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Issues and Options

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**AGRO-FORESTRY DEVELOPMENT PROJECT OF DEGRADED
LANDS IN LEBANON**

By

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Lebanon

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Agro-forestry Development Project of Degraded Lands in Lebanon



INARE (Greece) – KEDE (Greece) – MAKHZOUMI Foundation (Lebanon) and TC-DIALOGUE (Belgium)

2001-2004

Introduction

The “Agroforestry Development Project of Degraded Land in Lebanon” a partnership project among the following NGOs:

INARE (Greece), KEDE (Greece), TC-DIALOGUE Foundation (Belgium), and Makhzoumi foundation (Lebanon) was financed by the Hellenic Aid /Ministry of Foreign Affairs of Greece , and co-funded by Makhzoumi foundation and TC- Dialogue Foundation.

It was officially launched in 2001 by holding a Press Conference in Beirut on May 4th and an on –site inauguration on May 5th whereby the main nursery at Mqaitaa , on the coastal plain in the Akkar region , North Lebanon , was established.

Duration

The project lasted for 3 years from May 2001 till May 2004

Objectives

- To combat desertification,
- To prevent soil degradation and erosion
- To increase awareness of all the interested groups nationwide
- To introduce modern planning technologies

This project introduced the concept of Agroforestry in the country which is a dynamic system involving the integration of agriculture and or/ livestock breeding with tree plantation in order to increase land productivity. Agroforestry is based on traditional methods combined with modern technologies.

Application fields:

- Soil improvement: Water harvesting, surface mulching, green manure, nitrogen fixation.
- Wood production: fuel wood, pole wood, lumber.
- Windbreaks.
- Beekeeping
- Food for livestock: breeds of low mimosine content.
- Food for humans.

Various benefits of Agroforestry:

- Maximizing land use.
- Conserving and increasing biodiversity.
- Soil conditioning.
- Generating higher annual income.
- Better cash flow management.
- More sustainable return investment.

Moreover, the Project was one of the few ones in the country to grow and distribute trees completely free of charge to individuals or interested groups. It was formulated using a bottom up strategy through the organization of an initial workshop before implementation whereby several members of the target group were involved in the selection of the services to be offered.

It also included the capacity building component by providing information on the species to be planted and introducing a new technology, the TERRACOTTEM (TC) method.

TC is a superior, non toxic soil conditioning compound, developed at the university of Ghent, Belgium.

Advantages:

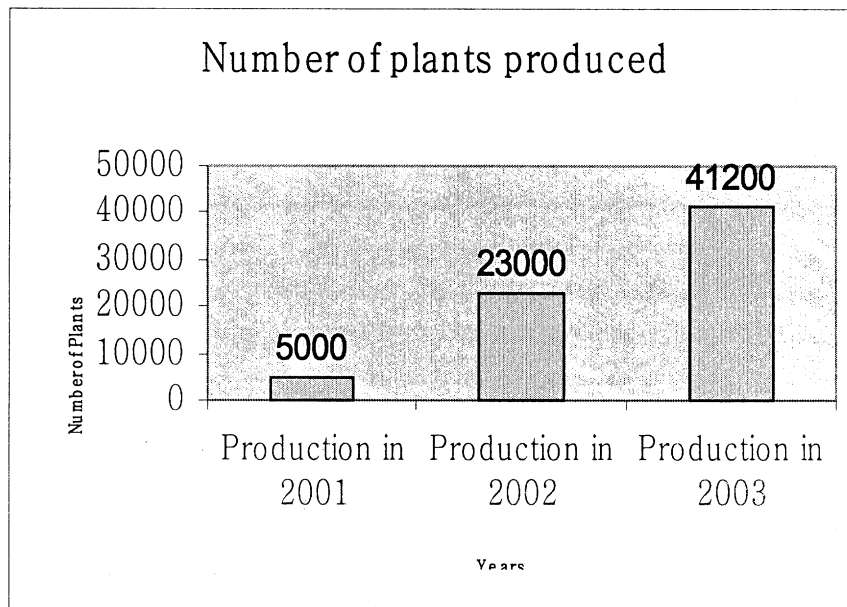
- Increases the survival of plants under serve drought conditions.
- Reduces water consumption by 50%.
- Makes plants healthier.
- Protects the environment by limiting use of fertilizer and reducing leaching.



PRODUCTION

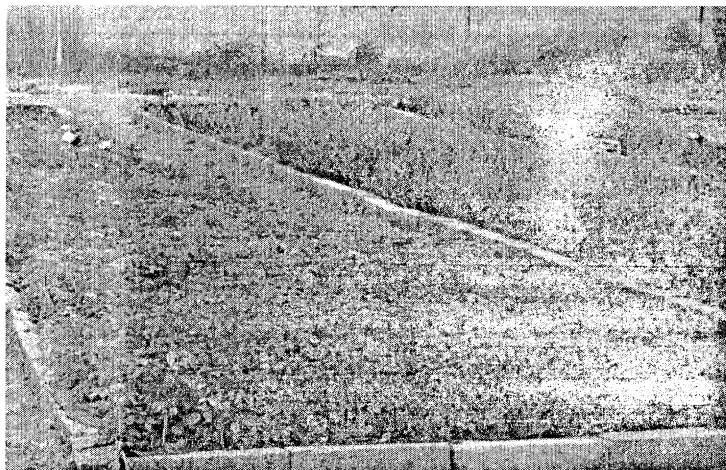
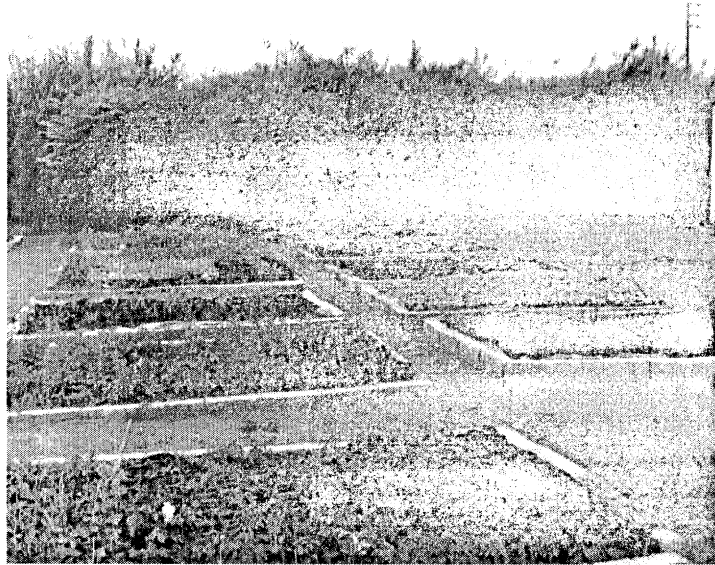
A total of 69200 trees were produced during the three years of the project (01,02and 03)

The following graph shows the numbers of plants produced in each year:



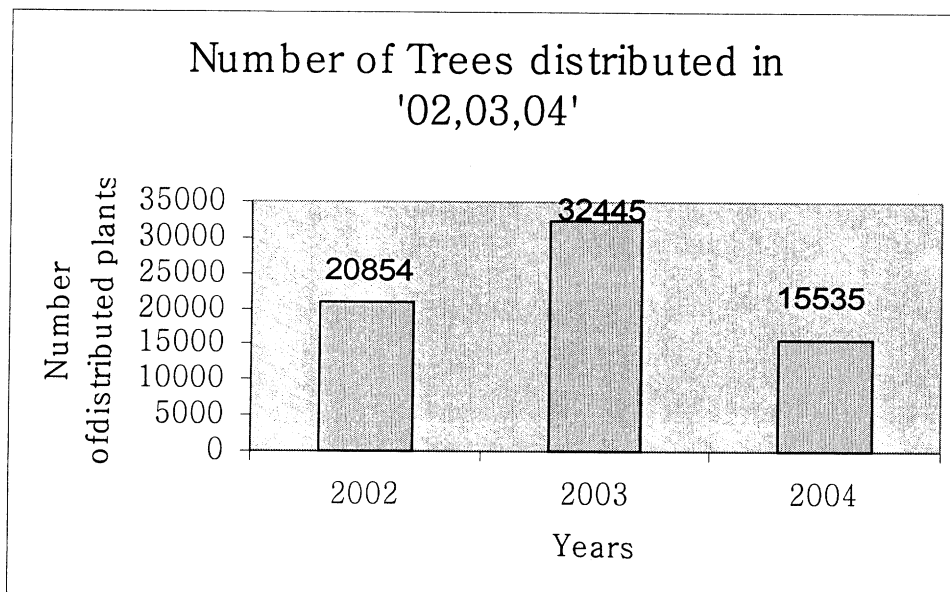
Some of plant species that were produced:

Grapes
Acacia
Roses
Leucaena
Cupressus
Casuarinas
Albizia
Citrus
Carob
Rosemary
Dodonea
Mimosa
Figs
Sofora
Washingtonia
Nerium
Pine
Oak
Pine
Pomegranate

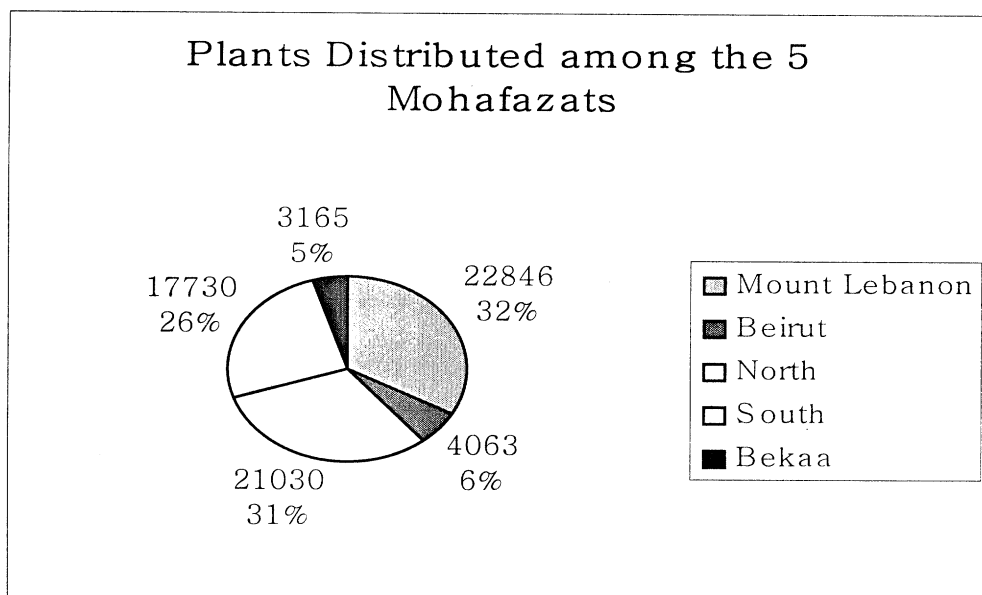


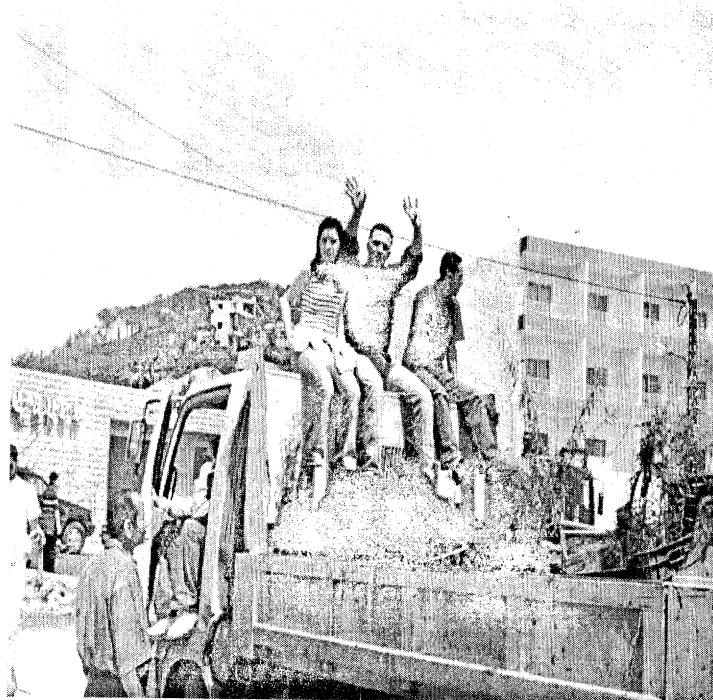
Distribution:

A total of 68834 plants were distributed during the years 2002, 2003 and 2004 as shown in the following graph:



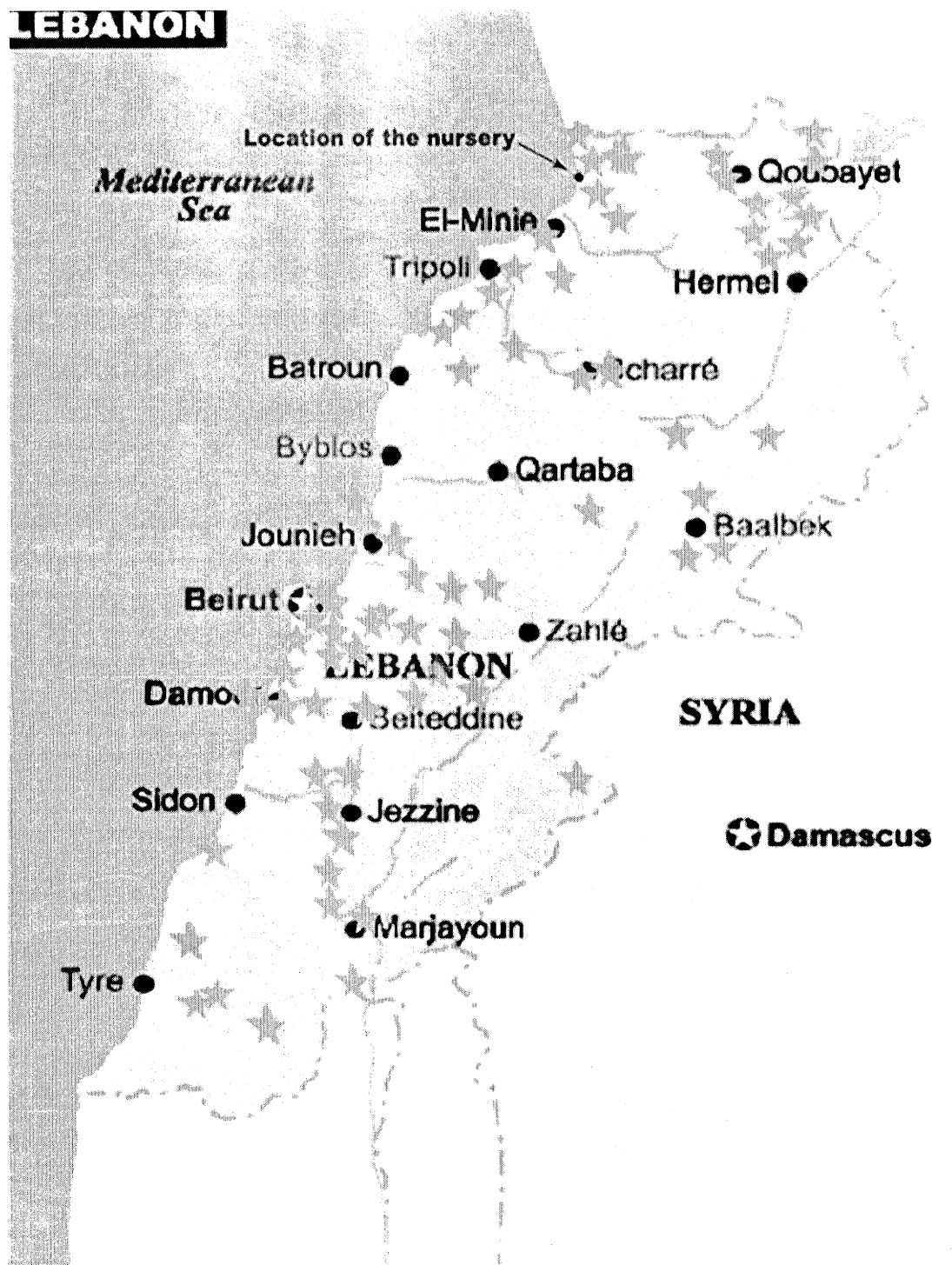
The followings graph shows the distribution of plants among the five Mohafazats:





The total beneficiaries of the Project were 39 municipalities, 3 Mayors , 10 NGOs, 7 schools and around 500 individuals/ farmers .

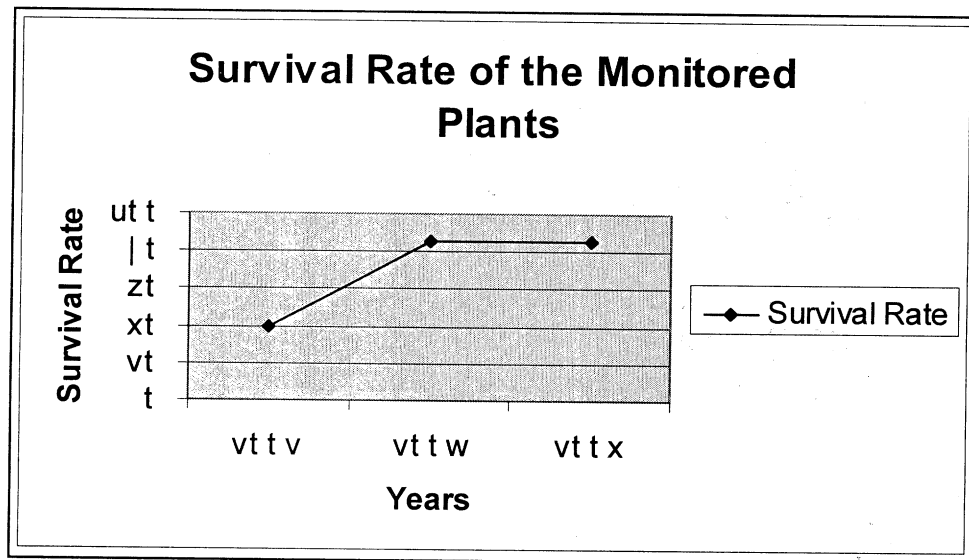
The following map shows the locations of distributed plants till end of June and the areas of distribution in 2004 respectively:



MONITORING

A site visit used to be made to the recipients after distribution on an agreed date whereby a monitoring form would be filled including survival rates of trees as well as other observations .

-The following graph shows the survival rates of plants monitored in 2002, 2003 and 2004



Tree plantings :

During the three years of the Project, several tree planting activities were held in Tripoli, Akkar, Sarafand, Damour, Roum. In all of those activities, trees were offered to the recipient population and Makhzoumi Foundation volunteers along with the farmers village volunteers, youth organizations, ..etc worked together in reforestation in friendly atmospheres and genuine team spirits .

Tree planting in Sarafand



Treeplanting in Akkar nursery



Treeplanting in Dahieh (Ministry of social affair: Hay El Seloum)

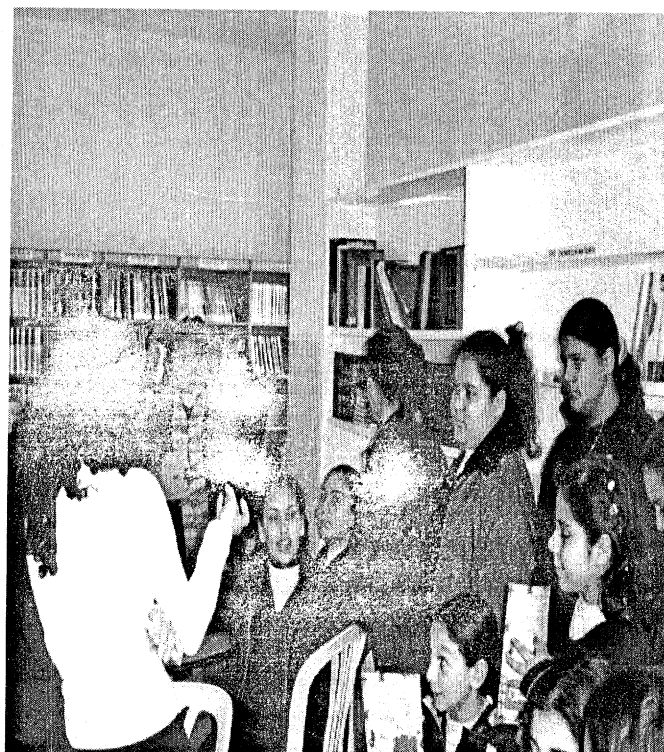
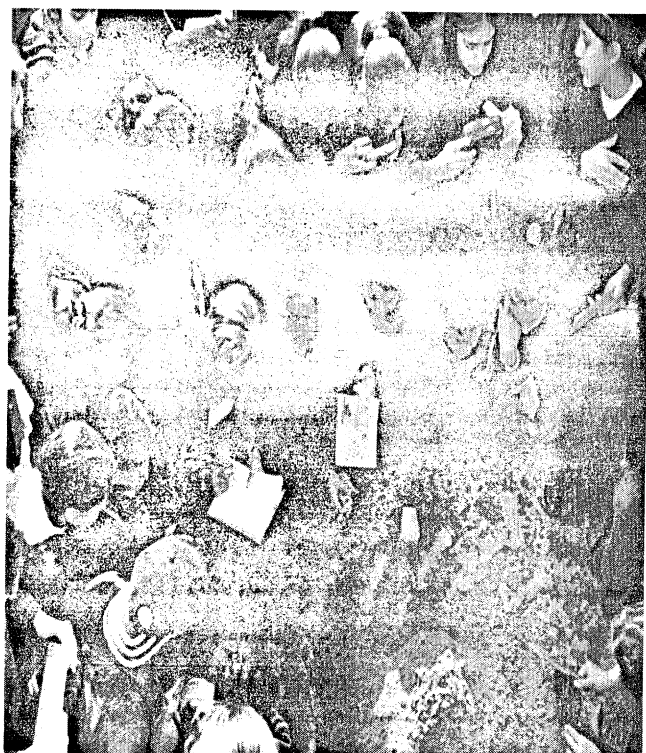


School Nurseries:

Two school nurseries were established in January 2004 in Beirut and Dahr el Ayn

Both activities included the following:

- * a lecture about “ desertification , importance of reforestation and setting up a nursery “given for 250 students of the 6th and 7th grades.
- * Distribution of brochures about tree planting
- * Planting activity that included: soil and TC mixing + bag filling + sowing pine seeds in 500 polyethylene planting bags.



FEEDBACK and IMPACT

- In September 2003, Makhzoumi Foundation received UNCCD accreditation for all its environmental activities and the implementation of this project.

After the termination of the partnership and due to the positive impact of the project, MF board decided to proceed on its own with the production and distribution of plants throughout the country.

