





RESTORATION ACTIONS TO COMBAT DESERTIFICATION IN THE NORTHERN MEDITERRANEAN

First Annual Report

January 2003 - December 2003

Executive summary

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EXECUTIVE SUMMARY

| Contract nº | EVK2-2002-00538 | Reporting period: | January 2003 – December 2003 | |
|-------------|--|-------------------|---------------------------------|--|
| Title: | RESTORATION ACTIONS TO COMBAT DESERTIFICATION IN THE NORTHERN MEDITERRANEAN (REACTION) | | | |

Objectives:

REACTION aims at establishing a database on land restoration to fight desertification by inventorying and evaluating well-documented restoration projects in the Northern Mediterranean, at facilitating access to high quality information to forest managers, policy-makers, and other stakeholders, and at providing restoration guidelines in the light of a critical analysis of contrasted past and innovative techniques.

Specific objectives for the reporting period were:

- (1) to set up the suitable management, co-ordination, and communication structure, links and tools to guarantee and foster exchange of information, dissemination, and quality assurance.
- (2) to organise the first REACTION workshop on "Methodologies and Indicators for the Evaluation of Restoration Projects" and select the most appropriate methodology to evaluate restoration projects in the Northern Mediterranean,
- (3) to design the REACTION Questionnaire, a tool for capturing and evaluating restoration projects, and launch the project inventorying process.

Scientific achievements:

REACTION created a fully functional structure that ensures, from both bottom-up and top-down approaches, exchange and dissemination of information and technology and quality assurance. REACTION structure includes (i) National Working Groups in every participant countries, including local experts and stakeholders, (ii) external Advisory Panel, (iii) Steering Committee with representatives of Annex-IV (UNCCD) Focal Points.

The REACTION workshop on *Methodologies and Indicators for the Evaluation of Restoration Projects*, held in Alicante (Spain) on 13th-15th June 2003, reviewed and discussed current approaches on evaluation and monitoring, and defined the REACTION analytical framework for the evaluation of restoration projects. The workshop exploited recent results from related EC initiatives and projects and greatly contributed to dissemination and exchange of experiences between stakeholders and experts.

Selected criteria, indicators, and methodology lie on the following key elements:

- Both, original and current objectives should be taken into account, as the objectives defined when the project was conceived may not necessarily match current environmental perspectives and social demands.
- Indicators of restoration success should include ecological, environmental, socioeconomic and cultural attributes and must be simple, measurable, and sensitive to



small changes in ecosystem trajectory, as expressed in structure and/or functioning.

- Criteria to judge the success of restoration will include: (1) Ecosystem quality attributes, based on recent advances on forest and land quality indicators, measuring actual quality of restored ecosystems, and (2) comparative functional approach, taking into account the original conditions of the restored sites.
- Evaluation methodology will address environmental constraints and restoration technology applied.
- The evaluation system has to be simple and flexible, to cope with the different levels of data availability, and broadly generalizable to other systems and situations across a range of ecological, and socio-economic conditions. Stand, landscape, and holistic ecosystem perspectives are to be considered.

REACTION Questionnaire, a tool for capturing project data and evaluating restoration success, is a main output resulting from the analytical framework designed.

The initial set of restoration projects to be compiled and evaluated focuses on long-term successful restoration projects in the Northern Mediterranean and covers a wide range of restoration projects in terms of dates, technology applied, vegetation type, climate, etc.

Socio-economic relevance:

Lack of available information on restoration actions, and lack of a network for communication and co-operation, limits the dissemination of technology as well as diagnostic and evaluation techniques among agencies, regional administrations and countries. REACTION project has created a suitable structure and a database/evaluation system that contribute to filling these gaps. REACTION outputs contribute to a wider application of the most successful planning, evaluation and implementation strategies and technologies available.

Conclusions:

Restoration projects should include evaluation and monitoring schemes, applying harmonised criteria and indicators, incorporated in the project budget. That information should feed restoration databases through standard forms.

Progress made by REACTION project contribute to harmonise criteria and methodology for the evaluation of restoration projects and to establish a land restoration database, taking care of disseminating the information for the various stakeholders.

Keywords: Ecosystem restoration, Evaluation and monitoring, Indicators, Methodology, Mitigation of desertification

Publications:

- S. Bautista & V.R. Vallejo, 2003. REACTION: An information system of forest restoration in the Mediterranean. Annual Meeting of the Reforestation Group of the Spanish Society of Forest Sciences. November 2004, Murcia, Spain (*in Spanish*).