



Sustainable Engineering in the Eastern Mediterranean Region
Defining Regional Community Issues & Needs

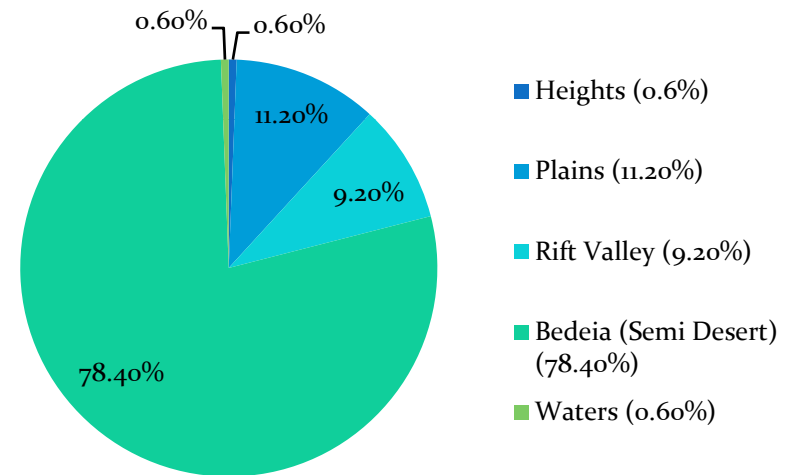
Jordanian Perspective

Cyprus, April '09



Quick Facts

- 6.2 M total population
- 2.3% population growth rate
- 37.3% of population less than 15 years of age
- At least 15% below poverty line
- 14% unemployment rate
- Area*: Total – 89342 sq. km
 - Land : 88802 sq. km
 - Water : 540 sq. km
- Arable land represents only 7% of Jordan's land area
- Natural Hazards: Droughts & Periodic Earthquakes
- Environment – Current Issues: limited natural fresh water resources; deforestation; overgrazing; soil erosion; desertification



* Department of Statistics - Jordan

Current Issues

- Rapid urbanization & industrialization
- Air pollution and low energy efficiency
- Scarce natural resources
- Inefficient utilization of agriculture land
- Rapid population growth
- Inability of the economy to generate enough jobs - risk that the sizeable segment of the near-poor of Jordanians will fall below the poverty line

Role of EWB-Jordan

“Sustainable Development & Human Development”

Poverty is not a form of weakness, it is an absence of opportunity!

- When technology is appropriately incorporated into each community's social, cultural, economic and political context, it can drive extraordinary change.
- In creating and enlarging choices, human capabilities are built. Introducing technology is introducing improvement and prosperity to the livelihoods and living standards.

Achieving Sustainable Development

Strategic planning, management and allocation of resources, one that flows simultaneously with the political and economical development.

This can be done through:

- Utilization of renewable sources of energy

Jordan is rich in renewable energy sources:

- solar energy
- natural gas
- thermal energy

currently utilized at a rate not exceeding 2%
of the total energy used

- Alternative means for energy: terrigenous sands near dead sea.
- Oil shale: Jordan preserves exceed 40 million tons – which contains 10% of refined oil
- Young community (60% of population) – involvement of the youth

Achieving Sustainable Development

Our Approach:

- ***People-First approach:*** interaction with people and getting a deeper insight into their challenges
- ***Creating Solutions:*** finding solutions to the root-cause of existing problems
- ***Efficiency:*** to maximize social returns, an effective and efficient operation of the organization is required
- ***Partnership:*** seek to partner with existing organizations wherever possible
- ***Transparency:*** operate transparently and openly address lessons learned
- ***Commitment:*** maintain solid commitments with communities we work with

Achieving Sustainable Development

Jordan has emphasized its commitment towards sustainable development through its involvement in the Earth Summit held in Rio De Janeiro 1992 in which a national agenda was prepared to achieve sustainable development – Jordan 21 Agenda

Ongoing plans and projects:

- Creating a training program for university students to participate in projects
- Working with Jordanian universities towards creating chapters of EWB
- Creating a website as a reference point to educate people about sustainable development
- Signing an agreement with API

Achieving Sustainable Development

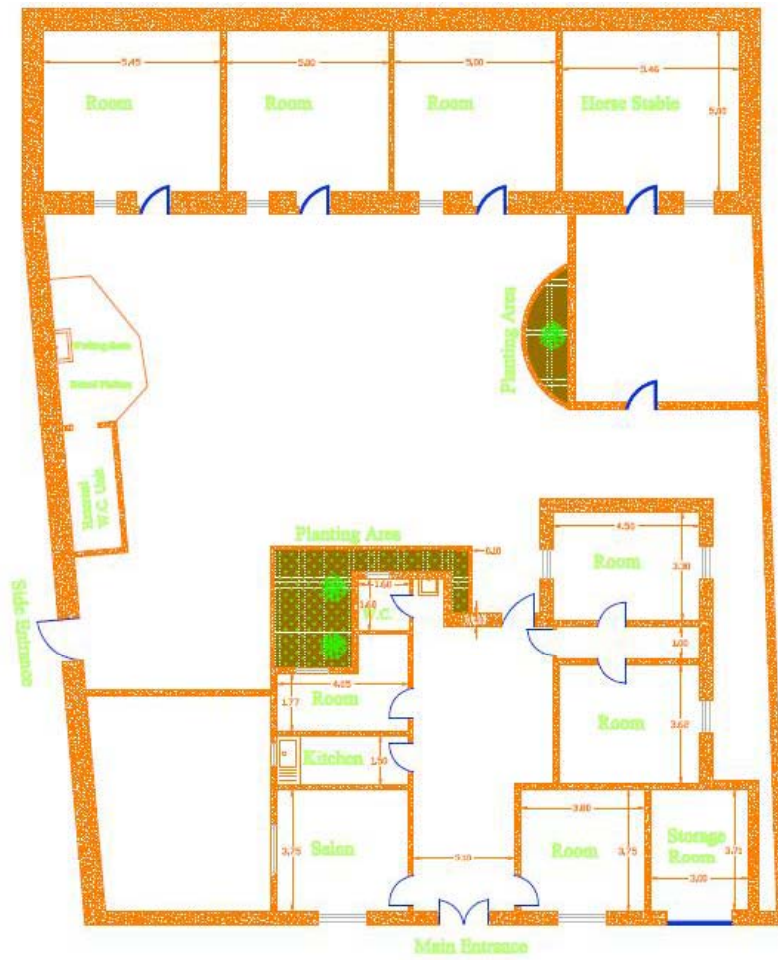
1st Project : API – Al Ayoun Lodge

Broad range of strategies and activities ...

- Support the development of the path; which include developing physical site and upgrade plans, scope of work, cost estimate and supervise the implementation of physical site and upgrade plans.
- Research and field work opportunities along the path.
- Assist with the development of the path



Achieving Sustainable Development



Al Ayoun Lodge
Location: Ajloun, Jordan

Description: Plan View of Lodge

Prepared by: EWB-Jordan

Achieving Sustainable Development



Achieving Sustainable Development

Future Projects & Plans

Projects focusing on :

- Waste management & recycling
- Preserving Biodiversity
- Prevention of desertification
- Raising awareness on the proper and efficient use of water, and making use of wastewater
- Total control of olive oil making residues, and utilising the outcome towards generation of energy
- Increase utilization of solar energy & natural gas
- Establishing a learning centre geared towards educating people about sustainable development
- Creating training programs for university students to build their capabilities and orient their efforts towards sustainable development



QUESTIONS or COMMENTS ?!

EWB-Jordan Team:

- **HAYEL AL-AMOUSH – PRESIDENT AND CO-FOUNDER**
MASTERS IN ENVIRONMENTAL ENGINEERING
- **RULA EL-JORF - PROJECTS MANAGER AND CO-FOUNDER**
MASTERS IN ENGINEERING
- **KHALED ZOUHRAH - UNIVERSITIES COORDNATOR**
MASTERS IN ENGINEERING
- **EID AL TAREZI - DEVELOPMENT MANAGER**
PhD IN ENGINEERING
- **IYAD ABOOD - ENVIRONMENT MANAGER**
PhD IN ENGINEERING