



منظمة الأغذية
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Продовольственная и
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Organización
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Naciones
Unidas
para la
Agricultura
y la
Alimentación

NEAR EAST FORESTRY AND RANGE COMMISSION

TWENTIETH SESSION

SECOND NEAR EAST FORESTRY WEEK

ANTALYA, TURKEY
29 JANUARY – 02 FEBRUARY 2012

Good Governance of Forests and Rangelands : Pillar of Food Security

USE OF TREATED WASTE WATER IN FORESTRY AND AGROFORESTRY SYTEMS

1. The Near East and North Africa are characterized by arid and semi-arid climatic conditions that affect food production and forestry. Population pressure in the region has increased over the years together with the needs of the people for food, fuel wood and other forest products and services. The fragile forest resources are under threat by the combined effects of population growth and climate change. Water scarcity is expected to be felt even more with the growing demand of the societies. However, the region produces large quantities of waste water in the peri-urban areas and extensive marginal lands that can be used for large scale afforestation using modern technologies of water treatment and improved drip irrigation systems. Afforestation in the arid zones of North Africa and the Near East has the potential to meet people's needs in forest and trees goods and services, restore degraded landscapes, combat desertification, and contribute to climate change mitigation by expanding the carbon pool in forests and transferring knowledge and technology in these areas.

2. Over the past years there has been an increase in requests from the Mediterranean and Near East countries to involve FAO in the implementation and development of projects to use treated waste waters (TWW) for forestry and agroforestry systems with the support of the international community and funding agencies. The Forestry Department of FAO has prepared and submitted to donor countries and funding agencies a number of projects. The Italian Government has positively responded to the initiative by funding a small project that is implementing new technologies in the production and management of treated waste waters in four

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Mediterranean countries.

3. From 16 to 17 October 2010 FAO, with the financial support of the Government of Italy, organized a workshop in Hammamet, Tunisia, on forest restoration using treated waste water. The meeting brought together 28 participants composed by key stakeholders from Algeria, Egypt, Morocco and Tunisia, observers of the Italian Cooperation and five specialists representing relevant Italian institutions already working as technical partners of the FAO-Italian Project: the National Research Council (CNR) the Research Council For Agriculture (Ente CRA), the University of Basilicata (Potenza) and the University of Tuscia (Viterbo).

4. The result of the workshop was a document containing a logical framework for a regional project proposal to contribute to the transfer of scientific research into forest policies, plans and forestry practices. The document was endorsed by all participating countries and gave FAO the mandate to continue working on a full-fledged draft for a regional project proposal to be revised by each participating country.

5. The Government of Italy expressed interest in the regional project proposal and decided to support the preliminary activities foreseen by the project in the first year of activities. These activities will focus on the establishment of small demonstration projects on the use of treated waste water in forestry and agroforestry systems in Algeria, Egypt, Morocco and Tunisia. The new project became operational in October 2011 and will last one year. At the same time FAO is also working in partnership with other national and international institutions and NGOs to submit the project proposal to other funding agencies to ensure continuation in the project activities in the long term.

6. Three field missions have been carried jointly with experts of the Italian institutions that are in partnership with FAO in three of the four project countries to evaluate the specific needs to use treated waste waters (TWW) in forestry and agroforestry and initiate to plan country activities finalised to the realization of the demonstration projects. A fourth mission is foreseen in Tunisia by mid November. At the moment the project is to support in Algeria the establishment of a phyto-depuration treatment plant in the Oasis of Brezina for production of TWW to produce biomass crops. The Government of Algeria has decided to invest on phyto-depuration plants in remote rural areas as costs for phyto-depuration are sustainable also in areas with poor economy. In Egypt the project will support the Under-secretariat for Afforestation in the management of the forest of Ismailia an important plantation established in the desert, near Suez, with the use of TWW. In Alexandria the project will work closely with the Forestry Department of the University and with Alexandria Sanitary Drainage Company to establish new plantation areas to be irrigated with TWW. In Morocco the project will support the use TWW to establish the green belt with palm trees around the city of Marrakech. More activities are foreseen also in Tunisia.

7. The project will benefit of the transfer of knowledge and technologies from more advanced countries in the use of TWW particularly by implementing new technologies on phyto-depuration and on the use of TWW for ferti-irrigation. At the same time the project is also working in partnership with Mediterranean countries and national and international institutions to submit project proposal and ensure continuity to the project activities in the mid-long term.

ISSUES FOR CONSIDERATION OF THE COMMISSION

- The project described above has been endorsed by the four participating countries: Algeria, Egypt, Morocco and Tunisia. However an endorsement of the NEFRC would also be needed to

better position FAO in its efforts to raise additional funds with donor countries and funding agencies.

- Through which kind of initiatives could the NEFRC support FAO in seeking more funding to ensure project continuation in the long term?
- How could NEFRC member countries better exchange information, knowledge and technology in support of the FAO project on the use of treated waste waters in forestry and agroforestry systems?
- Would it be important to expand the project to more NEFRC member countries?