

# EUROPEAN UNION POLICY AND LOCAL PERSPECTIVES: NATURE CONSERVATION AND RURAL COMMUNITIES IN CYPRUS

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## Abstract

*Many nature conservation policies led by national and international institutions are often based on the assumption that local people found in areas of conservation importance do not have favourable attitudes towards the environment. This assumption not only affects rural communities, but is sometimes prejudicially directed towards countries in the southern hemisphere and the Mediterranean region. This paper describes the findings of qualitative inquiry conducted in 2001 in three mountain communities in the Pafos Forest, Cyprus, aiming to examine how people value the local environment and how they feel about the future of their villages, in light of the implementation of European Union conservation policies. In addition to the qualitative inquiry, a telephone survey was administered to 1,010 individuals in Cyprus to examine the environmental attitudes of the wider public in Cyprus. The inquiry in the Pafos Forest showed that contrary to prevalent assumptions, rural people have a deep appreciation for the local environment and a strong conservation ethic. At the same time, they are concerned about the future of their communities with respect to the implementation of EU policies, which place a priority on nature conservation, but do not always address the pluralistic needs of local people. The larger public in Cyprus also holds favourable values towards the environment and supports the survival of rural communities in Cyprus, indicating the importance of policy that addresses both environmental and cultural sustainability in Cyprus.*

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## Introduction

Rural communities in many parts of the world are experiencing decline, finding it difficult to sustain their culture and way of life (Godde et al., 2000; Valaoras, 2000). The lack of employment and education opportunities, the decline of local agricultural systems and the centralisation of public services in urban centres are only some of the pressures leading rural residents to abandon their communities in

search of new opportunities in urban centres. The decline of rural communities is often most severe in mountain areas, which are more geographically isolated and economically marginalised (Valaoras, 2000). Unfortunately, national and international policies have not always supported rural and mountain communities. Conventional nature conservation policies, for example, have sometimes inadequately addressed or entirely neglected the needs of local communities found in areas of conservation importance. Built on the assumption that local people are responsible for the degradation of natural ecosystems, many conservation initiatives have focused on eliminating or restricting people's access to natural resources, which diminished their economic and cultural well-being (Guha, 2000; Neumann, 1997; Michaelidou et al., 2002).

In what has been called the 'fences and fines' approach to nature conservation, local people in many areas where nature conservation focused have been forced to move out of areas designated for protection, in exchange for some form of compensation (Barrett and Arcese, 1995; Brechin et al., 1991; Neumann, 1997). This approach was largely implemented during colonial regimes, but is still occasionally pursued. Terborgh and Peres (2002), for example, argue that "People of all stripes, whether indigenous or not, pose a grave threat to the biological integrity of any park when they must derive their livelihoods from the park's natural resources" (p. 307). They suggest that "The most direct and effective way to reduce human impacts within parks is through active relocation programs" (p. 312).

The implementation of integrated conservation and development projects (ICDPs) is another conservation approach, which aims at combining the conservation of natural resources with community development initiatives (Peters, 1998; Wells et al., 1992). The development component of ICDPs usually focuses on "providing local people with alternative sources of income that do not threaten to deplete the flora and fauna of the parks" (Brandon, 1997, p. 93). Although ICDPs are an improvement over the 'fences and fines' approach because they address the economic needs of local people, they are not always sensitive to the local culture. Alternative occupations are sometimes imposed on local communities, with little consideration for the cultural importance of local land-use practices (Neumann, 1997; Michaelidou et al., 2002). Furthermore, like the 'fences and fines' approach, many ICDPs adopt the assumption that local people do not have favourable attitudes towards nature conservation. As Abbot et al., (2001, p. 1116) argue, "Changing attitudes and behaviours... are important outcomes of ICDPs because development opportunities on their own are unlikely to stop unsustainable exploitation of natural ecosystems if people continue to regard it as rational from their individual standpoint" (Abbot et al., 2001, p. 1116).

Despite evidence that casts doubt on the link between local communities and environmental degradation (Duraiappah, 1998) and studies that emphasise the

interdependence between rural communities and nature conservation (Guha, 2000; Hyndman, 1994; Michaelidou and Decker, 2002a), the assumption that local people pose a threat to natural ecosystems has prevailed in the international conservation arena. This elitist assumption not only affects local communities in areas of conservation importance, but is sometimes directed more generally towards less developed countries in the southern hemisphere and the Mediterranean region. Favourable public attitudes with respect to forest and wildlife conservation are generally thought to be more prevalent in wealthy, industrialised countries, while residents of less developed countries are thought to be motivated by utilitarian values, wishing to exploit nature for their own direct benefit without regard for nature conservation (Terborgh and Boza, 2002; Pridham, 2002; van Schaik et al., 2002).

This unfounded perspective is also manifested within the European Union (EU) toward countries in the Mediterranean region. Northern European countries regard themselves as 'leaders' in shaping environmental policy and promoting the application of uniform environmental standards across the Community, while southern EU states are labelled 'laggards,' perceived as always being behind in the environmental field (Lieverink and Skou Andersen, 2002, p. 63). In a book titled *Environmental Policy in the European Union: Actors, Institutions and Processes*, Pridham (2002, p. 95) states that in "central and northern Europe, environmental values are generally more developed." He goes on to say "The signs from southern Europe are mixed, with some evidence of environmental consciousness, but hardly - as yet - any overall 'remaking' of public attitudes over the environment..." The perspective that environmental values are more developed in northern countries is used to justify the centralisation of nature conservation in many situations. Terborgh and Boza, for example, argue that "responsibility for rescuing nature must fall on the so-called 'international community,' consisting largely of the major industrialised nations" (2002, p. 384). Within the European Union (EU), nature conservation is becoming increasingly more centralised and standardised, with responsibility shifting from individual Member States to the European Commission.

Assumptions about the negative interaction between certain groups of people and nature play a significant role in shaping nature conservation policy, but are not always critically evaluated. Environmental values have been extensively studied in northern Europe and the United States (e.g., Butler et al., 2001; Dunlap et al., 2000; Fulton et al., 1996; Purdy and Decker, 1989; Vaske and Donnelly, 1999), but not many studies have focused on other regions. Countries of the Mediterranean region, in particular, have been largely underrepresented in such studies. Furthermore, in light of the widespread decline of rural communities and the top-down pressure international nature conservation programmes continue to place on local people around the world, it is important to re-examine the assumptions that drive many conservation initiatives. This paper focuses on the island of Cyprus in the Mediterranean region and addresses two main questions: (1) How do people in

mountain communities value key elements of the local environment? and (2) How do people in mountain communities feel about the future, in light of the implementation of European Union conservation policies? These questions are addressed through a case study from the Pafos Forest, the largest state forest in Cyprus. In addition to the specific questions about mountain communities, this paper also examines how the general public in Cyprus values nature.

### **Cyprus: A Case Study**

#### **General Overview**

Cyprus is the third largest island of the Mediterranean Sea with an area of 9,251 square kilometres. At one time entirely forested, Cyprus was called the green island of the ancient world (Thirgood, 1987). Today, the island's forests cover 19% of its surface and are mainly confined in the Troodos Mountain Range in the central part of the country (Leontiades, 1999). The Pafos Forest, in the western part of the Troodos Range, is of great ecological significance, as it contains high plant diversity and provides habitat for the Cyprus mouflon (*Ovis gmelini ophion*), an endangered sub-species of wild sheep endemic to Cyprus (Hadjisterkotis and Bider, 1997). The Pafos Forest is also home to several mountain communities, which today are in serious decline evidenced by an out-migration of young and educated people (Michaelidou and Decker, 2002b; Sawa, 1997).

#### **Colonial Administration**

The first comprehensive policies with respect to nature conservation were formulated when the island was governed by the British Administration, which ruled from 1878 to 1960. During this time, the majority of the local population was rural and heavily dependent on the island's forests and other natural resources to meet their needs. The major sources of livelihood for mountain communities were animal husbandry, the cultivation of vineyards and timber felling (Sawa, 1997; Thirgood, 1987). In colonial writings of the time, local people were often blamed for environmental degradation and were thought to lack an appreciation for the island's forests.

Sir Samuel White Baker (1879, pp. 209-210), a famous British explorer, writes about the local villagers:

*I myself met droves of donkeys and mules loaded with wood and accompanied by their owners with their destructive axes... It is impossible to feel amiable when passing through these desolating scenes... and the people, instead of deriving pleasure from natural beauties, are obtuse to all surroundings, which, according to educated taste, would ensure appreciation... In my heart, I immediately forgave the poor people... They had... been subjects of a bad government, and it was not their fault they were despoilers... [T]hey were ungoverned, and unfortunately the instinct of uncivilized man is to destroy.*

David E. Hutchins, who served as Chief Conservator of Forests in Cyprus at the time, had a similar view about local people. "The wandering shepherds are the vagabonds of the island," he writes. "They are public nuisances spending their time stealing pasture and destroying herbage and forest, whenever they get the chance" (1909, p. 25). The view that rural people did not appreciate the indirect values of nature has persisted with little questioning.

The perception that local people were despoilers of the forest led to the enactment of a series of laws during the early years of British rule, which aimed at bringing forest and wildlife management under the ownership and control of the state. The Pafos Forest was declared a state forest in 1879, in which resin extraction was forbidden and the clearing of land for the cultivation of vineyards was restricted. A series of laws also called for the elimination of all free-range goats from the Pafos Forest and by the 1940s, animal husbandry, one of the most important sources of livelihood for the local population, was completely eradicated (Sawa, 1997; Thirgood, 1987).

### ***Cyprus and the European Union***

After the independence of Cyprus in 1960, natural resources management remained under centralised control. In recent years, in light of the accession process to the European Union, Cyprus has been undertaking an effort to comply with EU policies. The Habitats Directive (Council Directive 92/43/EEC) is the Union's main policy with respect to nature conservation. Its main objective is the conservation of biological diversity through the conservation of natural habitats. Member States are called to compile national lists of important habitats and species and designate Special Areas of Conservation (SACs). All designated sites across Europe will form an ecological network of protected areas, labelled Natura 2000.

Although the Habitats Directive does not call for the exclusion of all human activities within the Natura 2000 sites, human activities can be maintained only if they do not threaten the biodiversity conservation objectives of the protected area. The European Commission acknowledges that "Natura 2000 management is essentially about influencing land use" (European Commission 2000, p. 2) and encourages alternative occupations for local people, such as ecotourism and craftmaking. These occupations, which are assumed to be more aligned with the conservation objectives of the Directive, are expected to increase local support for the protected areas through the provision of revenue (European Commission, 2000). At this point, it is not clear who will be ultimately responsible for determining whether existing human activities are compatible with nature conservation and can be maintained or whether alternative occupations should be pursued. So far, the compilation of national lists for important habitats and species around Europe has been the responsibility of scientists and civil servants who follow a set of scientific

criteria, while the perspectives of local people living in those habitats have not always been incorporated in the selection process (Alphandery and Fortier, 2001).

Being in the process of conforming to the Habitats Directive, Cyprus has already compiled national lists of important habitats and species. The Pafos Forest has been included in the list of important areas for conservation and the Cyprus mouflon has been included in the list of important species. By restricting mass-scale development in the selected Natura 2000 areas, the Habitats Directive can be a positive step towards nature protection. However, its implementation raises some important questions regarding the future of rural communities. With an emphasis placed on biological diversity, it is not clear what the consequences of this EU policy will be for the mountain villages within the Pafos Forest.

While Cyprus is undertaking this significant effort, not many studies have examined how mountain communities in the Pafos Forest value the local environment, or how they feel about the future of their communities in light of the implementation of EU policies. Furthermore, no studies have examined how the wider public in Cyprus values the island's natural resources.

## **Methods**

### ***Qualitative Inquiry***

A qualitative inquiry took place in the villages of Kampos, Tsakistra and Mylikouri, which are the only three communities located within the Pafos State Forest. The inquiry lasted eight months (June 2001-January 2002) and involved 112 village residents, who participated through in-depth interviews. Forty-nine women and sixty-three men were interviewed, with an age distribution of thirteen to ninety-three and education levels ranging from a couple of years of primary education among older residents to college graduates. Interviewees were chosen mainly through the community reference approach, where people who are interviewed are asked to indicate three additional people.

Interviews with village residents covered a wide range of issues and were meant to reveal how people value the local environment and how they feel about the future of their communities, in light of the implementation of EU policies. Interviews began with general guiding questions, such as "What do you love most in this place?", "How do you feel about the forest?" and "How do you feel about the future of your village?" A number of basic questions were covered with all respondents, but interviews varied in time and context, depending on what people chose to elaborate on.

In addition to the villagers in the Pafos Forest, eleven civil servants from the

Ministry of Agriculture, Natural Resources and Environment and the Ministry of Interior were also interviewed, to provide more insight into the implementation of EU policies in Cyprus.

### ***Quantitative Inquiry***

To examine how the wider public in Cyprus values the island's environment (i.e., forests and wildlife) and how they value the viability of rural communities, a survey was designed. The survey was intended to give a first approximation of Cypriots' perspectives on the environment and rural communities, and hopefully, help identify areas of interest for further, more in-depth research into these topics. The survey included a set of general questions about forests, wildlife and rural communities, and a set of specific questions about the Pafos Forest, the Cyprus mouflon and the mountain communities within the Pafos Forest. To facilitate direct comparison of attitudinal data about these topics, two questions were included to examine the relative importance Cypriots place on these three elements. The main statements in the survey were developed taking into account studies that addressed similar issues in other countries (Fulton et al., 1996; Manning et al., 1999; Purdy and Decker, 1989; Vaske and Donnelly, 1999) and in collaboration with the Human Dimensions Research Unit within the Department of Natural Resources at Cornell University. Using a Likert-scale approach, most statements gave interviewees a choice among five responses: strongly agree (SA), agree (A), not sure (NS), disagree (D) and strongly disagree (SD).

The questionnaire was pre-tested in face-to-face interviews with twenty individuals from urban and rural Cyprus to ensure that all instructions, questions and response options were interpreted in their intended meaning and to identify and correct possible shortcomings. The national survey was administered by telephone in February 2002. A stratified random sample was selected and nine strata were formed to represent the following main regions of Cyprus: urban and rural Lefkosia, urban and rural Lemesos, urban and rural Larnaka, urban and rural Pafos and rural Famaghusta. Roughly equal numbers of people were interviewed from each region and results were later weighted according to the true population proportions of each region. Telephone numbers were randomly selected using the computer programme CATI (Computer Assisted Telephone Interviews). Individuals reached by telephone were initially screened for age to ensure that only people who were above eighteen years of age were interviewed. Only one interview per household was conducted. In the case that a specific household was called and there was no answer, two additional attempts were made before another household was selected. One thousand and ten individuals participated in the inquiry, with a response rate of 75.7%.

## Findings

### **Local Environmental Values**

#### *The Forest: A Source of Life*

Villagers in the Pafos Forest have historically depended on the land and the surrounding forest as a resource for animal husbandry, agriculture, timber felling, hunting and gathering. The contribution of the forest to local livelihoods over the course of several centuries has left a strong sense of appreciation for the forest and a sense of gratitude for the fact that the forest has never let the villagers down in times of poverty, drought, civil strife and war. In the words of a middle-aged man from the village of Kampos, 'The reason our village is still alive today is because of the forest...Even in times of poverty, the people of Kampos survived because of the forest.' Today, village residents are not as directly dependent on the land as in the past, as the unprofitability of small-scale agriculture and timber felling has led many local people to search for other sources of employment. Nevertheless, people of different ages and occupations continue to regard the forest as a vital source of life. "We all love the forest, it is a source of life for us. If the forest is gone, we are also gone."

Although local people value highly the tangible benefits that the forest provides, such as employment opportunities, wood for heating and a variety of edible and aromatic plants, they also appreciate the ecological and aesthetic significance of the forest, acknowledging that the forest brings "cool water" and "clean air," regulates the climate, provides habitat for wildlife and "makes the place beautiful." Deep appreciation for the forest has in turn led to a strong desire among local people to conserve and protect it. 'The forest is life...' a woman from Tsakistra said. 'We have to love and protect the forest, just like the forest loves us.'

The people of the mountain communities rarely draw boundaries between their villages and the forest. They consider the forest their home and neighbourhood. In describing what they love most about their place, people refer to elements of the forest landscape, such as mountains, the greenery, the smell of the pine trees, the dew, the water, the sound of birds, the beauty of the scenery. Rarely is love for the place equated to love for the non-natural world, such as the village houses, the village squares, or the local coffee shops. The following quotes exemplify how local people expressed their love for their place:

*We love the entire place. We have beautiful forests with pines and cedars, it is a very beautiful place. - Seventy-year old housewife/farmer from Tsakistra*

*I love the clean air of the forest... And the greenery... Is there anything better than the greenery? - Fifty-two-year old timber worker from Kampos*

*These are the things I love: the different locations in the forest, the greenery, the*



*trees, the smell of the forest.* - Forty-year old housewife/farmer from Kampos

The attachment to the forest is so strong among older village residents that many of them refuse to abandon their village and move with their children to the city. A seventy-year old woman from Mylikouri felt that "It is much lonelier in the city... Here, at least, we have the mountain!" Young village residents also have a strong attachment to the forest, but they are more likely to express their concerns about their communities and place. In the words of a sixteen-year old student from Kampos, "The forest is the best element in this place... But there are no jobs, it is hard to make a living here."

#### *A Two-way Relationship*

From past to present, the people of the mountain communities have perceived themselves as the keepers of the forest. Local people feel that just as they are benefiting from the forest, so likewise the forest is benefiting from them. "The forest needs the villagers, just like the villagers need the forest. If the villages are deserted, so will the forest."; "The forest is man's life and everyone here loves the forest. If people leave the village, the forest would be in great danger every single day." This view is best depicted in the old but widely espoused local proverb, "Man is the place and the place is desolate" (*Άωθρωπιος εν ο τόπος τζ' ο τόπος γέρημος*). Humans are viewed as the guardians and stewards of the forest, who protect it from various threats. Without humans, village residents believe that the local place will be abandoned and barren, susceptible to fire and destruction.

Contrary to view that goat grazing was damaging to forests, which was prevalent during the British Administration and later years, local people feel that the shepherds and their goats brought many benefits to the Pafos Forest. "During the time of the shepherds," they argue, "the forest was in a better condition." They describe that shepherds guarded the forest against fire, while the trails made by goats prevented the spreading of forest fires and encouraged vegetation growth. The following quotes indicate the different ways in which the forest benefited from shepherds and their goats, according to local people:

*The forest is inferior today... There were goats in the forest and fire would not burn. The goats made trails which prevented the spreading of fires... In the past, we might walk for 20-30 miles to reach the fire and find that only two acres of forest had been burnt... Today, we see that fires can destroy the entire forest in just two days.* - Ex-forest shepherd from Kampos

*The British made mistakes. They eradicated the herds of goats in the forest... The goats kept the forest green. You would find a shepherd at a distance of every one kilometre, who protected the forest. They cleaned the water springs and prevented fires... It was good. Today it's all deserted [and]... the condition of the forest has become worse.* - Retired forest worker from Tsakistra

The risk of forest fires is a great concern among local people, who feel that the abandonment of the forest villages will be detrimental to the forest. "If people go away, the forest will be in great danger," a young man said. "If a fire breaks out, who will be here to fight it?" In the hot months of July and August, when many interviews took place, some local people expressed a concern for the summer's heat wave and increased risk of forest fires and admitted that they were on "alert." A local policeman acknowledged that local people "always run to offer assistance when a fire breaks out" and that typically villagers will go to the police station to report someone who has lit a fire in the forest. Many local people are very proud of the fact that they have participated in extensive reforestation efforts after great fires, which gives them a sense of ownership over different parts of the forest. "I enjoy walking in the forest," a forest guard from Tsakistra said. "I was in charge of most reforestations here after the great fires of 1974 and I consider the trees my own,... [they are] my family."

Some local people feel that their love for the forest is not always recognised. "The forest is our life... ," a local villager said. "We protect the forest, even though other people may accuse us." A local forest guard described an incident with a "young environmentalist" who visited the village and confronted him for cutting a tree in his yard. "I asked him, 'how many trees have you planted in your life?' He looked at me and replied, 'none.' I told him that I had planted that entire mountain slope, farther than his eyes could see... He did not know what to say." A young worker involved with timber processing felt the need to provide an explanation for his job: "I was born near the forest so I love the forest. If one considers my job, he may say that I am not an environmentalist because my work involves cutting down trees... But we love the forest.. .We were born here."

In addition to the strong local desire to conserve the forest, most village residents also support the conservation of the forest's wildlife, such as the Cyprus mouflon. In the last few years, the lack of forage in the forest interior due to years of drought has driven the mouflon towards cultivated lands near the villages, bringing them into conflict with local farmers. Although farmers are indignant about the damages and feel neglected and unprotected by government policies, they still support mouflon conservation. "We do not blame the mouflon and do not doubt the need for their protection, but...we feel that the state ought to help us."; "We do not want the mouflon to be extirpated, they are the most beautiful jewels of our place. But we do not find support and understanding." Local people seem to love the animals, but hate their impacts. "We should definitely protect the mouflon. They are a great wealth... But they are catastrophic for our orchards and nothing is being done about it." Local people feel a sense of pride in living close to the mouflon, whose status is close to that of a national symbol. As a farmer said with humour, "We are proud that Kampos is famous for having mouflon... in the orchards!"

**Community Decline and European Union Policies**

*Limited Employment and Education Opportunities*

Local people are very concerned about the decline of their villages. Kampos, the largest of the three villages, had 1070 permanent residents in 1960, but less than 430 residents today. Tsakistra's population declined from 218 permanent residents in 1960 to 107 residents today. And Mylikouri is only a remnant of the village it used to be, with 39 residents today, compared to 418 residents forty years ago (Ministry of Finance, 2001). Feelings of sadness and powerlessness are widespread and the majority of local people feel that the future of the villages is grim:

*I feel depressed. It is a pity (iiJ,i-) to see a village which had so much life dying... There was a time when you could find everything here, shops, everything... ~ Fifty-year old grocery store employee from Kampos*

*We feel awful that we might be forced to abandon our village. On the one hand, we see there is no future here, but then... it is difficult to start from the beginning in the city... We are very-concerned... ~ Thirty-two-year old housewife from Tsakistra*

The lack of education opportunities is a major concern among local people. With only an elementary school operating in Tsakistra, high school and lyceum students have to travel by bus to nearby villages. Due to the small number of students, these schools do not provide all the courses that are being offered in urban public schools. Students feel disadvantaged in terms of gaining acceptance at universities, as they usually do not have access to private lessons, a common source of additional education among city students. "I personally want to stay here, I do not want to go to the city," a thirty-two-year old woman from Kampos said. "But I cannot sacrifice my children's future... If people are not well educated today they go nowhere." Two months after our conversation, this woman together with her husband and three children moved to the city of Lefkosia.

Local people consider the lack of viable employment opportunities to be the biggest problem they are facing and the main reason why people are abandoning the villages. Many of them fear that the condition of their communities might worsen after Cyprus becomes an official member of the European Union. After the elimination of animal husbandry in the 1940s, agriculture and timber felling continued to support local livelihoods until recent years, but both of these activities are no longer economically viable. Village residents believe that European Union policies are contributing to the decline of these activities. The liberalisation of trade, which is encouraged by the EU, is hurting local agriculture. Small-scale farmers cannot easily reduce their production costs, while meeting the quality standards of the EU, and are finding it difficult to remain competitive. Local producers feel neglected and unprotected and indicate that EU policies place a greater emphasis on the protection of the forest than their overall well-being.

*Unfortunately we are heading towards catastrophe... With the European Union things will get worse because they are bringing cheap fruit from abroad [and]... our fruit does not sell in the market. ~ Farmer from Kampos*

*When Cyprus joins the European Union Kampos will die... The European Union wants Cyprus to specialise in olive oil... They are telling us to plant olive trees and pine trees, but how will we survive?... They just like to come here and... want us to serve them drinks and food... We will slowly be effaced. ~ Farmer and forest worker from Kampos*

A sequence of events has led to the decline of timber felling also. Advances in technology have altered the nature of timber felling operations, reducing the number of workers required for a single cutting. A timber worker explained that "In the past, twenty people were needed for a certain cutting, while today four people can do the same job." Furthermore, in an effort to comply to the Habitats Directive, the Forestry Department has reduced the amount of timber cutting and has placed an emphasis on other objectives for forest management, such as the development of recreation opportunities (Forestry Department, 1999). Many village residents believe that all timber felling will be eliminated when Cyprus joins the EU and that all wood for local consumption will be imported. A forest guard from Tsakistra commented that "They are reducing the timber cuttings... [because] this is what the European Union desires. This may be positive for the forest [but] of course, the forest related jobs will be reduced... "

The majority of young people do not see themselves working exclusively in agriculture or timber felling in the future, as increased education levels are leading to higher aspirations for more reliable jobs. Today, the majority of young people who live in the mountain villages are employed either by the Forestry Department as forest guards, or by Kykkos Monastery, an old religious foundation located in the Pafos Forest. A few young people feel that increased tourism opportunities, which are encouraged by the EU, may benefit some community members, but doubt whether a significant number of people would benefit from this policy. "Those who would like to work in hotels may benefit from the EU, as more tourists will come here," a young woman said. "But many people do not want to be waiters,... I personally would not want that."

#### *Policy Reforms*

Civil servants in the Forestry Department and the Department of Agriculture confirmed that in light of Cyprus' accession process, many policies that affect mountain communities are currently being reformed. In response to EU requirements, an emphasis is being placed on enhancing the protection of the forest and providing alternative occupations for local people, so that they are not directly dependent on forest use.

A high-level official in the Department of Agriculture explained that "with the European Union we will undertake a programme for rural development, which entails increasing forest cover and providing incentives for people to do so,...and stabilising the population of the countryside, through the promotion of tourism and traditional occupations, such as basket weaving." Indeed, in the official document titled 'Rural Development Policy of Cyprus, 2004-2006' of the Department of Agriculture, a specific measure calls for the "encouragement and support of handicraft making and the involvement of young people in activities such as pottery, weaving, basket weaving, wood crafting, etc..." (p. 126). The Forestry Department has also created a new national forest policy called "The Rural Betterment Strategy," which shifts away from the traditional emphasis on timber production and places an emphasis on "the maintenance (and improvement) of environmental quality while meeting the recreational requirements of local people and foreign tourists" (Forestry Department, 1999, p. 3).

These policy reforms are aligned with the Habitats Directive of the EU, which encourages the development of ecotourism and handicraft making as alternative sources of revenue for local communities. The European Commission expects ecotourism to "raise awareness amongst tourists and locals for the need of conservation" and "encourage a greater acceptance of the protected area within the local community" (European Commission, 2000, p. 2). Apparently, the authors of this nature conservation policy assume that local people do not widely support the conservation of nature.

### ***Broader Values of Forests, Wildlife and Rural Communities***

While Cyprus is in the process of complying to European Union policies, little knowledge exists about how the wider population in Cyprus feels about the conservation of forests and wildlife, or the viability of rural communities. To develop a first approximation of Cypriots' perspectives on these issues, a nationwide telephone survey was administered. This initial exploratory effort showed that Cypriots generally support forest and wildlife conservation, and also wish to see rural communities in Cyprus sustained.

The survey was administered to 1,010 randomly selected individuals from urban and rural Cyprus, 556 (55%) of whom were women and 454 (45%) were men. The greatest number of people (24.8%) belonged to the 35-44 age group. Education levels varied: 20% of respondents had completed college, 40% had completed lyceum (twelve years of formal schooling), 16% had completed high school (nine years of schooling), 20% had completed elementary school and 4% had not completed elementary school. Of all respondents who currently reside in an urban region, 40% indicated that they were born in a village, revealing the urbanisation trend that has been prevalent in Cyprus during the last few decades.

The great majority of the people surveyed (99%) agreed with the statement "Whether or not I visit forests as much as I'd like, it is important to know that they exist in Cyprus." Respondents had similar attitudes about wildlife, as 98% agreed that it is "important to know that it [wildlife] exists in Cyprus." The statements "The presence of forests in Cyprus is not important to me" and "The presence of wildlife in Cyprus is not important to me" were found disagreeable by 95% and 94% of the respondents, respectively. Furthermore, 99% of the respondents agreed that "It is important to maintain forests for future generations in Cyprus," and similarly, 97% agreed that "It is important to maintain wildlife for future generations in Cyprus." The majority of the people surveyed also seemed to appreciate the non-utilitarian value of nature, supporting the notion that forests and wildlife have value irrespective of the direct benefits they provide to humans. Ninety-six per cent of the respondents agreed with the statement "Forests have value whether people use them or not," while 86% of people disagreed with the statement "Forests are valuable only if they produce jobs and income for people." Regarding wildlife, 92% of the people surveyed agreed that "Wildlife has value whether people use it or not" and 84% disagreed with the statement "Wildlife is valuable only if it produces jobs and income for people" (Tables 1 and 2).

**Table 1: Attitudes of respondents to a set of statements about forests**

Statements about forests	Agree	Disagree	Not Sure/ No Answer
1. Whether or not I get to visit forests as much as I'd like, it's important to know that they exist in Cyprus.	99	1	0
2. The presence of forests in Cyprus is not important to me.	4	95	1
3. It is important to maintain forests for future generations in Cyprus.	99	0	1
4. Forests have value whether people use them or not.	96	3	1
5. Forests are valuable only if they produce jobs and income for people.	9	86	5
6. Forests should not be used by people (i.e., for timber production).	45	27	28
7. The most important benefit derived from forests is that they support forest communities economically.	34	50	16

**Note:** N=1,010

**Table 2: Attitudes of respondents to a set of statements about wildlife**

<b>Statements about wildlife</b>	<b>Agree</b>	<b>Disagree</b>	<b>Not Sure/ No Answer</b>
1. Whether or not I get to see wildlife as much as I'd like, it's important to know that it exists in Cyprus.	98	1	1
2. The presence of wildlife in Cyprus is not important to me.	5	94	1
3. It is important to maintain wildlife for future generations in Cyprus.	97	1	2
4. Wildlife has value whether people use it or not.	92	5	3
5. Wildlife is valuable only if it produces jobs and income for people.	9	84	7
6. Wildlife should not be used by people (i.e., for food).	52	27	21
7. The most important benefit derived from wildlife is that it attracts tourists, who spend money in rural communities.	28	52	20

Despite the urbanisation trend that has been prevalent in Cyprus during the last few decades and the declining condition of many local villages (Michaelidou, 2002; Michaelidou and Decker, 2002a), both the urban and rural populations value the existence of rural communities and the continuation of rural life. Almost all of the respondents (99%) agreed with the statement "It is important that rural communities always exist in Cyprus," while 95% of the respondents disagreed with the statement "It would not be a great loss if the rural lifestyle disappeared from Cyprus." Furthermore, nearly all respondents (99%) believed that "National policy should help sustain rural communities." At the same time, 76% of the respondents disagreed with the statement "Taxes should not be used to subsidise rural communities" (Table 3).

**Table 3: Attitudes of respondents to a set of statements about rural communities**

<b>Statements about rural communities</b>	<b>Agree</b>	<b>Disagree</b>	<b>Not Sure/ No Answer</b>
1. It is important that rural communities always exist in Cyprus.	99	0	1
2. It would not be a great loss if the rural lifestyle disappeared from Cyprus.	4	95	1
3. National policy should help sustain rural communities.	99	0	1
4. Taxes should not be used to subsidise rural communities.	12	76	12

The appreciation Cypriots expressed for forests, wildlife and rural communities is manifested in the importance they place on the conservation of the Pafos Forest, the protection of the Cyprus mouflon and the viability of the mountain villages in the Pafos Forest. Ninety-eight per cent of the people surveyed agreed with the statement "It is important that the Pafos Forest always thrives in Cyprus" and 90% agreed that "It is important that Cyprus always has a viable population of Cyprus mouflon in the wild." Furthermore, 98% supported the statement "It is important that viable rural villages always exist in the Pafos Forest." Cypriots seem to place great importance on preserving the diverse components of the Cypriot countryside, as 100% of the respondents agreed with the statement "It is important to preserve the character of our countryside, together with its forests, wildlife and rural communities" (Table 4).

**Table 4: Attitudes of respondents to a set of statements about the Pafos Forest, the Cyprus mouflon and the forest communities**

<b>Statements about the Pafos Forest, Cyprus mouflon and rural communities within the Pafos Forest</b>	<b>Agree</b>	<b>Disagree</b>	<b>Not Sure/ No Answer</b>
1. It is important that the Pafos Forest always thrives in Cyprus.	98	0	2
2. It is important that Cyprus always has a viable population of Cyprus mouflon in the wild.	90	3	7
3. It is important that viable rural villages always exist in the Pafos Forest.	98	0	2
4. It is important to preserve the character of our countryside, together with its forests, wildlife and rural communities.	100	0	0



Cypriots do not seem to regard the survival of the mountain villages as a threat to the survival of the Pafos Forest or the Cyprus mouflon and wish to sustain all these elements. Two questions were directed towards evaluating the relative importance people place on the conservation of the Pafos Forest, the conservation of the Cyprus mouflon and the viability of the mountain villages. The first question asked respondents to rank these three elements from 1 to 3, where 1 would indicate the element they considered to be the most important. People had the choice of giving the same ranking to more than one element. The second question asked respondents to hypothetically allocate 100 CYP to the conservation of the Pafos Forest, the conservation of the mouflon and the viability of rural villages. The conservation of the Pafos Forest received an average ranking of 1.21 and an average contribution of 38.5 CYP, the viability of the forest communities received an average ranking of 1.32 and an average contribution of 34.9 CYP, and finally, the conservation of the Cyprus mouflon received an average ranking of 1.65 and an average contribution of 26.5 CYP (Table 5).

**Table 5: Average ranking and average contribution of CYP for the Pafos Forest, the Cyprus mouflon and the forest communities**

	Average ranking in terms of importance	Average contribution of CYP
The conservation of the Pafos Forest	1.21	38.5
The viability of rural communities in the Pafos Forest	1.32	34.9
The conservation of the Cyprus mouflon	1.65	26.5

## Discussion and Conclusions

### ***Moving Beyond Prevalent Assumptions in Nature Conservation***

Nature conservation initiatives in the past focused largely on the establishment of protected areas and the exclusion of local people from those areas, with little consideration for their overall well-being (McCabe et al., 1992; Neumann, 1997). People whose livelihoods depended directly on the use of the land and natural resources were considered a threat to nature conservation and were thought to lack an appreciation of the indirect values of nature. Similar assumptions about the negative interaction between rural people and nature are still prevalent in the international conservation arena and guide many conservation policies to this date (Abbot et al., 2001; Brandon, 1998; Terborgh and Peres, 2002). Integrated conservation and development projects are an improvement over past conservation methods, because they provide local people with alternative occupations, which are

thought to be more compatible with conservation (Barrett and Arcese, 1995; Brandon, 1997). On many occasions, however, alternative occupations are provided in a top-down way, with no consideration for the importance certain traditional practices may have for local people, or for the extent to which local people desire to adopt new occupations (Michaelidou et al., 2002; Neumann, 1997; Peters, 1998). Furthermore, ICDPs assume that local people do not have favourable attitudes towards nature conservation and aim to affect the attitudes of local people so that they are supportive of conservation measures (Abbot et al., 2001). "If rural people become convinced," writes Butterfield (1994, p. 304), "that conservation is in their best interest and that they can benefit from the wise use of natural resources, park protection is facilitated."

During colonial times in Cyprus, the people of mountain communities were thought to lack an appreciation for the forest and were regarded as agents of forest degradation (Michaelidou, 2002; Thirgood, 1987). Nature conservation policies focused on bringing forests and wildlife under the control of the state and on restricting people's access to natural resources. Today, the European Union seems to have taken an ICDP approach to nature conservation, by placing an emphasis on the protection of natural ecosystems and providing alternative occupations for local people, which are expected to make those people more supportive of conservation measures (European Commission, 2000). While the implementation of EU policies proceeds in Cyprus, few studies have challenged the view, which has prevailed since the colonial era, that local people do not have favourable environmental values.

Our inquiry in three mountain villages in the Pafos Forest showed that local people have favourable attitudes toward the environment and a strong conservation ethic. Local villagers regard the forest as a source of life, in a concrete way born of familiarity and necessity. They appreciate the historical contribution of the forest towards sustaining their lives and livelihoods during times of poverty, drought and war. But their appreciation for the forest is not limited to the direct benefits of food and employment that the forest provides. Village residents of different ages, occupations and educational backgrounds also value the ecological importance of the forest in bringing "clean air" and "cool water," the aesthetic significance of the forest in making "the place beautiful" and the cultural value of the forest in defining their cultural identity.

Appreciative of the ecological, cultural and economic significance of the forest, village residents greatly support its conservation. Local people believe that just as they are benefiting from the forest, so the forest is benefiting from them. This two-way relationship between local people and the forest is manifested in different ways, from the active participation of village residents in extinguishing forest fires,

to the historical contribution of local shepherds in enhancing forest conservation. According to local people, goat grazing brought many benefits to the forest by reducing the risk and magnitude of forest fires and enhancing vegetation growth. Interestingly, recent scientific studies verify that grazing in Mediterranean ecosystems enhances biological diversity and decreases the risk of forest fires (Bartolome et al., 2000; Verdu, et al., 2000).

Favourable attitudes towards nature are prevalent not only among local people in the Pafos Forest. The national survey administrated in Cyprus indicated that Cypriots generally support the existence of forests and wildlife and appreciate the indirect values of nature. At the same time, Cypriots wish to sustain rural communities and believe that national policy should be directed toward this end. With respect to the Pafos Forest, Cypriots seemed to seek a balance between the conservation of the forest, the conservation of the Cyprus mouflon and the viability of the mountain villages found within this forest. While this survey gives a first approximation of Cypriots' perspectives on forests, wildlife and rural communities, more research is needed to explore these issues in greater depth. Additional research that compares people's environmental attitudes to their actual behaviour might shed more light onto how Cypriots relate to the environment.

#### ***Sustaining both Biological and Cultural Diversity***

During the implementation of the Habitats Directive and other EU policies in Cyprus, attention needs to be paid to potential implications for rural communities found within the areas designated for protection. The European Commission (2000, p. 2) indicates that the management of the Natura 2000 areas "is essentially about influencing land use" and encourages the adoption of alternative occupations for local people, such as ecotourism and traditional craftmaking. Similar to ICDPs, the European Commission sees ecotourism as an opportunity for lifting the pressure from the forest and for substituting local revenue (European Commission, 2000). Although this approach takes into consideration the economic well-being of people in mountain communities, it is not clear what effects it might have for the local culture, if the development of alternative occupations is designed and implemented in a top-down way.

Before introducing alternative occupations in mountain communities, it is important to ensure that the cultural viability of rural communities is not adversely affected. Well-planned ecotourism may bring some revenue to these economically marginalized communities, but ecotourism is not a panacea for nature conservation and rural development. Benefits derived from tourism do not always reach local communities and if they do, they are often unevenly distributed among community members, increasing social inequalities (Peters, 1998). If local people desire the development of ecotourism, the inequitable distribution of tourism benefits and the

negative environmental and social consequences that might arise need to be taken into consideration.

The different needs and aspirations of people across generations may require a pluralistic approach in dealing with rural community development and not a focus on a single occupation. Many village residents desire to continue their agricultural practices, while others point out that more specialised occupations are needed to sustain the educated population of the mountain villages. Young people indicate that they would like to stay in their mountain villages, but not many aspire to be involved in the making and sale of pottery and other traditional handicrafts as their main source of income. Government agencies, such as the Forestry Department and the Department of Agriculture, could transfer more positions from urban to rural areas in Cyprus and give priority to people from rural villages for certain positions. The decentralisation of public services, such as schools and health care facilities, would also enable more people to remain in the countryside.

***Community Participation in Nature Conservation and Rural Development***

The participation of local people is essential for implementing policies that better address people's needs and for eliminating false assumptions about the relationship between local people and nature. During the implementation of the Habitats Directive and other EU policies, local government agencies need to work with village residents to make certain that the opportunity is made available for them to engage with stronger voices in the decision-making processes that affect their lives. Instead of placing first priority on the conservation of natural habitats, an effort can be made towards sustaining both biological *and* cultural diversity, by focusing on both nature conservation and rural community development. As Michaelidou et al. (2002) suggest, nature conservation and community viability are interdependent and should be simultaneously addressed if both are to benefit.

Decisions concerning the adoption of alternative occupations should be made in collaboration with local people, who are willing to collaborate with government agencies during the implementation of EU policies, for the benefit of both their communities and the environment. Failure to involve local people in the process of implementing the Habitats Directive in other countries has brought strong local opposition. Rural people in France, for example, strongly resisted the Habitats Directive because they felt they were left out of the process, while acknowledging at the same time that "they were not opposed to the principle of conservation" (Alphandéry and Fortier, 2001, p. 316).

The Habitats Directive can be a positive step towards nature conservation in the European landscape. The establishment of the Natura 2000 network of protected areas can prevent mass-scale development in important habitats and enhance their

conservation. However, without incorporating local people in the process of demarcating protected area boundaries and designing management goals, objectives and action plans for the protected areas, the Habitats Directive may be met with strong local opposition. People in mountain communities, like those of the Pafos Forest, support nature conservation, but at the same time wish to sustain their communities. They are, therefore, likely to be more supportive to policies that address the viability of their village communities together with the viability of the forest, than to policies that ignore their overall well-being. Only through citizen participation and an emphasis on both nature conservation and rural development will EU policies succeed in meeting their objectives. Otherwise, they risk repeating the mistakes of past conservation policies, which by ignoring rural people's needs, exacerbated the condition of rural areas.

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