

Biodiversity - 2014: As an incentive to reach an ecological, demographic and economic balance in the Mediterranean region

Brunetto Anton Chiarelli

University of Florence, Italy, Email: iihs.press@gmail.com

Abstract

Aim of the project:

The United Nations "Earth Summit" on the environment, held in Rio de Janeiro in 1992, marked a turning point in the history of mankind. The nations of the world agreed that the future of our planet lies in "sustainable development"; that is, in improving the quality of life whilst respecting the environmental equilibrium. In order to reach this objective, a fundamental concept has been underlined: "as a complex ecosystem capable of providing fundamental economic, social and environmental benefits, the forest has a vital impact on the stability of the biosphere, the maintenance of biodiversity and the process of global sustainable development". In the process of mankind's civilisation, the Mediterranean area has had a determining and prominent role. In the same area, though, man's presence has produced the vastest and most systematic deforestation that has occurred in history. The International Institute for the Study of Man in Florence has sustained a study group which dealt with an ambitious project promoting reforestation of the mountains which mark the outer limits of the western Mediterranean ecosystem. This ecosystem stretches to the north, from the Appenines to the Sierra Nevada; in the south, it is marked by the relief of the Atlas mountains, which extend from Morocco, through Algeria, to Tunisia. The project is based on three fundamental presumptions:

1. The countries of the European Union are committed to reducing the quantity of CO₂ produced by the combustion of industrial, and released by heating systems and cars: According to international agreements, combustion levels should, by the year 2000, be down to 1990 levels.
2. The Atlas' mountain chain, which concerns Morocco, Algeria and Tunisia, is subject to an ever-increasing process of deforestation due to a perpetually growing demographic pressure.
3. The Atlas regions are sustaining a strong migratory pressure on Europe. These elements of disequilibrium can be fused together to give birth to a large sustainable development project regarding the western Mediterranean basin: the "Atlas Project". This project deals with a) creating some wells in the Atlas region to absorb CO₂ from the excess European greenhouse gasses; b) balancing the demographic transitions of the North African countries with the decreases already occurring in the European Union; c) creating new regions of technical and economic exchange between the innovative abilities of Europe and the manufacturing potential of North Africa; d) regenerating the common current of civilisation of Mediterranean shores.

The practical effects expected are the following:

- a. Climatic and environmental reequilibrium in the western Mediterranean and a reduction in the greenhouse effect;

- b. The creation of new employment vacancies in North Africa and the reduction of the migratory flow towards Europe;
- c. The production of foodstuffs, of wood for industrial production and of renewable energy sources for the Atlas countries and the related induced business and commerce, including turistic trade;
- d. A greater economic and socio-environmental equilibrium in the Mediterranean countries.

The Atlas project concerns a vast eco-system which extends itself over two continents, from Europe to Africa. So far, no similar large-scale project has ever been carried out. As a result, an ad hoc decision-making process needs to be carried out. This process can be articulated on three different levels:

- A. The International Level: The project can be classified as one of the first of a series of global projects as it needs to organize the involvement of institutions which already operate on a global basis starting when the United Nations and the World Bank.
- B. The National Level: Various European and African Nations are involved. The national programming procedures need to be used, as far as possible, integrating them into the nature of project objective.
- C. The Local Level: The project will have its most direct impact on several specific areas; in these areas the process of participation in the decision-making process needs to filter down to the level of each individual citizen.

Thus, the decision-making process will require a great commitment, as many aspects of the project, starting from its vast territorial involvement through to its global objective, are completely original and therefore it is not possible to draw any lesson from previous experience.

If we consider that the European Union will be the

organization most concerned with the realization of this project, and that the European directives on the "Appraisal of Environmental Effects" are amongst the most advanced, the constitution of a specific European community for the elaboration of proposal regarding the decision-making process is suggested. Such proposals then, need the agreement both on a higher level together with international organizations and on a lower level, regarding the nations concerned.

The Atlas Project is based on three fundamental assumptions:

- a. There is a need to build CO₂ sinks, which would become important sources of energy and income for the region. European Community member states are currently unable to absorb the quantity of CO₂ produced by industrial combustion, heating systems and cars
- b. A regular stream of air from Northern Europe discharges its humidity over the Atlas Mountains, before it re-ascends over Europe. This stream of air is a natural conveyer of CO₂ produced by the industrial regions of Europe, which could then be immobilized by fixing it to the additional trees planted on the Atlas Mountains, before this stream re-ascends once more over the European continent
- c. These areas, Morocco and North Africa, are the source of a large numbers of immigrants who move to Europe in search of work as a result of high population pressures and the lack of employment

This work is partly presented at [3rd International Conference on Biodiversity & Sustainable Energy Development](#) June 24-26, 2014 Valencia, Spain

3rd International Conference on Biodiversity & Sustainable Energy Development
June 24-26, 2014 Valencia, Spain