 0.0	5.7	26.4	48.1	11.2



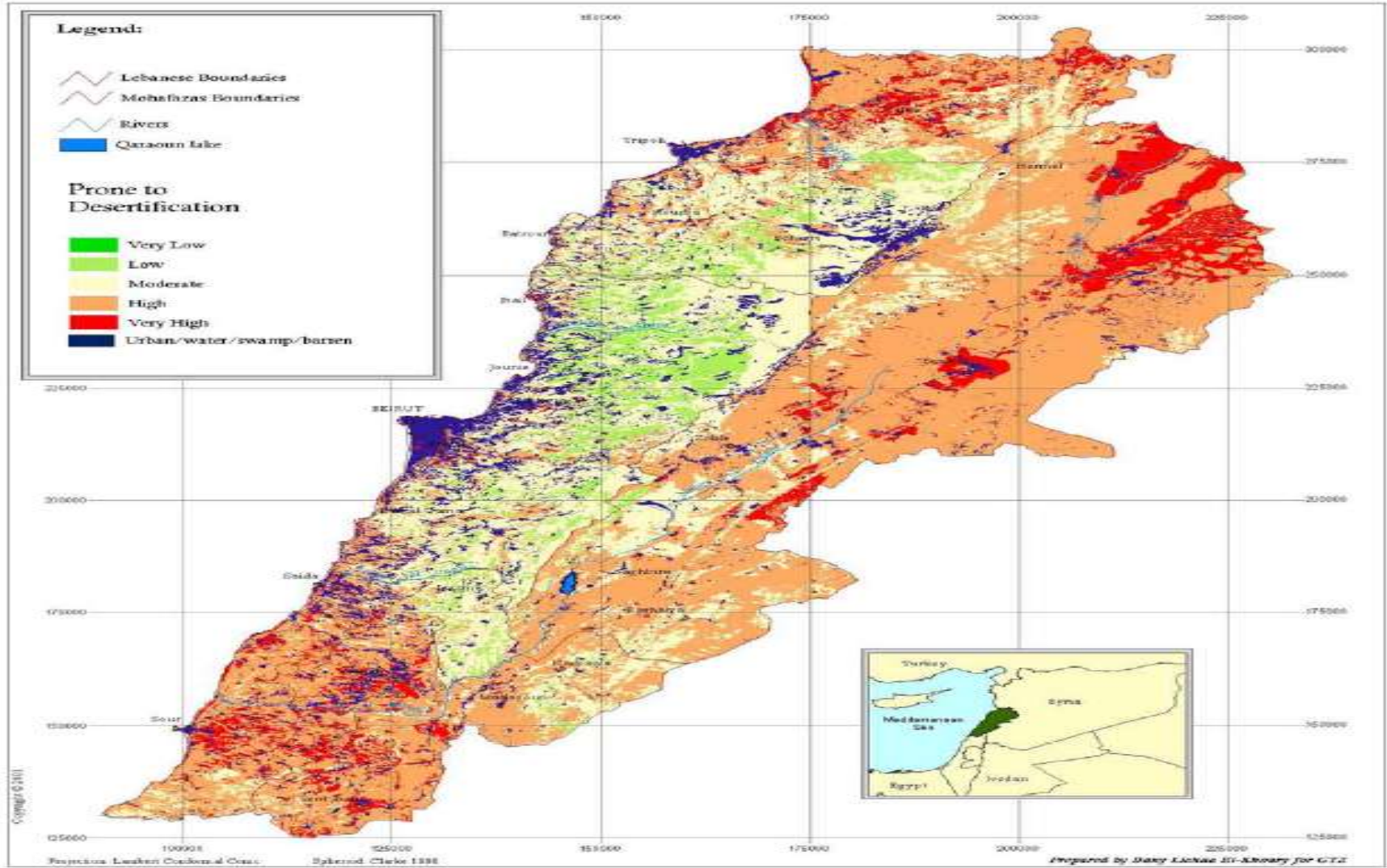
Ministry of Agriculture - LEBANON

Combating Desertification in Lebanon CoDeL

A Joint GTZ/Ministry of Agriculture Project



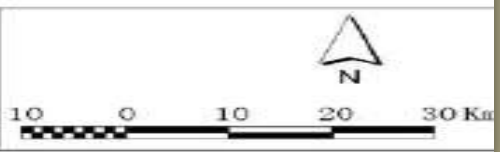
German Technical Cooperation



Map no. 6.1

Source:
Elaborated from the different individual indices CoDeL, 2001

Title:
Desertification Prone Areas



3. Combating desertification

3.1 Climate change

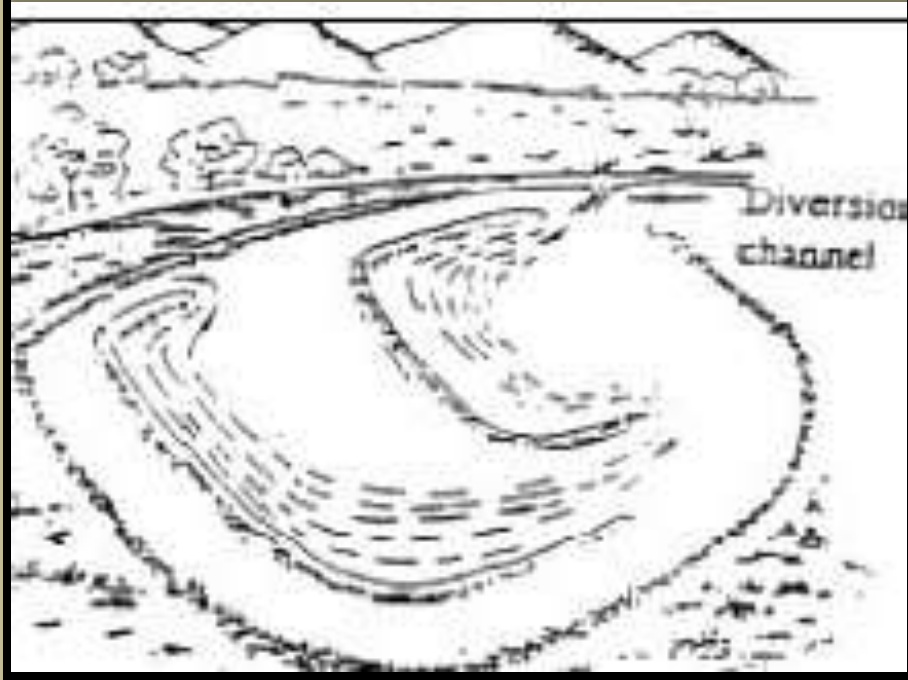
- Drought aspect: Water harvesting micro level



- Drought aspect: Water harvesting medium level



Collective storage



Medium catchment bunds



Terracing



ZAFAR ADEEL

Terracing prevents further gully erosion and stores surface runoff for olive production (Tunisia)

Medium water harvesting and storage scheme



Before

After



Lined collecting unit





Lined with stones

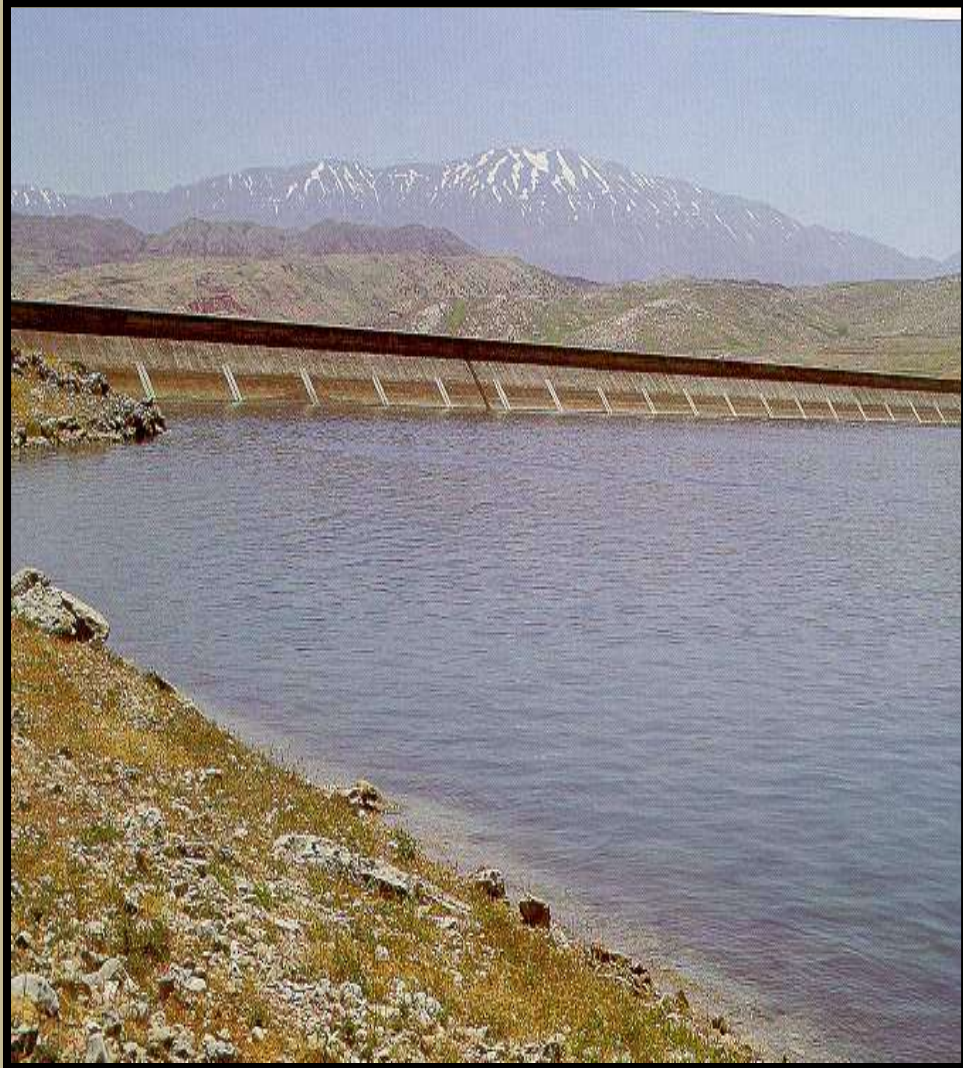


Un lined storage units





Large water harvesting and storage scheme



Irrigation Water Management









Mismanagement



Water erosion and reduced soil conservation in semi-arid Burkina Faso negatively affects ecosystem services.



**Conventional
irrigation is a
waste of water.**

A conceptual photograph for a water conservation campaign. It features a clear glass fishbowl on the left, partially filled with water. A single goldfish is swimming in the water. Attached to the side of the fishbowl is a black faucet, which is dripping water. The water is falling in a series of droplets onto a dark surface below, creating a small splash. The background is a plain, light-colored wall. A black rectangular box with white text is overlaid on the right side of the image.

Save water , save life