SOIL CONSERVATION AND STRATEGY FOR AGRICULTURE

ENG :FATME BEYDOUN LEBANON

NENA SOIL PARTNERSHIP

17-19 JUNE 2014 AMMAN


35°30'
Syria
36°30'
0
20 km
0
15 miles
Al Qubayyat
Halba
Al Mina'
Tripoli
Al Hirmil
Shikka
Amyu
Al Qa'
Al Batrun
Bsharri
Duma
Mediterranean
Sea
Jubayl
Lebanon
Juniyah
Ba'labakk
34°
Bikfayya
Beirut
Zahlah
Riyaq
B'abda
'Alayh
Shtawrah
Ad Damur
Bayt
ad Din
Syria
Barja
Jubb Jannin
Sidon
Jazzin
Al Qir'awn
Az Zahrani
Rashayya
As Sarafand
An Nabatiyah
at Tahta
Marji'yun
N
Tyre
UNDOF
Zone
Bint
Jubayl
An
Naqurah
Golan
Heights
(Israeli Occupied)
©1997 MAGELLAN Geographix℠
(805) 685-3100 www.maps.com
Israel
33°

LEBANON

- Lebanon is located on the eastern shore of the
- Mediterranean Sea between 33° and 35 °N latitudes,
- and 35° and 37° E longitudes (Fig. 1).
- Lebanon (10,452 km2) is a predominantly mountainous country with complex physical geography. Landform, climate, soils, and vegetation differ markedly within short distances

CLIMATIC CONDITIONS

- hot and dry summer,
- cool and rainy winter, moderately dry fall and spring
- Difference in climate are noticed in the regions
- Bekaa Valley has a semi-arid to continental climate
- with unpredictable rainfall and recurrent drought. In the central part, the climate is semi-arid; whereas in th
- north-east it is almost arid to continental

WHERE IS OUR LEBANEASE SOIL FROM THE EXISTING AGRICULTURE STARTEGY

- DOES IT EXIST? YES HOW ITS IMPLEMENTED
- The strategy for agriculture developments was build up by different tools
- Diagnosing the agricultural problems
- Valorization of the agricultural sectors
- Build up a strategy for improving yield quantity and quality
- Involving public and private sector to raise up a strategy for developments

Previous status of agriculture

- THE WHOLE SECTOR WAS NOT A PRIORITIES AMONG OTHER SECTORS AND HENCE LIMITED INVESTMENTS ON THE SECTOR THAT LEAD TO LIMIT OR REDUCE DEVELOPMENTS FOR AGRICULTURE.
- LITTLE PUBLIC AWARNESS ON HOW IMPORTANT IS THE SECTOR BY ITSELF AND THE VALUE TO DEVELOP SECURITY BY DEVELOPPING REASEARCH IN AGRICULTURE.

- LIILE CONTRIBUTION OF THE AGRICULTURAL SECTOR TO THE LEBANEASE OUTPUT
- COMPETIVNESS AND THE DEVELOPMENTS OF OTHER SECTOR MAINLY ON AGRICULTURAL LAND
- HIGH COST OF PRODUCTION THAT LIMIT THE EXPENSION AND DEVELOPMENTS OF AGRICULTURAL PRODUCTION TO OUTSIDE MARKET
- THE IMPROPER LAND USE EFFICIENCY AND LACK OF EXTENSION SERVICES ON RECOMMENDATION THAT WHAY INDUCED DESERTIFICATION IS IN PROGRESS,

ACTUAL STATE OF SOIL IN LEBANON

- REDUCTION OF AGRICULTURAL LAND
- DESERTIFICATION DUE TO CLIMATIC CHANGE AND REDUCE RAINFULL 1200MM-ARROUND 350 MM THIS YEAR WHICH AGREVATE THE PROBLEMS
- REDUCE FOREST AREA AND LAND COVER
- LACK OF WATER MANAGMENTS AND WATER HARVESTING (BAD APPLIED IRRIGATION PRACTICES)
- INCREASE THE POPULATION DENSITY LIMITED WATER RESSSOURCES ACCOMPANIED WITH LIMITED PRODUCTION TO SATISFY DEMAND
- THAT HILIGHT THE URGE NEED FOR INTENSIVE CULTIVATION AND AGRICULTURAL TECHNIQUES MODERNISATION.

PROBLEMS IN LEBANEASE SOIL

- INADEQUATE URBAN AND LAND PLANNING INITIATIVES AND PROJECTS.
- CONTAMINATION OF SOME SOIL AND WATER REASOURCES DUE TO ESSESIVE USE OF FERTILIZERS AND PESTICIDE
- LIMITED CONTROL TO LIMITED EXTENSION FACITLITIES AND LIMITED NUMBER OF TRAINED PERSONES IN THIS TOPICS.
- SALINITY BUILD UP PROBLEMS MAINLY IN GREEN HOUSES .
- UNDERGROUND WATER POLLUTION WITH NITRATE DUE TO EXCESSIVE USE OF NITROGENOUS FERTILIZERS IN MEDIUM AND SANDY SOILS.

SATISTISTICAL DATA ON AGRICULTURE

- THE TOTAL AGRICULTURAL AREA IS ¼ OF THE TOTAL SURFACE AREA
- 277 HA IN 2007 OUT OF WHISH 142 IRRIGATED LAND
- THE CONTRIBUTION OF AGRICULTURE TO LEBANON OUTCOM 6%
- 20-30 LABOR WORKING IN AGRICULTURE
- 17% OF THE PRODUCTION EXPORTED

LEBNAON IS AN IMPORTED COUNTRY

- YES ITS
- WE IMPORT 73% OF OUR REQUIRED PALNT PRODUCTION AND 27% OF ANIMAL PRODUCTION
- WHAT SHOULD BE DONE IN THIS ASPECTS HOW TO INCREASE PRODUCTION CAPACITY IF WE DID NOT START MAKING AN ALERT AWARNESS SYSTEM TO MAKE IMMEDIATE AND PLANED ACTION TOWORD PROPER FARMNING AND SOIL MANGMENTS SYSTEM
- IF WE CONTINUE LIKE THAT PERHAPS WE WILL END UP WITH SOIL LESS CULTURE AND LATER WE WILL BE 100% IMPORTERS OF ALL AGRICULTURE PRODUCTS???

SOIL EROSION RATE IN LEBANON

- THIS WORK WAS DONE 1995 SOER
- THEY DEVELOP A VULNERABILITY SOIL MAP BASED ON SOIL PERMEABILITY SOIL WATER RETENTION HYDROGRAPHIC DENSITY RAIFULL AND PLANT COVER(MAP SOULD BE VALIDATED)
- ENVIRONMANTAL FACTORS AND INNATE SOIL PROPERTIES AND OVER GRASING AND EXCESSSIVE USE OF FERTILIZERS TO RAISE PRODUCTION CAPACITY LEAD TO DISTROY OUR SOIL AND INCREASING INDUCED DESERTIFICATION

HOT SPOTS AND SENSITIVE AREA FOR LAND DEGRADATION

- 12 SENSITIVE SITES WERE REALIZED THEY HAVE A TOP PRIORITY CONSERVATION (DUE TO

  THEIR UNIQUE AND LANDSCAPE VALUE
- REF: LEBANON STATES OF THE ENVIRONMENTAL REPORTS FOR DETAILS

KEE FACTORS THAT CAN BE MANIPULATED TO SAVE SOIL FOR FUTURE GENERATION

- RAISE UP PUBLIC AWARNESS (ALL MNISTIRES)
- PROMOTING AND FINANCING PROPER AND EFFICIENT TECHNIQUES FOR LAND CONSERVATION
- DEVELOPPING REASEARCH ON NEW PRODUCTIVE VARIETIES RESISTANT VARIETIES AGAINST PEST AND DESEASE
- SET UP NEW REGULATIONS WHEN ITS NEEDED AND ORIONTATE REASEARCH TOWORD LAND CONSERVATION AND VALORISATION

SOIL IS A GOLD HERITAGE

- WHEN WE START KNOWING ITS VALUE WE CAN KNOW THAT ITS NECESSARY TO REGENERATE IT AND RESTORE ITS PRODUCTIVITY AND TO CONSERVE THE HERITAGE FOR FUTURE GENERATIONS

HOW TO CONVINCE PUBLIC SECTORS IN CONTRIBUTIONS

- SHARING PARTICPANTS EXPERIENCES
- SELECTION OF KEE ACTION PLAN TO START WITH.
- TRANSFERRING THE AVAILABLE DATA WITHIN MAPS TO AN EASY AND EXPLAINABLE FOUNDING TO BE USED AS AN ARGUMENTS TO PUSH UP THE STRATEGY FOR SOIL AND WATER CONSRVATION ACTION PLAN TO THE DESSISION MAKERS.
- UPDATING THE EXISTING DATA AND CONTINOUS MONITORING THE WHOLE FARMNING SYSTEM DEVELOPMENTS.

WHAT STAKE HOLDER SHOULD DO ABOUT PROPER LAND AND SOIL CONSERVATIONS

- ESTIMATE THE EROSION IN AGRICULTURAL PLOTS
- DEVELOP A NATIONAL ACTION PLAN TO COMBAT DESERTIFICATION
- CONTROL THE EROSION PROCESSES, INCLUDING VEGETATION AND TERRACES IN MOUNTAINOUS AREAS.
- DEVELOPING A NATIONAL PLAN OF PRIORITY ACTIONS FOR HYDROLOGIC-FOREST RECOVERY AND EROSION CONTROL.

THANK YOU