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Expert Group Meeting on Sustainable Land Management
as a Best Practice to Enhance Rural Development
in the ESCWA Region
Beirut, 25 – 27 March 2009

**Sustainable Land Management practices to reverse
land degradation in Lebanon**

by

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Sustainable Land Management Programme for Livelihood Development in Lebanon

Total area: 10452 Km²
Lebanon is situated East
of the Mediterranean
Sea, with 225 Km of
coastline between:
Latitudes 33° N - 35° N
Longitudes 35° E - 37° E
Total population
estimated: 3.77 million in
2004
Capital: Beirut
Currency: LB Pounds

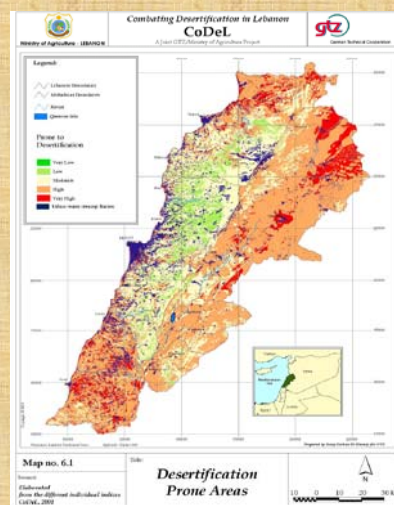


Biophysical conditions

- **Mediterranean climate** coastal plain & in the middle mountain range and **Sub-desertic climate** in North Bekaa
- **Mean annual T° Range :**
Coast 20°C 13°C - 27°C
Bekaa 16°C 5°C - 26°C
High 10°C 0°C - 18°C
- **Annual Precipitation:**
< 300 mm North Bekaa
600-800 mm coast /mid mountainous areas
1000-1100 mm high mountains

Lebanon affected by land degradation

Lebanon is affected by desertification; 60% of its territory are vulnerable with high spots in the Bekaa Valley, Akkar (North Lebanon) and South of Lebanon



Causes of Land Degradation in Lebanon

Pedo-climatic factors

- Aridity in the North East part of the Bekaa
- Drought: there is a limited water availability during the dry summer
- Topography (steep slopes occupy large areas)
- Kind of soils (young and highly fragile and prone to erosive process)

Human activities

- Unsustainable agriculture practices
- Chaotic urban sprawl
- Pollution
- War and Israeli hostilities
- Weak enforcement of existing legislation relevant to natural resources management
- Land fragmentation

Impacts of land degradation

- Poverty and migration aggravated
- Structure and functions of ecological systems deteriorated
- Water quantity and quality deteriorated
- The annual cost of environmental degradation is US\$ 565 million per year or 3.4 of GDP. The annual cost of land resources degradation is around US\$ 100 million per year or 0.6% of GDP (W.B, 2004)

Combating Desertification in Lebanon

The Government of Lebanon has launched and implemented programmes aligning with SLM and poverty alleviation:

- Community Development Programme
- Economic and Social Fund for Development
- National Environmental Action Plan
- National Reforestation Plan
- National Biodiversity Strategy and Action Plan
- 10-Years Plan for Water
- Recovery projects following July 2006 conflict

Sustainable Land Management Programme for Livelihood Development in Lebanon

- Designated institutions : MoA/ UNDP
- Main outcomes:
 - Identification of main problems and obstacles
 - Identification of alternatives and solutions adopted to improve environmental conditions, to reduce land degradation
 - Enhancement proper market linkages for achieving sustainable livelihood development of rural communities

Programmes components

- Rural Dry lands Development through Innovative Market Approaches, Financing strategies and local Initiatives for UNCCD Implementation
- Flood Risk Management and Water Harvesting for livelihood Recovery in Baalbeck –Hermel
- Application of the Integrated Financing Strategy in the implementation of the NAP to Combat Desertification

Programmes components

- Exploration industrial hemp as an alternative to the cannabis plant in the Bekaa for improving the livelihood of rural communities
- Promoting Cultivation of Medicinal and Aromatic plants for livelihood Recovery in South Lebanon
- Small Scale MAPs Cultivation to reduce the risks associated with cluster bombs in South Lebanon

Rural Dry lands Development through Innovative Market Approaches, Financing Strategies and Local Initiatives for UNCCD Implementation

Objective: Rural dry lands development through trade and marketing of agriculture products



Rural Dry lands Development through Innovative Market Approaches, Financing Strategies and Local Initiatives for UNCCD Implementation

Implement NAP priority local level pilot projects

Rehabilitation of irrigation channels and re cultivation of abounded lands



Rural Dry lands Development through Innovative
Market Approaches, Financing Strategies and
Local Initiatives for UNCCD Implementation

Implement NAP priority
local level pilot projects

Eco-tourism



Rural Dry lands Development through Innovative
Market Approaches, Financing Strategies and
Local Initiatives for UNCCD Implementation

Implement NAP
priority local level pilot
projects

*Promotion of aromatic
plant cultivation*



Rural Dry lands Development through Innovative
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Implement NAP
priority local level pilot
projects

Water harvesting



Rural Dry lands Development through Innovative
Market Approaches, Financing Strategies and
Local Initiatives for UNCCD Implementation

Implement NAP priority
local level pilot projects

Soil conservation



Flood Risk Management and Water Harvesting for Livelihood Recovery in Baalbeck –Hermel

Objectives:

- Reduction of flood risk (through construction of haffirs, check dams, stone walls)
- Improvement of access to irrigation water (Hill lakes), crop diversification and productivity improvement
- Regeneration of the vegetation cover (re-cultivation of native wild plants)

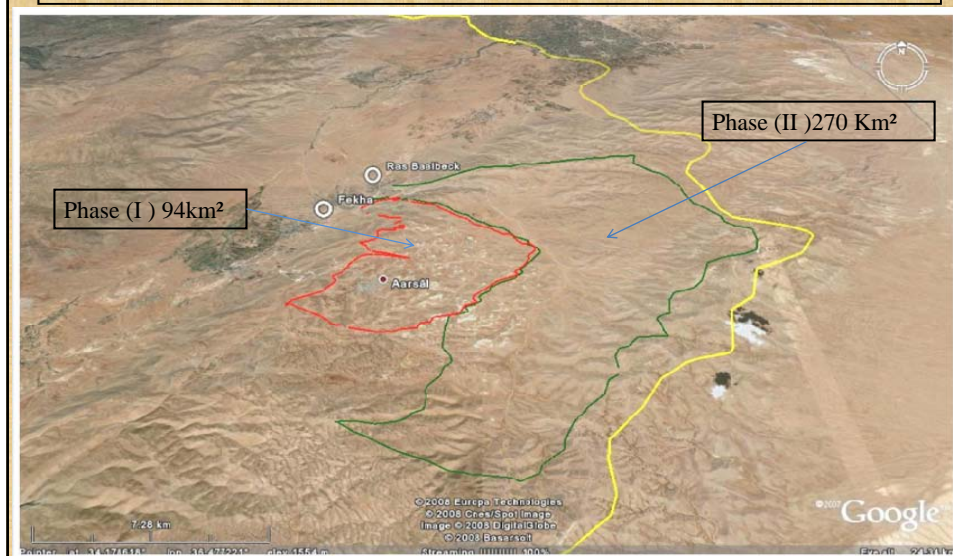
Flood Risk Management in North Bekaa(MoA/GTZ)



Flood Risk Management in North Bekaa (MoA/UNDP)



Flood Risk Management in North Bekaa



Application of the Integrated Financing Strategy
in the implementation of the NAP to Combat
Desertification

Objective:

Setting a process that facilitates the improvement of the enabling policy, legislative, institutional and incentive frameworks governing natural resources as a means of improving the impact of existing resources and mobilizing new and additional resources for combating desertification and poverty

Exploration industrial hemp as an alternative to
the cannabis plant in the Bekaa for improving the
livelihood of rural communities

Objective:

Promotion of industrial hemp as a viable and potential alternative to illicit crops in Bekaa

Promoting Cultivation of Medicinal and Aromatic plants for livelihood Recovery in South Lebanon

Objective:

- Improvement the livelihood of rural families affected by clusters bombs in South Lebanon
- Support the cultivation of economically important MAPs in target areas
- Support the conservation of the existing biodiversity

Small Scale MAPs Cultivation to Reduce the Risks Associated with Cluster Bombs in South Lebanon

Objective:

- Providing irrigation systems and seedlings to cultivate oregano in small scale home gardens
- Providing technical assistance
- Raising awareness

Next steps

- Rural Livelihood Recovery in Southern Lebanon through Reforestation with and sustainable Use of Carob, Pine and Laurel trees.
- Flood Risk Management in North Bekaa (Phase II/ 270 Km²)

Constraints and challenges

- Lack of financial resources
- Weakness of capability needed at both the institutional and community levels
- Absence or weakness of coordination mechanisms between concerned governmental institutions and their relationship to non-governmental stakeholders
- Absence of decision makers' engagement

Recommendations/suggested activities

- Promotion of sustainable agriculture
- Accomplishment of a national land degradation assessment
- Accomplishment of a national land suitability assessment
- Launching national awareness campaign on SLM

Thank you for your attention