

# Collective forestry restoration in a municipal forest in Spain: *the example of Binefar and the forest of San Quilez*

by David Alejandro SOLANO GRIMA

## Geography and climate

The forest of San Quilez is located in the foothills of the Pyrenees between 288 - 414 m. altitude, on a stretch of long hill on the left bank of the Ebro Valley. The climate is Continental Mediterranean: 300 - 400 mm rainfall annually, high temperatures and drought in summer, cold and misty in winter. The geology is dominated by alluvial river terraces on conglomerates and clay and terraced soils. There is a certain level of fertility and structure. The current population is 9,400 which is 10 times higher than at the beginning of the 20<sup>th</sup> century; this is due to the activities that developed after the opening up in 1907 of the area irrigated by the Aragon and Catalan Canal. Most notably, these activities include intensive farming and livestock rearing, the agrifood industries and related services and commerce, for example the Comerca de la Litera economic zone. Several waves of immigration have followed each other and there has not been any unemployment for a very long time.



**Pictures 1 & 2:**  
Pupils on the Sierra  
in 1955, ready to plant  
(on the left) and today  
(on the right),  
the members of a cultural  
association.  
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## General information and causes of decline

The forest (76 ha.) has been part of Binefar's municipal landholding since the end of the 19<sup>th</sup> century; surrounded by plots of farmland, it is contiguous with two other municipalities which share ownership of the hill. The initial poorness of the soil, allied to the influx of immigrants after irrigation started up, led to the over-exploitation of the forested land via felling for firewood, grazing, quarrying, waste tipping and other harmful activities, all typical of an area far removed from vast natural tracts and that has only lately been envisaged for sustainable development. In fact, the forest and woodlands were practically clear-cut following on the Spanish Civil War (the 1940s).

**Picture 3:**  
The irrigation canal with  
the plantation in the  
background, 1955.  
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## Background to the project

This is not a project that was designed in one go then carefully followed up; rather, it emerged little by little from the initiatives of a few visionaries with the backing of other committed people. At the end of the 19<sup>th</sup> century, the mayor at the time, Benito Coll, purchased 65 ha. which he offered to his neighbours on condition that the land be reforested. This they failed to do because they were really more attracted by the promising development of the land about to be equipped with irrigation.

In 1955, the primary school teacher Hipólito Bitrian rekindled the idea and, with his pupils and the National Forestry Heritage which at the time was very involved in reforestation throughout Spain, began replanting. They managed to cover 11 ha.

Then, in 1985 when the worldwide trend to ecology arrived here, former pupils restarted planting. The Municipal Council, previously not much involved, took an active part from 1990 led by the environmental advisor Ernesto Romeu. Between 1991 and 2007, certain sons of the village -some trained in forestry engineering (Jose Antonio Bonet and David Solano), another in biology (Jose Javier Arias)- brought technical rigour to the various choices and orientations.

The population at large and the Municipal Council (assorted political parties in succession) have pursued the work together since 1990: every Sunday throughout the winter, groups of residents and their different associations replant, extending and improving the forested zones.

## Focus on governance

The overall reasoning: there has been a successive accumulation of viewpoints, each depending on a particular period:

- Initial viewpoint: produce and restore;
- Viewpoint 1955: educate, restore and preserve, create jobs;
- Viewpoint 1985: preserve, restore;
- Viewpoint 1990–2016: preserve, restore, raise public awareness, involve people.

Various activities directly related to restoring the landscape and the environment have been carried out:

a) Planting of 25 ha. of mainly *P. halepensis* and *Q. Ilex*, and such upkeep as irrigation, lopping, replacing, done by the inhabitants (various associations and groups, businesses). These activities were backed up by the local Council as well as the provincial and regional administrations which together looked after: a1) impulsing environmental education in plant production, planting and maintainance; a2) the logistics involved in the planting, equipment, meals, watering the new plants...; a3) interfacing with the forestry authorities; a4) the rehabilitation of plant nurseries;

b) surveying and recovering the municipally-owned plots demarcated from the Sierra de San Quilez;

c) lopping and thinning for wildfire prevention;

d) fencing in and landscaping the rubbish dump;

- e) fencing in and restoring the quarry;
- f) adjusting, waymarking and maintaining the nature trail;
- g) treating against caterpillars;
- h) the Environmental Fair, held every October since 2005.

Creation in 1990 of the “Council of the Friends of San Quilez and the Environment”, a consultative body made up of motivated citizens with an awareness of the issues. This body worked very well during the lifetime of one legislature (4 years), then progressively lost its effectiveness once a solid basis for the future had been established. There has been clearly-defined sharing of responsibilities, an annual plan for planting and upkeep, and a very positive understanding between the general public involved and the public authorities centred on a shared, non-profitmaking project of mutual interest which took hold thanks to the underlying dynamic of participation.

## Results and impact to date

Some 30,000 trees (mainly *P. halepensis* and *Q. ilex*) have survived (80% success rate) on the 25 ha. involved.

Around 1,000 schoolchildren have been trained, their environmental education ensured

Nearly 100 groups and associations have taken part and continue their commitment, their awareness and participation guaranteed.

### Pictures 4 & 5:

The San Quilez hermitage in the 1940's (left) and today (right).  
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**Picture 6:**  
Sierra de San Quilez,  
pines planted in 1995.  
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The community has been awarded prizes as well as recognition for its success, at both local and national levels.

The forest and woodlands have become the main area of leisure activity as well as the site for enhancing public awareness and environmental education for an essentially agricultural community far removed from large-scale natural areas.

Public-private collaboration has worked out very well.

## Difficulties and challenges encountered

**Picture 7:**  
Planting done  
by local citizens.  
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The reluctance of farmers/livestock rearers at the time when the irrigated area and its development was launched.



The ignoring by the Municipal Council of the schoolteacher's initiative in 1955 and further neglect until 1990.

Amateurism or lack of technical know-how prior to 1990: some failures in the choices of plots and methods.

Isolated vandalism at certain times involving equipment and even trees.

A lack of leadership at some periods.

## Positive results and lessons learned

The environmental education of young pupils bears fruit over the medium or long term.

The involvement of the Municipal Council, as the public authority closest to inhabitants, acts as a catalyst.

The involvement of the general public was the key to the overall success of plantations having no prospect of immediate economic return.

The choice of plots and species backed up by suitable techniques enhanced the overall results.

## What the future holds

The stands must be consolidated with the forthcoming generation.

Their upkeep is crucial in order to adapt the stands to the demands of a changing climate and society's evolution.

New leaders must be identified who will take up the cause and pursue the guidelines.

Sharing this experience and exchanging with other initiatives in Spain and abroad is essential.

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