

# Linking research and education to raise societal awareness about sustainability, Canary Islands - ES

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

## 2. Key Approaches

- Participation
- Knowledge-based

## 3. Experiences that can be exchanged

The development of a unique, linked research and education programme with a societal agenda.

## 4. Overview of the case

In the Canary Islands, a programme of work was undertaken in which scientific elements were linked with educational elements to form a societal agenda to raise awareness about coastal sustainability.

## 5. Context and Objectives

### a) Context

The Canary Islands are a volcanic archipelago located in the central-east Atlantic. This region has nearly 1,600 km coastline, warm temperature waters and mild climate all around year and also an excellent water quality. These reasons have transformed the Archipelago to one of the most visited tourist destinations in Europe. With a population of nearly 2,000,000 people, these islands receive more than 11,000,000 visitors a year. In terms of conservation the Canaries have, on one hand, pristine areas (mostly protected by law) of outstanding natural values and a very rich marine biodiversity (5,300 marine species). During the last decades, littoral areas in the Canaries have experienced a spectacular change, with important economic developments through the promotion of energy, fishing, port, services and urban activities. These changes have meant countless social and quality of life benefits. However, such development has been at the cost of a great littoral expansion for residential and tourist use leading, inevitably to negative impacts on landward and marine landscape and biodiversity.

### b) Objectives

The main aim of the programme was to promote awareness of the biological and socio-economic values of the Canary coastline among coastal users. It had two complementary divisions: research and education, which incorporated a large social facet. The development of this programme has meant a new and fresh approach to littoral issues being a unique environmental education programme on a regional scale.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

## **a) Management**

The work was fully supported by the Spanish Ministry of Environment and run by the University of Las Palmas de Gran Canaria in cooperation with the environmental NGO WWF-ADENA. The project had also a close collaboration with the Canarian Institute of Marine Science, the University of La Laguna, Regional and Island Agencies and some private companies, which enriched the actions and outputs.

## **b) ICZM tools**

In order to achieve the proposed aims, the programme, entitled “Canarias, por una Costa Viva (Canaries, for a Lively Coast)” was developed in two different dimensions, combining a research programme (to assess the environmental quality of coastal areas) and an outreach programme (through environmental education and awareness raising on coastal issues in the Canary Archipelago). The research division had several objectives including an analysis of the relationship between the human population and the natural environment as well as the pressures it supports in order to evaluate the impact of human activities on littoral ecosystems. The education division worked to: raise public awareness of the environmental and natural values of the Canary coastline; support the education of the Canary population and visitors towards the sustainable use of the natural resources; enhance public participation in diverse coastal activities; and develop a full range of educational tools for diverse social groups (schools, handicapped collectives, silver-age groups, etc.). These objectives were mainly achieved through three different types of actions considering specific goals related to different population sectors: an exhibition aimed at the general public, but mainly to children; the creation of didactic materials for schools; and activities with specific social groups. Educational materials were designed for students from primary school level to university, as well as accompanying materials for teachers. The contents concerned the natural values of the

Canarian littoral. Furthermore, an analysis of sustainability of some socio-economic activities was done i.e. several studies were undertaken regarding the need to develop good practice methodologies in the use of coastal resources, particularly scuba-diving and sustainable whale-watching. These are recreational activities which can offer alternatives to the tourist in the Canarian Archipelago due to the outstanding weather, underwater landscapes and biodiversity. The selection of beaches made by beach users, regarding their perceptions and demands, was also targeted.

## **7. Cost and resources**

## **8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)**

Didactic materials were tested with 3,700 students and distributed to 1,500 Canary schools. The exhibition received more than 120,000 visitors and stayed 20-30 days at each of the 19 locations. Around 1,700,000 scientific data and 8,000 laboratory analyses were made. There were 26 communications at international scientific forums and more than 100 hours of radio interviews, 700 written press and TV releases carried out. More than 8% of the population of the Canary islands participated directly at the educational activities undertaken.

## **9. Success and Fail factors**

Special care was taken from the outset with the choice of image and layout of every product of the programme, starting with an eye-catching logo “Canarias, por una Costa Viva” with two pets, Menuda (a jellyfish) and Chinijo (a crab), introduced the visitors to the coast. This helped the major dissemination of the programme activities. Awareness raising activities were welcomed by the general population and social groups, which showed a special interest in active participation in nature and cultural conservation in littoral areas. The attractiveness of the various programme products and their dissemination largely influenced the active collaboration of private companies and public administrations.

## **10. Unforeseen outcomes**

The close cooperation of the research project and the Canary institutions led to the promotion of new measures in nature and cultural conservation and also in environmental education.

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## 13. Sources

- "Canarias, por una Costa Viva" (Canaries, for a Lively Coast) An educational and research initiative to enhance the sustainable use of the Canarian coasts". (2006) downloadable from [www.databases.eucc-d.de/files](http://www.databases.eucc-d.de/files)
- Fernández-Palacios, Y., F. Tuya, C. Fernández-Gil, Y. Cárdenes, J.J. Hernández Brito & R.J. Haroun. 2005. 'Canarias, por una Costa Viva', an Integrated Environmental Awareness Raising and Marine Research Project in the Canary Islands. 2005. Integrated Conference on Coastal Conservation and Management in the Atlantic and Mediterranean (ICCCM'05). Tavira, Algarve, Portugal. 17 – 20 April 2005.
- Haroun Tabraue, R. and Y. Fernández-Palacios. 2003. Canaries, for an alive coast! – An educational and research initiative to enhance the sustainable use of the Canarian coasts. MARS Newsletter: No. 6 (Autumn 2003) p. 6-7
- Haroun, R. y col. 2005. Canarias, por una Costa Viva. Memoria final del proyecto 2002-2004. Dep. legal: GC-130-2005. 67 pp. (Project Final report, in Spanish).
- Project webpage: [www.canariasporunacostaviva.org](http://www.canariasporunacostaviva.org)