

The communal management of the Radi forest on Icaria Island, Greece

Koumparou, Dimitra

**Department of Environmental Studies, University of the Aegean,
17 Karadoni str., 811 00 Mytilene, Greece
e-mail: dkoum@env.agean.gr**

ABSTRACT

This paper is a part of an ongoing research, and examines the present and past systems of the management of a common property resource, the Radi forest. Icarian forest history is replete with the participatory management of the forest. It reviews the evolution of this common, from ancient years till present. The rights to forest resources belong to no one, but state controls the forest through the forest service. This is because forests and other natural resources belong to the state as a part of the process of national building. For the state the Radi forest is an open-access resource, for the community near the forest is «its-own resource» according to its history. This long-standing history serves as an illuminative case of how common property resources work and achieve sustainability. This survey tries to identify the ways in order that the history and the experience of these villagers to be served as the base for the establishment of the resilience between community, forest service and state.

INTRODUCTION

The regimes of property rights which are characterised by social, political, cultural and economic context in which they function, affect the relationship between humans and environment. Property rights specify how persons may be benefited or harmed (Hanna and Munashinge, 1995).

Within the literature of common pool resources, the concept of community forestry or social forestry has developed. Community forestry as a strategy for sustainable forest management and rural development emerged when it was recognised that the needs of communities dependent on forest resources must be linked to the conservation of these resources. If forest management is to be effective, the role of local communities in managing the forest has to be recognised.

But if there is to be real participation by local people in implementing forestry activities, a change is needed in the way that policy-makers view local people and their use of forest resources. The strategy is to support local people in managing their forest resources in a sustainable way - not to keep them out of the forest (Warner, 1997) .

FOREST AS A COMMON PROPERTY RESOURCE

In Greece, approximately 19% of the landmass is covered by forest. 65% of the forest belongs to the government and the rest 12% belongs to villages, 18% to individuals and 4% to corporations (CPES, 1976).

The state remains as the owner of the forest. All forests, regardless of who is the owner are controlled by the government through a well organised and professionally

constituted forest service. Historically, the trend of the concentration of the rights to forest resources (and the other natural resources) to the state was part of the process of national building, with local rights constricting in response to the increasing rights taken by the state. However the concentration of rights to the state has not necessarily led to effective management of forest resources.

Destruction of the forest the result of competing pressures for agricultural land, timber, mining e.t.c. was activated by the local institutional vacuum that occurred when communities lost their rights and responsibilities to manage and benefit from forest resources, and the state did not have the institutional mechanism and/or resources to fill the vacuum that was created.

It is usual to confuse the management of common property resources with that of open access. This is particularly true. A grassroot level institution that was community declined, as the economical and social conditions changed and the right of management assigned to the forest service, according to the national law. So the Radi forest is now an open access resource and free-riding continues. But there are still remains of collective action. Icarians have tradition and experience in seeking ways and means for use and control, paving the way for collective action. The Icarian society has shown resilience by providing collective leadership through peoples' institutions.

THE HISTORY OF THE RADI FOREST USE AND MANAGEMENT

Ikaria is located in the centre of East Aegean, North from Chios, south-west of Samos, near the Cyclades (Figure 1). The total land surface is 267,000 square metres and its length is 40 km. The forest history of Icaria has been closely documented during one hundred years of management, while the earlier forest condition can be established with reasonable accuracy.



Figure 1. Map of Greece

It has to be mentioned that Icaria is the only island in Greece where the forests belong to communities or are private property (Kontos, 1929). The other three property status that function in Greece are public, joint and monastery.

The forest Radi or Gaia as it is called lies in the central mountain Icarian the mountain chain Aithera. It is 8,000 square metres about 3 per cent of the land and *Quercus Ilex* (oak tree) is the dominant tree species. Other species include *Quercus Pubescens*, *Arbutus Unedo*, *Andrachne* and *Phillyrea Latifolia*. In Greece there are only two forests of oak. From the clusters all over the island and from documents we know that the island was covered by oak forest, from antiquity. The felling timber and grazing were the reasons for the decline and gradual replacement by *Pinus Brutia* and we also meet the Mediterranean cypress sempervirens in cultivation lands. At north and west there are settlements in the forest and then there is arable land and again forest area. The existence of these settlements is ought to historical conjectures. The stiff wood from oak was used as a fuelwood (for cooking and charcoal) and for shipbuilding. The oak apple was used in tanning and also as a fodder. The leafage was used as a fodder too. The forest is in various stages of degradation. It has been subjected to organised illicit felling and uncontrolled overgrazing.

The history of forest use in Icaria is linked to the Greek history and the forest history in the Mediterranean.

The island was originally densely forested. Icaria was a shipbuilding centre and a charcoal exporting country. Throughout history it has attracted the dominant powers of the eastern Mediterranean, each of which, in its own way, influenced the forest. The

flourish cities of antiquity among them Samos, put pressure on its local resources. These demands have continued through out the vicissitudes of history.

Aristotle (4th century BC) mentions in *Politics* that Polycratis tyrant of Samos, as he strengthened his power and over neighbouring islands, he create a great navy force. The construction of boats named «samaina» would cause the destruction of Ikaria's forests.

In eastern Mediterranean, the forest areas became of strategic importance. Timber supply was inseparably related to sea power. For this reason, although management in the sense of regulated use for continuity does not seem to have been practised; timber forests were almost always in city-state ownership attended to be administrated in accordance with a unified plan or policy. For example in the period of the Roman Empire, all cutting was forbidden in the frontier forests for reasons of defence. There were also the sacred trees and groves. Arising out of the Greek and Roman pantheism, religious cults came into the possession of woodlands with holy groves around headwaters and springs and on venerated high mountains.

At the beginning of the Christian era, Strabo (53 BC - 24 AD) prepared a detailed record of conditions throughout the Mediterranean, with information about species and forest distribution, products and utilisation.

The information we have for Icaria by Strabo's geography is that the island is an uncultivated country, covered with wood, pine and oak, whose pastures were of great use to the Samians.

Strabo affirms that there was a temple of Diana, called Tauropolium in Icaria and Callimachus made no scruple to say that of all islands this was the most favoured by Diana. We must mention that huntress Diana chose for residence, according to the Greek mythology, woodlands that were difficult to be approached.

Once dedicated, cutting was prohibited. Damage was treated as «patricide» punishable by death. Nothing could be removed from a grove, even fire wood or leaf fodder. It was not until early Christian fanaticism led to war against pagan that these groves disappeared from the Mediterranean scene (Thirgood, 1981).

From the 4th century the island of Icaria belongs to the Byzantium Empire. The Roman-Byzantium Law took care of the management and protection of the forests, which belonged to the state. The forests were state property and they supported the developing needs and also they provided wood for shipbuilding. There was an economic flourish because of its rich forest which provided wood for ship construction. Until the Ottoman conquest the island was self-governed. In Byzantium era there was no special interest for the island and in 12th century it was assigned to Latins.

During this period the crusades gave a major impetuous to the development of the shipping. They used this island as a hide out. During this era pirates were the plague for the islanders, who found a shelter in the forest. The inhabitants moved upwards to protect themselves in the forest because there they could not been seen. The forest this period functioned as a wall to outsiders although the island was depopulated.

Under pressure of wars, invasions, coastal piracy and foreign occupations, many populations sought refuge in the more secure mountainous areas. So forest was the matrix of their existence for 2 centuries. They lived in the forest to protect themselves from pirates and Ottoman or Latin fleets. Wars and invasion have played a significant role in the history of land use in the region. They led to increased demands on local resources. Wood was used for manufacturing weapons; chariots, battering rams, siege machines and fortifications in addition to the considerable need for fuel for cooking

fires. They also had a profound effect in upsetting established use patterns. In the Mediterranean environment there is a clear relationship between the security that accompanies stable government and good husbandry of the land (Thirgood, 1981).

In the 17th century that is how Icaria was described:

«Nicaria (is its Latin name) is very narrow and crossed quite through by a chain of sharp raised mountains; for which reason it formerly called the long narrow island. These mountains are covered with wood and supply the whole country with Springs. The inhabitants have no other trade to live by, but the sale of planks of pine, oak and timber for building or burning...» (Tournefort, 1718)

Bart Eden in 1750 notes:

«...They (the mountains) are high and sharp, and run quite across the island. They are not burnt or barren; groves of vast extent cover the greatest part of what is uncultivated of them and they abound with water the shiniest and clearest in the world...»

In Ottoman Empire all agricultural land was declared to appertain to the state, unless it had been devoted to a religious endowment. All such land, therefore, was, in Ottoman terminology, either miri or wakf. But what was meant by agricultural land was only the second two of six categories: pasture and arable land. Of the remaining four, forestlands were also miri or wakf but the remainder was essentially, not. Thus the sites of houses in villages were private property - mulk, and each house had attached to it a half -donum of land that was likewise mulk. Again every village had a tract from which hay was cut or forest near the village and this was the common property of the villagers. The status of the remaining category that of vineyards and orchards, was more doubtful (Gibb and Bowen, 1951).

According to a series of highly complicated provisions embodied in the Sacred Law some forests were owned to communities. The villagers had the right to cut trees and that only for domestic use. No one could enter except the residents of these villages. The access was prohibited to others, unless they had acquired permission.

Peoples' participation was the key for any action. Common property resource management had had very big success. This is probably because of the proper grassroots level institutions and the understanding of the practical aspects at the operational level.

The involvement of the people was legalised through institutional arrangements. That was the community committee which was developed to cope with problems of survival or threatening dangers. There is a big literature about how the committee was created. It is believed that this type of organisation was in existence since the ancient times, but it was adapted according to the socio-economic and cultural life. The ottoman law found the communities and allowed them to act as a subsidiary tool for the administration.

The Ottoman sultans regarded the communities as a great mean for the tax collection without troubles. So the Byzantine communal institution adapted to the new situation and needs. The community of Ottoman domination functioned to a high degree as a substitute of state authority in every aspect of administration and organisation. The metathesis of fiscal responsibility and the undertaking of other ruling functions contributed to the formation of self-sufficient constitutional entity. The ottoman system allowed the political participation of local people. This participation is obvious not only in the communal procedures, but also in the relationship between community and government.

From the 18th century there are saved papers and documents from the self-government. They have to do with decisions that the local committee had taken about the protection and the guard of the forest from the illicit wood felling and charcoal.

A document in 1795 informs us that the community had decided that if anyone put fire on a kiln for charcoal, or carry charcoal without permission of the communal committee, he would be punished either by paying a fine or by being chastised. Also he would be fringed, as social exclusion is the harshest punishment.

In 1800 the villagers had agreed that everyone has a defined land to make charcoal. If someone broke the deal he would be punished by paying a fine.

All villagers who lived by the forest decided in 1812 to fence it in order not to cut timber for charcoal. The Turk governor, aga, agrees and he characterises the offender as a barbarian, whose punishment is 120 piastres.

The villagers asked from the elders and the aga in 1838 the permission to fence the forest around the village. We have not got information about the area that they would fence. The purpose of this act was the prohibition of making charcoal, to maintain the forest for their animals and for the necessary fuelwood and timber. The aga characterises the offender «cursed» but on the paper this word is written off and it has been replaced by the phrase «let his work be unworthy». This is an evidence of how much this behaviour is social disapproved. It is mentioned that the offender will be punished by 100 canes and the fine is 250 piastres.

In another paper of 1865 the administration (Turkish and Christian) concedes that the forests on the island «were always established for the needs of the villagers» so they can (the village councils) divide the forests in order that every village should have under its jurisdiction definite area.

We also have a detachment of a letter that aga sent to a coal merchant. The threat is clear:

«master Fysida do not kill our mountain
master Fysida do not play up
because if you tangle with my hands you will not disentangle easily
Master Fysida I will send you the Arab»

Here, by the word «Arab» aga implies a harsh corporal punishment.

The villages near the forest in 1879 decided once more in a certain area, not to make coal and to have it as a resource for wood. It is very interesting that they impose a communal fine and they characterise the labour of the offender «empty».

In another paper in 1891 we can read the names and the sentences that were imposed on offenders who cut trees to make coal «in the communal forest ... and this is prohibited by the village public...»

In the beginning of our century as the Ottoman Empire shrank and was on the war with Balkan countries, there was economic recession. Sultan imposed taxes on the forests in 1904. The inhabitants of the island asked for the discharge of their forests. Among others they mention the uses of the forest, which is the wood felling, the grazing and most of all the protection of the slopes from the erosion.

Eight years later, in 1912 the island is annexed to the Greek State, which from 1828 had practised the nationalisation of all the land. At «new lands» lands that had been annexed in 1910 and later had decided that the existence property status and the regulations in force would continue to function. That means that the Greek State recognised the communal property of the forest. So the villages in the 20th century continue to use and to manage their forest.

In 1927 we have the first attempt of the community to afforest. It is important to note that the forest begins to change as they plant pine trees and not oak tree. The community did not succeed in restoration. The uses of forest continue to be the same, charcoal, firewood, and grazing. Despite the efforts of protection a large area was deforested and the coal merchants moved from the island and they travelled in Minor Asia, Chio, Macedonian, Thrace and elsewhere. The Icarian charcoal merchants were famous all over Greece and Turkey.

In the middle of the century too many habitants of the island left and they emigrated. The forest does not anymore support their living. They abandoned it and they turn to cultivation and later to tourism.

But they never abandon the mountain chain from goats. Still today there are 8000 goats. Their name is «rasko». They are free and common property. Because they live free it is difficult to distinguish what belongs to whose. Icarians kill them with a rifle or they hunt them with dogs. In the day they are usually in the forest. Especially in the summer months. Ten years ago, there were also pigs in the forest. But a decision of the forestry service put an end to that. At the local festivals, especially in summer, Icarians celebrate with their own wine and meat from rasko. This was a way of controlling their number. In summer there is a shortage of vegetation. The reduction of the goats is a way of adapting to the climatic conditions and protection of the grazing area. At the festivals they sell their meat to the visitors. With the money they gain, they construct works in the village, like roads, repairing, etc. Thirty years ago, all along the mountain chain there were walls, not very high, and they functioned as a fence to the goats. These walls were made by the villages (common work) in order to protect the soil, the forest and the cultivation (Poulianos, 1975). For one year the goats were in one area. The next year the goats were to another. So it was avoided the overgrazing and the erosion. On the walls there were «doors». People were passing through from one place to another, by opening and closing the «doors». These fences have fallen now and there is no interest in repairing them. So the goats have overgrazed the forest. In addition some herdsmen cut branches from the tress in order for the goats to eat. But the felling on the papers is illicit. According to the law if one wants to cut wood for whatever reason from the forest he ought to inform the head of the village or the forest service and then enter the area. If he cuts trees without permission then he must account for this in court. But this is not happening. The forest service has not got staff and the friendship between the residents does not allow the implementation of the regulations. The herds of goats have caused even problems in the relationships between the villagers. The goats enter in the cultivated land and they destroy the plants. The brushes are frequent.

A discussion of Mediterranean grazing would be incomplete without consideration of its relationship to fire. The most frequent disturbance on Icaria is fire and overgrazing. Forest fire is a usual phenomenon in the Mediterranean region and the species have adapted to that type of destruction. But when the fires are frequent and in extend, and afterwards the flocks graze the area, the ecosystem may never come back to its initial condition. Shepherding has been associated with the more lawless sectors of Mediterranean society, with all-known connotations of brigandage and blood - feud. Burning has traditionally been the concomitant of forest grazing. Throughout history, the shepherds who have reanged the mountain pastures and forests have set fires during summer season, either intentionally or accidentally. Because of his proclivity for incendiarism, together with his lopping and general maltreatment of trees, and his unwillingness to accept any form of control, the general problem of forest grazing lies

rather in the Mediterranean shepherd than in the Mediterranean flock. (Thirgood, 1981). This statement also includes the island of Icaria. Én 1993 the west division of the island was burned. In the articles of the Greek newspapers the blame for the fire is put indirectly on the shepherds. Also secret agents by neighbourhood countries in time have been accused.

But the people are taking organised steps to prevent forest fires. From May to October they guard the forest on voluntary basis every day for eight hours. This is happening in co-operation with forest service. Although it has to be mentioned that there is a fire-fighting plan in which locals are not involved. There are no roads in the forest or in the perimeter, so the access is very difficult. There are many pathways which the locals follow when they enter in forest. A stranger cannot distinguish and follow them. This knowledge is essential for the passage, because of the density of the trees and the steep precipices.

EMERGING ISSUES

The problem of sound forest management will remain until the filling of the gap between the locals and the forestry agency and as long as there is lack of interest on behalf of the community about the forest. Although community is the owner of Radi forest, in practice the state with the forest agency are responsible for this. So the local rights have been constricted in response to the increasing rights taken by the state. The undertaking of rights has not led to effective management. It is forestry agencies and foresters which are primarily responsible for forestry activities, yet the mandate of forestry agencies and the orientation and training of foresters does not encompass both of the objectives of community forestry, sustainable forest management and improving the livelihoods of the rural population.

The history of Radi forest has highlighted a few positive trends of participatory forest management. These trends may be useful in the creation of favourable conditions for regeneration of the forest, through control, in the removal of forest products and to illegal grazing. This could happen when people manage the resource as a common responsibility, to derive common benefits. That is what the present research work tries.

ACKNOWLEDGEMENT

The author thanks Professor Costas Man. Sophoulis for his scientific help in writing this paper, which is part of her PhD research work conducted under his supervision in the Department of Environmental Studies of the University of the Aegean.

REFERENCES

Bart Eden (1750). <i>Letters from several Parts of Europe and the East</i> . London.
CPES (1976). <i>Development programme 1976-1980 Forest sector 14. Report</i> . Athens.
Gibb and Bowen (1951). <i>Islamic Society and the West</i> . Oxford University Press, London.
Hanna, S., and Munasinghe, M. (1995). An Introduction to Property Rights in a Social and Ecological Context. In Hanna, S., and Munasinghe, M. (eds.), <i>Property Rights in a Social and Ecological Context. Case Studies and Design Applications</i> . The Beijer International Institute of Ecological Economies and The World Bank, Washington.
Kontos P. H. (1929). <i>Forest policy</i> . Athens.

Poulianos A. (1976). <i>Folklore of Icaria</i> . Athens.
<i>The Geography of Strabo VI</i> (1989). Harvard University Press.
Thirgood, J. V. (1981). <i>Man and the Mediterranean Forest</i> . Academic Press, London.
Tournefort M. (1718) <i>A voyage into the Levant</i> . London
Warner K. (1997) The vision and role of community forestry in sustainable development. In XI World Forestry Congress, Antalya, Turkey, 13-22 October 1997.