

“Green forestry engineering”

Faced with a forestry sector in crisis and an eroded natural environment, the Garfagnana LEADER group has opted for the creation of environmental forms of employment in forestry management using innovative technologies, rather than an intensification of activities.

The Garfagnana (“Large Forest”) LEADER area forms a large valley (534 km²) between the Tuscany-Emilia Apennines and the Apuane Alps, in the Lucca province of northern Italy. Forests cover 75% of the surface area and 54% of the area is considered mountainous (at heights above 750m). The rugged geography has contributed to the area’s relative isolation, despite the proximity of well-developed human settlements along the coastline. The population of Garfagnana has dropped by 30% in 40 years and currently numbers around 32 000 inhabitants spread over 25 municipalities.

During preparations for LEADER II, the partnership of the Garfagnana Ambiente e Sviluppo (Garfagnana Environment and Development) LEADER group was extended to the main forestry cooperatives within the area. A strategy to modernise the forestry sector was established, entailing the shift of a number of activities and jobs towards environmental protection. The necessity to safeguard the natural environment has become evident in an area that is prone to flooding (a tragic flood in 1996 killed some 60 people) and whose population decline depressed land management activities. The strategy focused on two aspects: the retraining of forestry workers and the modernisation of forestry equipment (particularly the testing out of new, environmentally-friendly machines).

In the first instance, ten forestry workers underwent a retraining programme lasting 380 hours. Practical training took place in work camps employing so-called “green engineering” techniques (based on the principle of using native, natural resources such as wood, plants, stone, etc) where possible instead of the traditional steel, concrete and asphalt, which are unattrac-

tive and whose watertight features have led to erosion and flooding. The training took place in flood-risk zones and covered light infrastructural developments such as terraces, weirs, diversions and other measures to impede the water flow. This work is often labour-intensive and has little visual impact on the landscape.

As the former trainees put into practice the green engineering techniques acquired, the impact of the initiative on the way the sector operates has been spreading throughout the region. To meet the growing demand for qualified labour from local forestry cooperatives (geared more and more towards green engineering), a new training course was organised in 1999, this time for 20 young unemployed people. The contents of this programme led to the compilation of a manual of green forestry engineering techniques, which today serves as a reference for all activities related to the restoration and environmental development of the Garfagnana.

In the aftermath of the catastrophic floodings in 1996, the LAG took the decision to strengthen its environmental actions and to fund different measures involving the restoration of the natural environment. These have included:

- the setting up of 8 work camps between 1998 and 1999 in both the flooded zones and in areas of high landscape value;
- support for the planting of native trees and thus for the forestry nurseries specialised in these species. In this regard, the LAG has saved an old native tree and medicinal plant nursery on the brink of closure owing to financial difficulties. This business now has a research and development mission in the field of organic and bio-dynamic forestry techniques.

[GARFAGNANA, TUSCANY, ITALY]

The latter initiative came at a time when the authorities of the Apuane Alps Natural Park, which covers a large part of the Garfagnana, introduced the obligatory planting of native species in all afforestation activities.

In employment terms, the various actions have had both direct and indirect impacts: 5 of the 20 youth trainees have found employment in the forestry sector; 5 jobs were safeguarded at the nursery; furthermore, the efforts to boost the sector have led to an increase in the number of local forestry cooperatives from 6 to 8 between 1995 and 1999, creating a further 120 jobs. The various innovations arising from the actions have also given the forestry cooperatives a certain competitive advantage in terms of know-how.

The full range of actions represented an investment of EUR 1 345 000. Public contributions varied between 50% and 100% (in the case of the training course for the unemployed) of the costs, ie, EUR 954 000. With the exception of the training programme (funded by the Objective 5b programmes and the Province), all actions were financed by LEADER I and II.

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