Egypt

Contribution of Poplars & Willows to Sustainable Livelihoods & Land-use in Egypt: Status & Needs

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International workshop:

"Improve the contribution of Poplars and Willows in meeting sustainable livelihoods and land-use in selected Mediterranean and Central Asian Countries"

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Country general information

- Climate: Arid
- Total country area : 1 002 000 km2.
- Area of agricultural land (%): 3 %
- Forest area and potential growing stock (FRA 2010):
  - Forest area : 70 000 ha (0.07%, mainly linear plantations for environmental protection)
  - potential growing stock : 8 .4 M m3
- Population: (72.6 M – 2006 census)

Area & type of poplar & willow culture

- Area of poplar Plantations (ha): 700 ha
- Area of willow forests (ha): 1000 ha
  (Linear plantations, no wood lots)
- Area of intensive plantations, poplar (ha): Nil
- Area of intensive plantations, willow (ha): Nil
- Area of agroforestry, poplar (ha): Nil
- Area of agroforestry willow (ha): Nil

Key stakeholders in poplar & willow development

- **Governance in P & W (policies, programs & technical support):**
- Ministry of irrigation and Water Resources, planting willows along main irrigation canals
- Ministry of agriculture, introducing new poplar hybrids and clones
- **Research in P & W & Specializations**
- University of Alexandria, Department of Forestry: Growth and physiology of some species, comparative growth of some species and clones introduced from Syria.
- Ministry of Agriculture, Agricultural Research Institute, Growth of some introduced species and clones introduced from Turkey.
- **Education & Training in P & W**
  1. Universities: University of Alexandria, Faculty of Agriculture, Department of Forestry : offers B. Sc, M. Sc and PhD degrees in forestry
  2. Technical training for forest managers: Alexandria university and Ministry of Agriculture and Land reclamation
  3. Operational training for forest artisans: Alexandria university and Ministry of Agriculture and Land reclamation
  4. Others: Kaul- Mubarak secondary technical forestry school at Luxur city
- **Investors in P & W afforestation/harvesting/end use**
- No investors on commercial scale
- Private sector (Farmers and land owners): Poplar and willows planted around fields and along secondary irrigation canals.

Benefits from poplar & willow cultivation (economic, environmental & social)

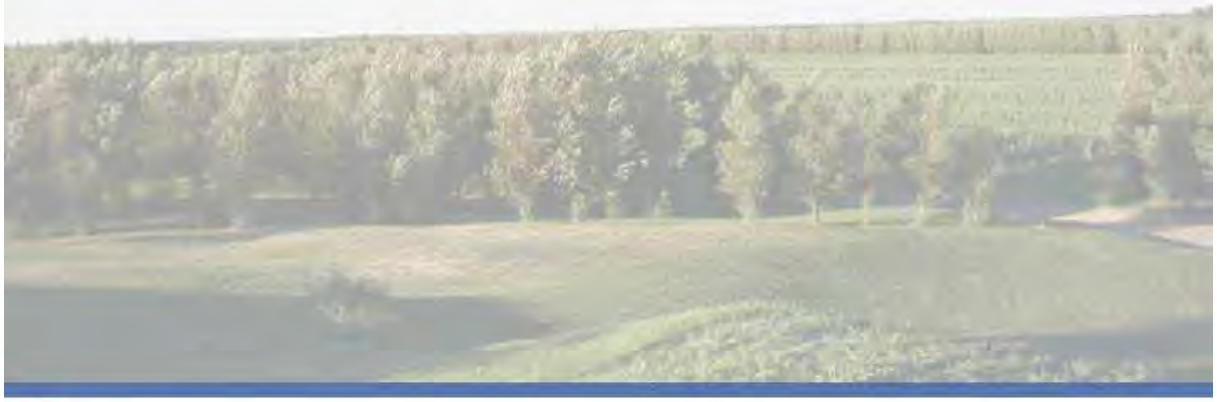
- Increasing the amount of local wood and decreasing, partially, the amount of hard currency needed for wood imports

- Using waste water safely through establishing poplar plantations near the sewage stations where land is available.

- Conservation of water streams banks.

Issues in poplar & willow culture

- The limited number of introduced clones and species.
- Infection with the stem borer *Zeuzera pyrina* (Leopard moth).
- Susceptiblity to infection with: (in trees already infected by stem borer)
- 1-Heart rot (Stem rot) disease caused by *Inonotus sp, Ganodarma applanatum*
- 2: Root rot fungi disease caused by *Armillariella mellea*



Problems/constraints experienced in P & W culture

- Due to the limited forest resources in Egypt in genral and the small area of polars and willows, no problems or constraints were experienced in their culture except the infection with stem borers and diseases in the governorates of high relative humidity (Alexandria and Behaira governorates)

Opportunities for poplars & willows to meet sustainable livelihoods & sustainable land-use

- Forest plantations have very limited role in sustainability of livelihood due to:

1. the limited amount of local wood removals and the underestimated prices of local wood in comparison to the prices of imported wood.
2. There is no community plantation in Egypt. Private willow plantations consist of small number of trees for small canal conservation and shading.

- However, there is an opportunity for poplars to have a role in sustainable land-use through Phytoremediation of contaminated sites and harmful waste products, particularly in industrial and near by waste water plants..

Priority needs to support poplar & willow development

- Securing adequate external funding for establishing poplar and willow plantations using sewage water, through bilateral and multilateral sources and joint projects with international donors.. (Governmental funding to the forest sector is limited. It represents less than 2.5% of the Ministry of Agriculture and land Reclamation budget).

- Technical contribution from regional and international organizations (technology transfer), including introduction of new clones and species and testing their performance under the local conditions for future development and expansion in planting poplars and willows


Thank you