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Central European University in part fulfillment of the
Degree of Master of Science**

**Protected areas and local communities
– the case study of Vânători Neamț Natural Park, Romania –**

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Budapest

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Doina Mihaela COJOCARIU

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List of Abbreviations

AER Association for Ecotourism in Romania
CBD Convention on Biological Diversity
CBNRM Community-Based Natural Resource Management
COP Conference of Parties
GEF Global Environment Facility
ICDPs Integrated Conservation and Development Projects
ICEM International Center for Environmental Management
IUCN World Conservation Union
NFA National Forest Administration
NFD National Forest Directorate
NMA National Meteorological Administration
NRSD Neamț Regional Statistics Department
RFSD Romanian Fund for Social Development
RMESD Romanian Ministry of Environment and Sustainable Development
SGP Small Grants Programme
UNDP United Nations Development Programme
UNEP United Nations Environment Programme
UNESCO-WH United Nations Educational, Scientific and Cultural Organization World
Heritage
UPN Unesco Pro-Natura
VNNP Vânători Neamț Natural Park
VNNPMP Vânători Neamț Natural Park Management Plan
WCMC World Conservation Monitoring Centre (WCMC)
WCPA World Commission on Protected Areas
WDPA World Database on Protected Areas
WWF Worldwide Fund for Nature

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for the degree of Master of Science and entitled: Protected areas and local communities: the case study of Vânători Neamț Natural Park, Romania.

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Relations between protected areas and neighboring communities are of strategic importance in park planning and management. On the one hand, experience has shown that exclusion and restrictions from the use of natural resources, especially when locals' reliability on such resources is high, together with the disregard for local needs and interests can spark conflicts and undermine conservation efforts. On the other hand, greater participatory planning and benefit sharing are believed to increase local support and strengthen protected areas.

Understanding this relationship is necessary in order to develop a mutually beneficial partnership. The aim of this thesis is to analyze the nature of the relationship between Vânători Neamț Natural Park and local communities. A questionnaire survey involving 135 people living within or neighboring the park was administered to identify the park's impact on local people, and their knowledge and attitudes towards the park.

The selected villages have a poor road infrastructure, poor access to medical facilities, no central drinking water and waste water treatment facilities, and high unemployment. Only a small portion of the population enjoys direct benefits from tourism, although the majority believes the number of tourists should increase. Consequently, better roads, medical services and tourism development were given highest importance as needs of local communities.

Attitudes toward VNNP were not significantly influenced by age, gender, education level, or income, nor were they significantly different for villages situated inside or neighboring the park. The lack of major restrictions, a low level of knowledge about the park and divided perceptions of direct benefits may explain why over 90% of respondents feel the park's existence does not affect them. There is a general positive attitude towards the park and a relatively high expressed willingness to participate in park-related activities, which could provide a strong basis for collaboration. There is a need for better communication strategies and improved dissemination of information, combined with efforts toward achieving sustainable rural development.

Keywords: protected area, local communities, Vânători Neamț Natural Park, Romania

1. INTRODUCTION

1.1. Background and motivation for this research

Nature protection is undeniably the main objective of protected areas around the world. However, understanding the local social and cultural characteristics of communities living inside or surrounding protected areas has been considered increasingly important for the success of such conservation areas.

There is an ongoing debate regarding the effectiveness of protected areas in actually meeting their conservation goals and the role local communities have to play in protected area management. Although having evolved from ‘fine and fences’ parks to concepts of integrated conservation and development (ICDPs) and community-based natural resource management (CBNRM), the relationship between conservation objectives and development necessities of local communities is not resolved. The principle of local support as a requirement for the long-term survival of a protected area has established support, but there are also voices that advocate the return to a stricter, more authoritative system of protection. Moreover, recent years have seen a surge in concerns about conservation and equity – more often than not it has been the case that the benefits from establishing protected areas have been global, while the local and indigenous communities have suffered the costs, such as restricted access to resources.

In order to better understand the dynamics of park-people relations and the influencing factors that define them, goals have been set to explore the connection between environmental and local livelihood benefits and to comprise a global assessment regarding the social impacts of protected areas. This research aims to participate in filling that gap and to provide an additional case study, that of Vânători-Neamț Natural Park, in Romania, a country struggling to set in place effective strategies to protect its rich biodiversity in the face of uneven economic development.

Further more, the coordinates of park-people relationships are complex and depend greatly on the local context. That is why more site-specific and human-faced management strategies need to be designed to build on the positive attitudes of the local population, and to mitigate their negative perceptions. In addition to the contribution to the available body of knowledge, this research attempts to provide a basis for shaping effective people-oriented park management practices.

1.2. Aim and objectives

The aim of this research thesis is to analyze the impact the establishment of the Vânători-Neamț Natural Park (VNNP) has had on the local communities and to explore the park-community relationships in this particular case. The park's area of influence is relatively populated, with three villages situated within the park's boundaries, and several others, including the city of Târgu Neamț, in the park's surroundings.

The general aim of this research can be broken down into several objectives:

- determine what is the balance between environmental objectives and the costs and benefits born by the local communities adjacent to VNNP.
- identify any people-oriented policies and programmes VNNP has already implemented or intends to implement and if / how they have influenced local people's attitudes and perceptions towards the park.
- formulate recommendations based on the findings of this research.

In order to achieve these objectives, a survey questionnaire was administered to randomly selected members of local communities in and around VNNP and interviews were conducted with park personnel and representatives of local NGOs.

1.3. Thesis structure

Following the introductory section, chapter 2 provides the necessary theoretical framework, by introducing the concept of protected areas, focusing on the particulars of park-people relationships and on principles of protected area management, as they evolved throughout time. The focus is then shifted on the particular case of Romania, giving an overview of the state of biodiversity and of the evolution of the Romanian system of protected areas. This section continues with a presentation of the case study – Vânători-Neamț Natural Park – history, objectives, policies and programmes targeting local communities.

Chapter 3 describes the research design of this thesis, outlines the methods that were used, and provides justification for their inclusion. Moreover, delimitations and limitations encountered while carrying out this research are explained. Chapter 4 presents the research findings and provides discussion of relevant aspects, following the structure of the questionnaire that was used during field research: first, it provides socio-demographic information and identifies sources of livelihood within the household, deals with the development of local tourism and how/if it creates benefits for the local people, then talks about local needs of the community and, finally, about local people's knowledge of and opinions and attitudes towards the Natural Park. The final chapter of the thesis summarizes the main findings, formulates conclusions and elaborates recommendations based on the research findings.

2. CONCEPTUAL FRAMEWORK

2.1. Biodiversity conservation through protected areas

Protecting biodiversity and nature conservation have been major concerns for the human society for a long time, even though reasons and strategies to do so have varied greatly. And yet, the natural world is increasingly suffering from human induced pressures and influences, causing an alarming rate of species extinction all around the planet – as serious as to be considered the sixth mass extinction (Myers 2002), and especially in areas most high in biodiversity, the so-called biodiversity hotspots (Myers *et al.* 2000).

Efforts to prevent the collapse of Earth's natural support system include designating protected areas for conservation, with various degrees of strictness of regulation, in an attempt to reverse the current trend of loss of biodiversity and to preserve as much of our inherited natural capital for the generations to come.

2.2. Definitions and classification of protected areas

The World Conservation Union has defined a protected area as *"an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means"* (IUCN 1994). The establishment and management of protected areas, together with related conservation, sustainable use and restoration projects in surrounding areas are also central for the Convention for Biological Diversity, which provides its own definition for protected area, not essentially different from the previous one: a protected area is *"a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives"* (CBD 2007).

The most comprehensive dataset on protected areas world-wide is managed by the UNEP-World Conservation Monitoring Centre (WCMC) in partnership with the IUCN World Commission on Protected Areas (WCPA) and the World Database on Protected Areas

Consortium. According to their 2004 assessment report, the number, as well as the extent of protected areas have more than doubled since 1992 – there are over 100 000 protected areas worldwide, covering around 20 million km² or ~12% of all terrestrial area (CBD 2007; Phillips 2004).

In order to bring unity among the various national terminologies and classification systems, IUCN has developed an international system of protected area categories according to the management objectives of the sites, which is still used today and which is briefly described in Table 1 below. It must be noted that the order presented there is not hierarchical in nature, instead it indicates, in ascending order, the degree of human intervention in that particular type of protected area.

Table 1. IUCN categories of protected areas

| Categories | Description |
|-------------------|---|
| I a | Strict Nature Reserve - protected area managed mainly for Science |
| I b | Wilderness Area - protected area managed mainly for wilderness protection |
| II | National Park - protected area managed mainly for ecosystem protection and recreation |
| III | Natural Monument - protected area managed mainly for conservation of specific natural features |
| IV | Habitat/Species Management Area - protected area managed mainly for conservation through management intervention |
| V | Protected Landscape/Seascape - protected area managed mainly for landscape/seascape conservation and recreation |
| VI | Managed Resource Protected Area - protected area managed mainly for the sustainable use of natural ecosystems |

Source: IUCN 1994

Other types of international protected areas were designated under international agreements, to recognize areas of international significance:

- *Biosphere Reserves* – part of the UNESCO Man and Biosphere scientific international programme. These protected areas are considered learning sites, “living laboratories for people and nature”, as they support a range of objectives besides conservation, such as economic, human and culturally adapted development, research, monitoring, environmental education and training (UNESCO 2007).
- *World heritage sites* – set up under the World Heritage Convention, designating areas of ‘outstanding universal value’, aimed, among other things, at fostering international cooperation for nature and culture conservation (UNESCO-WH 2007).

2.3. Evolution of the concept of protected area

In some form or another, conservation efforts are as old as humankind, with traditional practices revolving around securing food sources or protecting cultural symbols, such as religious sites or totemic plants or animals (Western and Wright 1994). However, modern conservation only arose in the late nineteenth century, brought about as a reaction against increased human occupation of land and urbanization.

2.3.1. The National Park – traditional model of protected area

The United States model of protected areas is considered the forerunner in modern conservation: Yosemite National Park was the first national park, founded in 1864, and Yellowstone followed closely in 1872 (Hales 1992). However, Phillips (2003) notes that the movement towards establishing such protected areas took root in several parts of the world at the same time (*i.e.* Brazil, Australia, Canada, South Africa, New Zealand).

The first such national parks did not have conservation of wildlife as their primary purpose; instead, they aimed to save natural monuments and open spaces, to protect landscapes of particular natural beauty from the “ravages of ordinary use” (Hales 1992). They were meant as recreational places for visitors coming to enjoy ‘the wild’ and find inspiration

in nature. National parks continued to be established around the world, although motivations sometimes differed: emphasis on protection of large game in Africa or a focus on landscape protection in Europe (Phillips 2003).

These parks are referred to as ‘fortress parks’ or ‘fine-and-fences’ parks because they assumed a centralized, top-down approach of management, completely restricting local people’s access to the area, as they were only seen as a threat to the protected area. The parks functioned as fenced-in natural ‘islands’, open only to tourists and rejecting any other development options. This way of thinking prevailed until the 1960’s-1970’s, when limitations to this approach started to be voiced (Phillips 2003).

As understanding about biological diversity advanced, conservationists realized that the scientific grounds for establishing such protected areas were often limited – the area selection and boundary setting was often done arbitrarily (Phillips 2003). Parks were simply removed from their ecological and social context and often too small to be able to support viable populations and genetic diversity of large mammals (McNeely 1992). Moreover, maintaining the control over the entire territory of these national parks proved to be difficult and required extensive human and financial resources that were sometimes hardly available (McNeely 1992).

Such conservation efforts were also threatened by increased pressures from population growth, poverty and commercialism. In areas with high population densities and high dependency on local natural resources, it proved especially hard to remove them from the use-cycle and deprive local communities of the right to sustain their livelihoods from use of natural resources (Hales 1992). “The resulting us-versus-them rush to harvest is the root of resource depletion”, say Western and Wright (1994, 4).

2.3.2. *The new paradigm of protected areas*

Increased environmental awareness brought about by the emergence of the modern environmentalist movement through books such as Rachel Carson's *Silent Spring* (1962) or Paul Ehrlich's *Population Bomb* (1968), triggered a wave of changes in the way people related to nature and the development of the so called new paradigm for protected areas (Phillips 2003), in which local communities would acquire a much more central role.

Phillips refers to the 1972 Stockholm Conference as “signaling the end of a colonial period of conservation” (2003, 17-18) and notes the development of the concept of biosphere reserve within the Man and Biosphere programme. This concept meant a departure from the idea of national parks as isolated islands, towards an approach of more flexibility and integration of local communities' needs, through the establishment of buffer and transitional zones allowing multiple land uses, surrounding a strictly protected core (Hales 1992).

The Third World Parks Congress in 1982 brought the issue of the need for building public support for protected areas to international attention, linking conservation to development needs and acknowledging the role of local and indigenous communities (Phillips 2003). That meant a vision more in line with the newly emerging principles of sustainable development, promoting the integration of protected areas within the larger context of the surrounding landscape and people (Furze *et al.* 1996).

The Fourth World Parks Congress in 1992 brought a reinforcement of the importance of park-people relationship and of the sustainable use of natural resources and supported ideas such as the necessity of regional strategies for protected areas and of linking protected areas through corridors, to form stronger, more inclusive and sustainable networks (Phillips 2003). Moreover, Phillips signals the fact that, while previously categories I to IV received the most attention, now there was a growing interest in categories V and VI, which are protected areas situated in inhabited lands (2003).

The changes towards this new paradigm of protected areas arise from a complex interplay of factors, including the advances in scientific understanding that effective conservation in the context of surging anthropogenic pressure cannot be achieved within isolated patches of land and that attention also has to be paid to the lived-in landscapes, therefore the need to cooperate with the local communities (Hales 1992; Phillips 2003). The need for multi-disciplinary approaches and conservation strategies that are integrated within national and regional development plans also played an important role, together with technological advances such as IT and GIS, making it possible to handle new and a larger amount of information (Phillips 2003).

Furthermore, the changes were prompted by the greater respect for local communities (i.e. traditional conservation practices, local knowledge) and the increased recognition of human and environmental rights of indigenous people, as well as women's rights (Western and Wright 1994; Phillips 2003). Political and economic developments influenced protected area conservation at the national level, through the tendency towards decentralization of power (devolution from center to regional and local levels), together with the enhanced voice of civil society, through participation of non-governmental organizations or even of private owners in protected area management (Phillips 2003), and at the international level (international agreements, organizations, financing mechanisms – GEF, globalization, free trade) (Western and Wright 1994).

A report from the International Center for Environmental Management (ICEM 2003) synthesizes the evolution of the protected area approach by identifying five main changes:

- From islands to networks
- From conservation to integration of social and economic objectives
- From excluding local people, protected area management has become with and for the people

- Quality versus quantity concerns (rapid expansion of protected areas, and an increase in the number of paper-parks shifted the focus on efforts towards management effectiveness of existing protected areas)
- From national to international concern (ICEM 2003).

2.3.3. Community-based conservation

Community-based conservation comprises a wide range of conservation arrangements, from establishing buffer zones around strictly protected areas and having various degrees of local participation, revenue and resource sharing or co-management of resources in a particular area (Jones and Murphree 2004), to integrated conservation and development initiatives (ICDPs) and even turning the management responsibility over to local communities within self-mobilized and empowered communal systems of resource management (community-based natural resources management projects – CBNRM) (Western and Wright 1994; Jones and Murphree 2004).

Community-based conservation is basically reversing the top-down approach of the fortress parks and focuses on the needs of the local communities as an ends for which effective conservation of natural resources becomes a means for achieving economic well-being (Jones and Murphree 2004). Conservationists are interested in making “nature and natural products meaningful to rural communities”, while the latter are interested in regaining control over their natural resources and having a say in the way they are managed (Western and Wright 1994).

Conservation by, for and with the people has found many supporters, who explain that the exclusion of local populations from conservation areas creates tensions (Western 1994¹;

¹ Western describes the case of Amboseli National Park in Kenya, which is an example of a well organized, block local opposition towards the Park’s exclusive management approach by the indigenous Masai people.

Pretty 2002²) and increases monitoring costs (McNeely 1992), whilst not taking advantage of the time and place specific local knowledge that local communities have, nor of the traditional institutions they might have set in place to achieve sustainable local-level resource management (Wells and Brandon 1992; Borrini-Feyerabend 1997; Agrawal and Gibson 2001).

Conservation has, thus, become a social challenge, integrating the protection of both biological and cultural diversity (McNeely 1992). Furthermore, it follows “the principle of local support” (Brockington 2004, 412), that states that protected areas will only survive in the long-run if there is local support and community participation in decision-making (Borrini-Feyerabend 1997). This view was upheld at the Fourth World Parks Congress: “quite simply, if local people do not support protected areas, then protected areas cannot last” (Ramphal 1993: 57), and enforced by Phillips who expressed in an interview “the iron rule that no protected area can succeed for long in the teeth of local opposition” (Borrini-Feyerabend et al. 2002, 11).

One of the underlying principles of community based conservation was the necessity to reconcile the conservation of biodiversity with the social and economic needs of local people (Wells and Brandon 1992). The ICDPs were first introduced by WWF and are “biodiversity conservation projects with rural development components” (Hughes and Flintan 2001, 4). A more general definition brings them very close to a broader sustainable development thinking, characterizing them as “an approach that aims to meet social development priorities and conservation goals” (Hughes and Flintan 2001, 4)

ICDPs are usually linked to a protected area, the main objective being to improve relationships between a usually state-led protected area and the adjacent communities (Hughes and Flintan 2001). Wells and Brandon (1992) suggest three types of activities:

² Among others, Pretty gives the example of India, where “in the early 1980’s, more than a hundred clashes were reported from national parks and sanctuaries” (2002, 65)

- protected area management activities, including biological resources inventory and monitoring, together with research and education, as well as taking action against illegal activities
- establishing buffer zones, allowing for human settlement and other activities
- promoting local social and economic development (i.e. rural development projects, compensation and substitution schemes)

The assumption is that if local people are involved and their basic needs are met through development programs that provide alternatives to resource depletion, then they will use resources wisely and sustainably, thus helping to meet broader conservation goals. Many ‘lessons learnt’ studies reported some successful outcomes of ICDPs³, but most often than not, they reported failures (Hughes and Flintan 2001).

Among the grounds for criticizing ICDPs are the fact that the linkage between conservation and development has yet to be clearly established – some authors argue that increased living standards will imply putting even more pressure on resources (Barrett and Arcese 1995). Also, ICDPs are a response to the assumption that the local populations are the ones responsible for resource over-exploitation, often overlooking other major factors, such as external trends or vested interests (Hughes and Flintan 2001). Another concern regards the sustainability of such projects after the external financing ceases.

2.3.4. Current debates

Skeptics of community conservation dispute the effectiveness of using rural development projects as stepping stones to meeting conservation objectives (Lepp and Holland 2006; Brockington 2004). Some are even arguing for a return to a stricter park management, with more involvement of state agencies and less decision power given to the

³ A few examples are Annapurna Conservation Area Project, Nepal; Bwindi Impenetrable Forest and Lake Mburo National Park in Uganda; Amboro National Park in Bolivia; others in China, Papua New Guinea, Cameroon, Tanzania, Costa Rica (Hughes and Flintan 2001, 7)

community (Locke and Dearden 2005). The most powerful example is that of a modern fortress park – the Mkomazi Game Reserve in Tanzania described by Dan Brockington, who contests the validity of the principle of local support arguing that the success of a conservation strategy depends more on the particular political and social context and on the distribution of power between actors involved (Brockington 2004).

In response to these ideas, other authors try to find out local communities' attitudes towards various conservation alternatives⁴, while others try to determine whether formal protected areas actually are effective or not in safeguarding biodiversity⁵. Although recognizing that community conservation has not turned out to be a universal 'panacea' of biodiversity protection, the majority of the authors still support it, arguing that we shouldn't be discouraged by the failures, but strive to see how these implementation difficulties can be overcome (Wells and Brandon 1992; Brechin *et al.* 2002; Michaelidou *et al.* 2002). Brechin *et al.* (2002, 51) conclude that: "establishing a legitimate process by constructively working with people is the most feasible and morally just way to achieve long-term nature protection".

2.4. Protected areas and local communities

As stated above, park-people relationships have been on the agenda of protected area management for more than a century. Throughout this time, the nature of this relationship and its importance for park management has been widely discussed as concepts of nature or conservation have evolved. The debate is as vigorous as ever – solutions are needed to reconcile human development necessities and nature conservation.

⁴ A 2006 study by Lepp and Holland shows that community-based conservation is positively perceived among inhabitants of Bigodi, Uganda, while state-led conservation is not

⁵ Bruner *et al.* (2001) found that protected areas are effective if there is a high density of monitoring guards and high probability of receiving a sanction; while Hayes (2006) claims that protected areas are not necessarily more effective than other conservation efforts for forest protection and emphasizes the importance of local forest rules, suggesting that more attention should be given to local communities and institutions

2.4.1. What is community and why is participation important

In response to those voices that say that what we need to do in order to protect biodiversity is to establish more parks/protected areas, Norman Myers argues that, although necessary, that is not enough, saying that “setting aside a park in the overcrowded world of the early twenty-first century is like building a sandcastle on the seashore at a time when the tide is coming in deeper, stronger and faster than ever” (Myers 2002, 54).

On the one hand, he argues, many of the existing protected areas already suffer from the ‘paper-park syndrome’, and on the other hand, many of the areas most rich in biodiversity are situated in overpopulated, poor parts of the world (Myers 2002). What should be done is to find ways to deal with poverty, to establish sustainable consumption patterns and get local communities involved.

Wells and Brandon (1992) consider local participation in protected area management as a process beyond simply sharing the benefits, while Furze *et al.* (1996, 11) define it as “the active and meaningful involvement of local people in the development process and in decisions related to it”. In what concerns forms of participation, Wells and Brandon (1992) suggest a range of possibilities, from gathering/providing information, consultation, participation in decision-making, to even initiating action and evaluation.

The most common arguments for making the effort to involve neighboring communities are that: 1) involving local people helps build public support for conservation activities and means that there is less conflict and increased co-operation in the park-people relationship (Wells and Brandon 1992; Western and Wright 1994; Furze *et al.* 1996);

2) involving local communities means tapping into a rich source of local knowledge (Furze *et al.* 1996; Agrawal and Gibson 2001) and making use of valuable existing social capital (“the structure of relations between actors and among actors that encourages productive activities” – Pretty 2002, 69);

3) if not involved, communities will use resources destructively; if involved and given a share of the benefits from conservation, communities will become good stewards of resources (Western and Wright 1994);

4) it is only ethical to involve people in decisions that affect their livelihoods (Furze *et al.* 1996).

However, many authors point out that a community is not a ‘given’ and not a homogenous social entity and should not be taken as such. Instead, it comprises various social groups and individuals who differ in status and power and who have different wants, needs and different abilities to secure those wants and needs (Furze *et al.* 1996). Contesting the common views of community as a small spatial unit, a homogenous social structure or as a set of common interests and shared norms, Agrawal and Gibson (2001) suggest that communities should be analyzed considering three other perspectives: the existence of multiple actors with multiple interests within the same community; the local-level processes through which these actors interact among themselves and with outside actors; and the existing institutional arrangements⁶. Understanding these mechanisms in specific local contexts will prevent the shift of power from state to local elites and will help achieve the goal of including the marginalized (Agrawal and Gibson 2001).

2.4.2. Equity issues

One of the top priorities of the Fifth and latest World Park Congress in 2003 was the issue of equity related to protected area management. Indeed, this concern sprang from the recognition that often local communities are adversely affected by the presence of protected areas, as well as the fact that the local communities are frequently the ones bearing most of the costs of conservation and receiving few of the benefits, while still being insufficiently engaged in the management process (Phillips 2004).

⁶ Institutions are defined as “sets of formal and informal rules and norms that shape interactions of humans with others and nature” (Agrawal and Gibson 2001, 14)

A number of authors have approached the topic of the negative impacts suffered by local communities from the establishment of strictly protected areas, especially in developing countries (Wells and Brandon 1992; Pretty 2002; Brockington 2004). These negative impacts range from restricted access to natural resources, creating conditions for social tensions and impoverishment, to forced displacement, conflicts, and a general deepening of social and spatial inequalities between communities and social actors (Pretty 2002; Brockington 2004).

Protected areas founded in developed countries have also directly or indirectly affected adjacent communities. Fortin and Gagnon (1999) identify several such impacts: modification of employment structure, land speculation and potential rises in the cost of living, influx of new workers and residents, new demands on resources from new tourism developments, which in turn puts more pressure on the protected area itself.

In this context, major international constituencies⁷ have set goals to explore the inter-relationship between environmental and local livelihood benefits, to put in place policies to avoid and mitigate negative impacts, and whenever necessary, provide compensations and share benefits equitably. Moreover, work has been started at putting together a global assessment of the social impact of protected areas (Schmidt-Soltau and Brockington 2004). This is where this research will be contributing – by analyzing a case study from Romania – the Vânători Neamț Natural Park.

2.4.3. Attitudes and perceptions in the people-park relationship

Analyzing the nature of park-community relationship should be at the center of attention for designing current protected area best management practices. The concept of people-oriented park management planning was established as a result of the strong belief that cooperative attitudes within local communities would help to preserve the biodiversity in

⁷ IUCN (through the Strategic Direction on Governance, Communities, Equity and Livelihoods; formerly known as TILCEPA, Theme on Indigenous and Local Communities, Equity and Protected Areas), the CBD Programme of Work (COP 8), GEF

parks and reserves (Lam 2004). However, local communities are still not sufficiently engaged in park management (Phillips 2004).

According to many studies, the first step to achieve that is to understand that local people are not homogenous in their opinions and that their perceptions and attitudes toward protected areas are molded by contextual factors (Agrawal and Gibson 2001; Lam 2004; Anthony 2007). That is why attitudinal studies are recommended to identify park challenges in their relationship with neighboring communities and provide guidance for the design of future conservation programmes (Ormsby and Kaplin 2005).

A large portion of the literature place the most importance on level of education, affluence or cultural characteristics as factors that influence people's attitudes towards protected areas, while others point to personal experience with costs and benefits from the park (Lam 2004; Ormsby and Kaplin 2005; Anthony 2006; Allendorf *et al.* 2006), resource extraction restrictions and crop damage from animals (Anthony 2006; Allendorf *et al.* 2006), the relationship with the park staff, awareness about the protected area and continuity in management practices (Ormsby and Kiplin 2005; Anthony 2006).

What these studies have in common is the recommendation that more site-specific and human-faced management strategies should be designed to build on the positive attitudes of the local population, and to mitigate their negative perceptions (Lam 2004; Allendorf *et al.* 2006; Anthony 2007).

2.5. Nature conservation in Romania

2.5.1. The state of biodiversity

Biodiversity in Romania is considered to be among the richest in Europe – about 47 % of the country's territory is in a natural or semi-natural state, which explains why Romania got the nickname 'Canada of Europe' (Beckmam 2003).

This natural richness is determined by a wide variety of natural conditions, among which Romania's position at the confluence of several European eco-regions, including five of the ten bio-geographic regions officially recognized by the European Union: alpine, continental, Pannonic, Pontic (Euxinic), and steppe (Manoleli 2005). This, together with its extensive range of ecosystem/habitat types (two thirds of the Carpathian Mountains, home of viable large carnivore populations of bears, wolves and lynx; 200 km of the Black Sea shoreline; a large portion of the Danube and 75% the Danube Delta, which was declared a UNESCO Biosphere Reserve), has resulted in great floral and faunal diversity, including many endemic and rare species (Ioraş 2003).

At present, a total of 27.65% of Romania's land area is covered by forest, with over a half situated in the Carpathian Mountains, which foster some of the last virgin or semi-virgin forest and natural alpine ecosystems in Europe (Manoleli 2005). However, Romanian forests face the serious challenge of almost 30% of standing forests being returned to families of former land owners, with forecasts, modeled on initial restitution efforts that resulted in wide-scale deforestation, indicating up to 20% deforestation of returned forests for immediate economic gain, on top of illegal logging activities (Manoleli 2005).

2.5.2. The Romanian system of protected areas

Although some nature protection practices were present since the nineteenth century (recreation or hunting reserves) and proposals for landscape and natural monuments protection date back as far as 1907 (Ioraş 2003), it was only in 1930 that the first Nature Protection Act came into force in Romania (UPN 2001; Ioras 2003)

The first forest reserve was set up in 1932 (Domogled-Băile Herculane), the first National Park in 1935 (Retezat) and the first geological reserve in 1938 (Detunata Goală – the Apuseni Mountains) (Ioraş 2003). Even though many others were created⁸ and the first

⁸ By 1972, the number of protected areas had reached 190, representing approximately 100,000ha (UPN 2001)

Environmental Protection Law containing some guideline for the administration of protected areas was adopted in 1973 (No. 9/1973; ‘Zone Protejate în România’, București) (Ioraș 2003), there was no specific legal instrument following this law. Therefore, the country’s designated protected areas lacked administrative bodies and real protection against increasing human pressure (UPN 2001).

In the years following the fall of communism, after 1989, the first environmental non-governmental organizations were founded. Also, 13 national/natural parks were established through a governmental decision in 1990. However, true implementation of such provisions and effective conservation was very weak (UPN 2001).

In the process of preparing for the accession to the European Union, Romania has become a signatory of all major international conventions for environmental protection and has integrated all necessary European legislation, including developing a “Strategy and action plan for conservation of biodiversity and its components” in 1996, after ratifying the Convention on Biological Diversity (UPN 2001).

As of 2004, according to Government Decision 2151/2004 which established the limits of national/natural parks and biosphere reserves, Romania has designated 955 protected areas, covering 7% of the country’s surface, with a target to reach 15% by the end of 2013 set up in the National Development Plan for 2007-2013 (Manoleli 2005). Protected areas are classified in 10 categories, five following IUCN guidelines for categories I to V of protected areas and five special categories defined by international agreements. This includes three biosphere reserves and twenty-two national and natural parks (RMESD 2007) (see Appendix 1 for a map of protected areas in Romania).

With financial and technical support from the World Bank and the Global Environment Facility, the Danube Delta Biosphere Reserve and three national/ natural parks (Retezat, Piatra Craiului and Vânători Neamț) have established Park Administration Units

and prepared management plans (Manoleli 2005), while two similar projects are underway in Măcin Mountains National Park and Maramureş Mountains Natural Park.

2.6. The Vânători Neamţ Natural Park

2.6.1. General coordinates and background

Although originally the intention was to use the name Vânători Neamţ Forest Park, due to IUCN classification criteria and terminology, this 30,818 ha protected area in Northern Moldavia is now known as the Vânători Neamţ Natural Park (VNNP). It is situated in the north of Neamţ County, at the border with Suceava County, in the joining area between the Eastern slope of Stânişoara Mountains (part of the Eastern Carpathians) and the Neamţ Sub-Carpathians (VNNPMP 2006) (see Appendix 1 for a map indicating the geographical position of VNNP in Romania).

The park's establishment in 1999, together with the setting up of its administrative body and management plan, is closely linked to the UNDP/GEF Biodiversity Conservation Management Project carried out during 1999-2005 and meant to strengthen the Romanian system of protected areas.

The VNNP belongs to category V of the IUCN classification of protected areas, meaning an “*area where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological / cultural value and high biological diversity*”, corresponding to the Romanian “*parc natural*” as defined by Law 462/2001 (VNNPMP 2006).

Its stated purposes (VNNPMP 2006) are to provide sustainable forest management, to conserve the landscape and the local traditions, to establish a bison breeding center and attempt to reintroduce a free and viable bison population in the area, and to encourage the development of tourism, always bearing in mind the aforementioned values.

2.6.2. Forest management

Of the total surface of the park, approximately 85.35% (26,300 ha) is covered by forests. The tree species composition is as follows: 40% beech (*Fagus sylvatica*), 30% fir (*Abies alba*), 15% spruce (*Picea abies*) and 2% oak (*Quercus petraea*) (VNNP 2007). Out of the park's total forest area, 68% is owned by the state, 17% by the Metropolitan Church of Moldova and Bucovina, and the rest by private owners (NFA 2007).

In June 2002, Vânători Neamț Natural Park and the Neamț Forest Directorate (NFD) obtained the first independent Forest Stewardship Council certificate in Romania, acknowledging their sustainable forest management practices. That was reconfirmed in 2004 and, in addition, berries from the park's territory were also certified as non-timber forest products (VNNP 2007).

The administration of VNNP is subordinated to NFD, a branch of the National Forest Administration (Romsilva) (NFA). NFD provides funding for the park's administration, but is also the body that has the final decision in matters of forest management in the area. The park's administration collaborates with the three forest districts in the area – Văratec and Târgu Neamț (branches of NFD) and a private one – Neamț Monastery (NFA 2007).

2.6.3. Biodiversity

The flora and fauna present in VNNP is that of low mountains and hilly regions, characterized by a high diversity of species and by extended areas with a low degree of disturbance of the natural environment (VNNPMP 2006). On the territory of the natural park, there are a few strictly protected areas (VNNP 2007):

- the Silver Forest (corresponding to IUCN category IV of protected areas⁹) – a birch (*Betula pendula*) forest, with some more than 100 years old trees, covering 2.4 hectares and home to 150 plant species.
- the Copper Woods (also IUCN category IV) – about 21 hectares of common oak (*Quercus petraea*), the oldest being as much as 135 years old, situated on Filiorul Hill. Approximately 300 plant species were identified in this reserve. The most famous Romanian poet, Mihai Eminescu, immortalized the Silver Forest and the Copper Woods in his lyrics.
- The Dumbrava Oak Reserve – a century-old oak forest of 56.6 hectares, with some trees aged between 150-200 years. The value of this natural reserve is given by the dimensions and aspect of oak species, by the abundance of grassy flora and coniferous infiltrations.
- The “Dragoș Vodă” Bison and Carpathian Fauna Reserve (see section 2.6.4.) - 1047 species of vascular plants have been identified in the area, representing 53% of the Neamț county flora and around 25% of the Romanian flora (VNNP 2007). Out of these, 82 species are trees and bushes¹⁰ (VNNP 2007).

The flora found on the territory of VNNP also includes endemic species and over 50 rare species (*Angelica archangelica*, *Cypripedium calceolus*, *Taxus baccata* are a few species that are protected under Romanian laws) (VNNP 2007).

Studies on the fauna present in the Vânători Neamț Natural Park area (VNNP 2007) have identified 35 species of mammals, including the brown bear (*Ursus arctos*), wolf (*Canis lupus*), lynx (*Lynx lynx*), otter (*Lutra lutra*), wild boar (*Sus scrofa*). There are also significant populations of birds (102 species identified so far; e.g. birds of prey: blackthorn sparrowhawk - *Accipiter gentiles*, small screaming eagle - *Aquila pomarina*; rare species: *black stork*

⁹ **Habitat/Species Management Area** - protected area managed mainly for conservation through management intervention (IUCN 1994)

¹⁰ In addition, there were identified 580 species of fungi, 57 species of lichens, 147 species of mosses.

- *Ciconia nigra*), amphibians and reptiles (e.g. Carpathian triton - *Triturus montandoni*, a Carpathian endemism; species of community interest according to the Directives of the European Board 92/43 EEC: comb triton - *Triturus cristatus*, toad - *Bombina variegata variegata*), and invertebrates (VNNP 2007).

2.6.4. The European Bison

The European bison (*Bison bonasus*) is an important representative of the fauna of Neamț County, and one of the main focuses of VNNP activities. The European bison became extant in Romania due to excessive hunting; the last one was spotted in Ghiurghiului Mountains in 1810. In 1970, three bisons were brought in from Poland to live in the “Dragoș Vodă” Reserve. Currently, this impressive animal can be found only in captivity in Romania, in three reserves affiliated with NFA: Bison and Carpathian Fauna Reserve in Vânători Neamț, the Hațeg- Silvuț Reserve and the Neagra-Bucșani Reserve (VNNP 2007).

Worldwide, wild bison populations live freely in 5 countries: Ukraine, Poland, Belarus, the Russian Federation and Lithuania. One of VNNP’s objectives is to reintroduce bison into the forests of Neamț Mountains. For that purpose, a Bison Reproduction and Management Center was established, covering 107 ha (VNNP 2007). The purpose of this enclosure is for a small herd of bison to readjust to surviving in the wild, without human help in finding food or shelter (Curea pers.comm.). The herd can be localized through radio-collars attached to the herd leader and are carefully monitored (Cătănoiu pers.comm.).

The park administration would like to use the bison as a symbol of the region and, at the same time, as a unique selling point for the area. Therefore, a new trademark was developed and registered with the Romanian State Office for Inventions and Trademarks, called ‘Bison Land’ or, in Romanian, “Ținutul zimbrului” (see details in section 2.6.5.).

2.6.5. Tourism in Vânători Neamț Natural Park and adjacent areas

The development of tourism in the Vânători Neamț Natural Park area has traditionally been connected to the existence of numerous monasteries and hermitages in the area, some neighboring VNNP (Văratec), others deeper within the territory of the park (Agapia, Neamț, Secu, Sihăstria, Sihla). Other tourist attractions in the area are the Neamț Fortress, several memorial houses of established Romanian writers (Ion Creangă, Mihail Sadoveanu, Veronica Micle). Thirdly, another group of people are brought in the area by the thermal and mineral waters in two adjacent resorts: Bălățești and Oglinzi.

However, as Sebastian Cătănoiu (pers.comm.), the head manager of VNNP administration noted, most of the tourism in the area is a weekend or transit tourism: visitors usually come, most often by car, visit the monasteries, possibly the “Dragoș Vodă” reserve, and the other main tourist attractions and then travel on.

In order for the tourism in the area to develop further, the park’s administration considers that creating a unitary vision for the area is essential (Cătănoiu pers.comm., Cureau pers.comm.). That is one of the reasons for which the Bison Land trademark was created to act as an umbrella, a unifying and defining element, not only for the identity of the area as a tourist destination, but also for goods produced locally, festivals promoting local traditions, and so on (Cureau pers.comm.). However, the concept is still in its initial stage and the park has not yet obtained sufficient funding to develop and promote it further (Cureau pers.comm.).

2.6.6. Local communities

The VNNP administration declares in its Management Plan (VNNPMP 2006) that it is committed to achieving conservation objectives and to preserving the local landscape and traditions, whilst considering the development needs of local communities. In line with these principles, the head manager of VNNP administration states that a relationship based on collaboration with adjacent communities is preferred to one scarred by conflicts (Cătănoiu

pers.comm.). That is why the park has not yet imposed strict restrictions on traditional activities in the area and wants to establish a relationship based on close collaboration with representatives of the local communities – the mayors and Local Councils of 4 communes (Vânători Neamț, Agapia, Bălțătești and Crăcăoani) and 1 city (Târgu Neamț) (Cătănoiu pers.comm.). For a map of the park and adjacent communities, see section 3.4.

It must be noted here, though, that several villages (Groși, Târzia, Poiana, Brusturi, Loghin) situated on the Northern and Western border of the park are not even mentioned in the Management Plan and not included in the park's community activities. The park administration's explanation on this issue was that there is no particular reason for this situation, but simply it has been Vânători Neamț, Agapia, Bălțătești and Crăcăoani that the park has traditionally maintained relations with, and not the others. It is possible that these villages weren't taken into account simply because they are part of a different administrative unit than the park – they belong to Suceava County, while VNNP is located in the Neamț County.

One of the UNDP/GEF project's components focused on giving support for the local communities and provided small grants for 12 projects developed by newly formed local associations and NGOs (see Appendix 2 for a complete list of SGP beneficiaries and details of their respective projects). The purpose of this programme was twofold: on the one hand the projects would represent improvements in themselves, and on the other, local people would gain experience in project writing and accessing funding opportunities (Curea pers. comm.).

The 12 projects supported such activities as the creation of several ecology clubs in local schools, the organization of an environmental camp in Văratec, the rehabilitation of a local pasture, the promotion of local handcrafts, bringing together local guesthouse owners in an association, and waste management. Out of the 12 NGOs and associations, only a few are active at present and have found other sources to finance new projects (for more details, see section 4.4. and Appendix 2).

An important aspect of the park's activities addressing the relationship with the local communities refers to the involvement in the education of children in local schools. The park has prepared a textbook named "Bison land" which touches on general aspects concerning VNNP, the protected areas in Romania, and general environmental issues. This textbook has been chosen in 4 schools in the area to be taught during optional courses (Curea pers.comm.). Other activities include excursions to the VNNP visiting center, regular cleaning-up activities of river beds, together with participation in various contests and events organized by the park.

Another aspect the VNNP has worked on in the past few years has been waste management. Except for the closest town – Târgu Neamț – the villages in the park's area of influence did not have any kind of system in place for waste management. Traditionally, the volume of household waste was not a big problem and the main disposal option was backyard incineration. However, the volume of waste has increased considerably, in part due to the extended use of plastics in the last 17 years. Therefore, the uncontrolled dumping of waste in improper spaces has become a big problem in rural Romania, including Neamț County.

In collaboration with local authorities and a regional NGO – Ecosilvex 2000 from Piatra Neamț, the park's administration has helped obtain funding through the Small Grants Programme (SGP) for a project¹¹ that included purchasing waste bins for local villages and a PET shredding machine. Besides that, this problem is addressed through continuous involvement in educating and involving children.

IUCN category V of protected areas is unique among the rest of PA categories in its emphasis on the **interaction** between people and nature, putting people at the heart of their management approach (Phillips 2002). In line with this principle, this research analyzes the Romanian case study of Vânători Neamț Natural Park, focusing on if, and how, the park's establishment has influenced local people's livelihoods, and trying to identify their views and attitudes regarding VNNP.

¹¹ The project is called "Bison Land – a model for biodiversity conservation"

Attitudinal studies are recommended to identify park challenges in their relationship with neighboring communities and provide guidance for the design of future conservation programmes (Ormsby and Kaplin 2005). However, as important as attitude studies are in understanding these relationships, one must keep in mind that they are only indicating ‘attitudes’ – which may or may not be directly related to behavior (Aipanjiguly and Jacobson 2002). Such a study has not yet been performed in relation to Vânători Neamț Natural Park and they are very scarce for Romanian protected areas in general¹². This research attempts to fill that gap and, hopefully, provide a helpful tool in shaping VNNP future management approaches. The importance of this research lies also in the fact that it describes a new case study, adding to the existing body of knowledge necessary to strengthen conservation efforts and to find the most effective way of safeguarding biodiversity.

¹² One such study was carried out for Piatra Craiului National Park.

3. METHODOLOGY

This chapter describes the research design of this thesis, outlines the methods that were used, and provides justification for their inclusion. Moreover, delimitations and limitations encountered while carrying out this research are explained. This research takes a case study approach. The methods that were used are archival research, unstructured and semi-structured interviews, field visits and administering a questionnaire survey.

3.1. Case study approach

Case studies are often the approaches of choice in the research design of dissertations and theses in fields such as social sciences (Yin 1994). According to Yin (1994, 2), “the case study contributes uniquely to our knowledge of individual, organizational, social, and political phenomena”, by providing a good understanding of not only the phenomena itself, but also its real-life context. It is particularly for this reason that the case-study approach was chosen for this research, since surveys’ ability to investigate the context of an issue is limited (Yin 1994).

This research employs a single-case study approach, looking at Vânători Neamț Natural Park – a Romanian IUCN category V protected area. The reasons for focusing on this particular park lie in the fact that it is a quite recently established protected area, thus allowing easier analysis of its impacts on local communities. Furthermore, practical reasons were the park’s accessibility and location – its position, relatively close to the researcher’s home town allowed for more flexibility in scheduling more than one trip to the research site and compensated for the lack of a portable computer.

3.2. Archival research

A first and important step in this research was to acquire a good understanding of the topic and to construct a conceptual framework by conducting *archival research* – identifying and analyzing relevant national and international documents. These included books, journal articles and reports found in the CEU library, as well as online, on the websites of relevant organizations and of the Vânători Neamț Natural Park, which was chosen as the case study for this research.

3.3. Preliminary field visit

A preliminary field visit was undertaken in mid May, 2007. The purpose of the visit was to get familiar with the chosen site, the Vânători Neamț Natural Park and to get more site-specific information that would help with the further development of the research. This involved making personal contact with park staff and local authorities in order to clarify the location and number of villages situated within the park's boundaries and in its close vicinity, and to obtain valuable demographic data about the population and number of households in selected villages. Furthermore, relevant documentation was obtained from the park's administration office.

Also, *unstructured and semi-structured interviews* were conducted to investigate the current situation. Interviewees were members of the park staff – the general manager, the education and community relations officer. The purpose of the interviews was to get details about the park's management policies and activities directed toward local communities, to identify potential successes or failures encountered along the way in the park-people relationship, and to get insight into the staff's attitudes regarding this issue.

Other interviews were conducted at this time, as well as during future visits, with members of local associations and non-governmental organizations, identified from the park's internet website and from interviews with the park's personnel as having participated

in development projects made possible or financed with the help of the park administration. The snow-ball sampling technique was used to identify and develop contacts with further such participating organizations or projects.

This first field visit was also used as an opportunity to pre-test the questionnaire that would be administered at a later date to members of selected local communities. Pre-testing a questionnaire is very useful in order to make sure that the questions are clear and understandable by the respondents and that there are no inconsistencies in the meaning or order of questions that might confuse respondents and interfere with the results (Fowler 2002; de Vaus 2002). Pre-testing is also useful to help identify new issues of importance to the respondents and to find out how much time administering the questionnaire will actually take, thus helping to plan the following field trips (Fowler 2002). Particular care was given to choosing respondents from other local villages than those selected for the actual questionnaire.

3.4. Constructing the questionnaire

A questionnaire (see Appendix 3 for a copy of the English version of the questionnaire) was used to find out local people's beliefs and attitudes toward the existence of Vânători Neamț Natural Park, because surveys are a good method to identify and understand differences and connections between variables such as socio-demographic information and personal beliefs (Weisberg et al. 1996).

The questionnaire was adapted from a previous master thesis (Kipson 2003) and modified to fit this research and the local circumstances. It consists of several sections, meant to explore: background information about the respondent and about the sources of livelihood within the household, the development of local tourism and how/if it creates benefits for the local people, local needs of the community and, finally, local people's knowledge of and opinions and attitudes towards the Natural Park.

The majority of the questions are closed-ended, making it easy to code the data for further analysis. However, several provide some of the response freedom of open-ended questions, such as #24, which asks for the respondent's agreement or disagreement of a certain statement and then requires him to give a reason for his/her answer. The questionnaire also includes two fully open-ended questions prompting personal opinions on the part of the respondent.

3.5. Administering the questionnaire

The face-to-face questionnaire was administered in two different times in late May and early June 2007. The targeted respondents were adults (≥ 18 years old) living in randomly selected households from 6 villages situated within the park's boundaries and in neighboring areas. Due to insufficient time and to financial and transportation limitations, this research could not include all villages that fall within the Vânători Neamț Natural Park's area of influence. Instead, this research focused on the region situated in the South-Eastern part of the Park and adjacent area. Table 2 below provides administrative and demographic details concerning villages belonging to the above mentioned area and is accompanied by a map indicating the location of these villages in relation to the park territory (Figure 1).

Table 2. Villages located within and on the South-Eastern border of Vânători Neamț Natural Park

| Commune ¹ | Population ² | Villages* |
|----------------------|-------------------------|--|
| Agapia | 4568 | Agapia Filioara Săcălușești Văratec |
| Băltătești | 4470 | Băltătești Valea Seacă Valea Arini |
| Crăcăoani | 4600 | Crăcăoani Poiana Crăcăoani Cracăul Negru ** Mitocul Bălan ** Magazia ** |

1 Romanian administrative unit, which is one-level higher than village

2. Source: NRSD 2006

* villages included in the sample are marked with bold characters

** indicates villages situated within the park's boundaries.

Headquarters of VNNP administration (see appendix 2 for photographs)

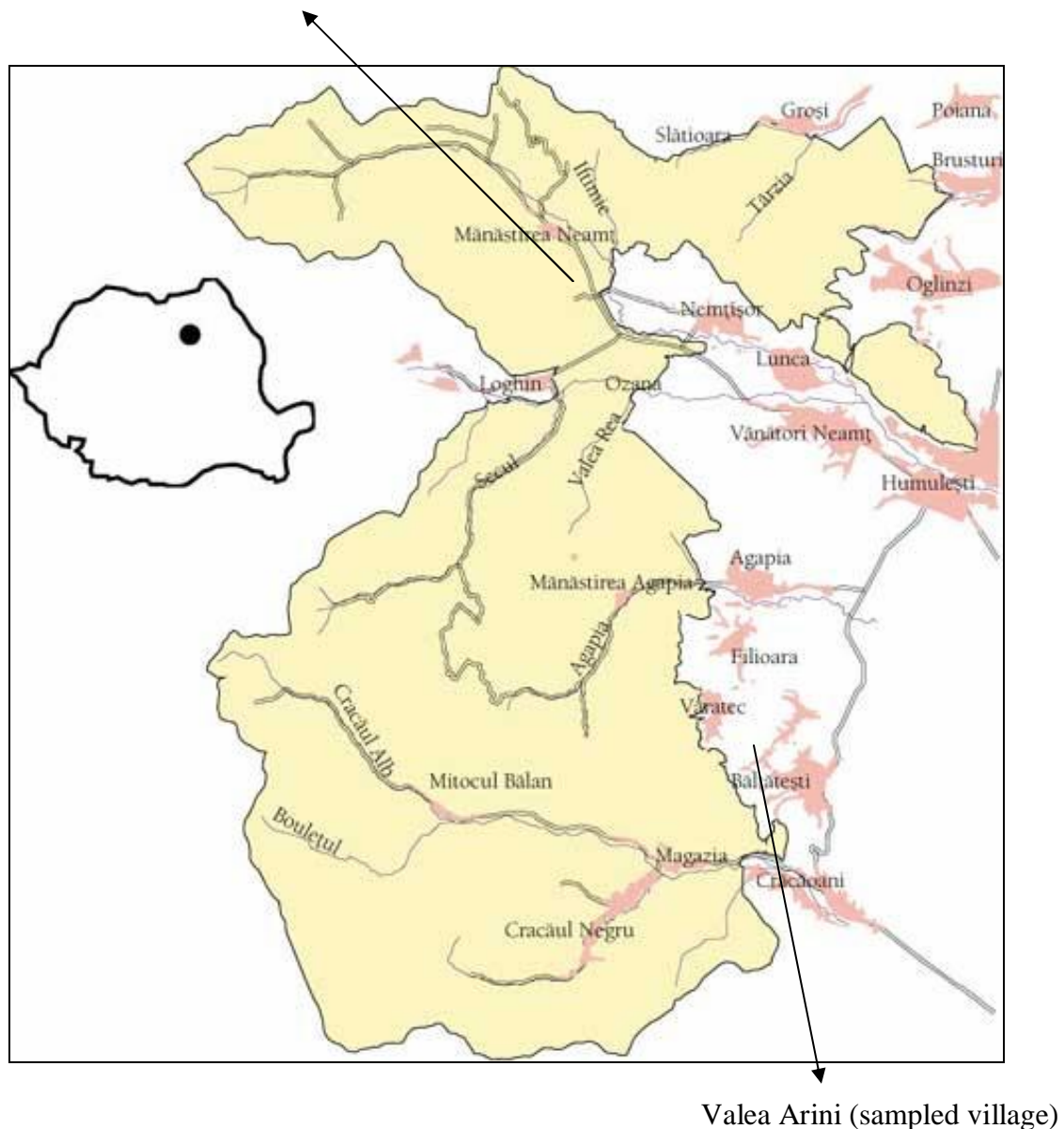


Figure 1. Vânători Neamț Natural Park and local communities

Source: adapted from AER 2004a

In order to determine if there are significant differences between results obtained from people living inside the park's boundaries and those living in adjacent areas, three neighboring villages were selected (see Table 3). The criteria used for the selection was that these villages have relatively similar population sizes to those of the three villages situated inside the park.

Table 3. Population, number of households and sample size in selected villages

| Village | Number of inhabitants | Number of households | Number of sampled households | Sampled households (%) |
|-------------------------------|------------------------------|-----------------------------|-------------------------------------|-------------------------------|
| Mitocul Bălan | 352 | 112 | 12 | 10.72 |
| Magazia | 689 | 220 | 23 | 10.90 |
| Cracăul Negru | 1246 | 422 | 31 | 7.35 |
| Total inside the park | 2287 | 754 | 66 | 8.75 |
| Valea Arini | 650 | 250 | 24 | 9.60 |
| Văratec | 903 | 229 | 19 | 8.30 |
| Filioara | 1108 | 371 | 26 | 6.95 |
| Total outside the park | 2661 | 850 | 69 | 8.12 |
| TOTAL | 4948 | 1604 | 135 | 8.42 |

The demographic information provided in Table 3 was obtained during the preliminary field trip from the respective city halls. However, clear accounts concerning the number of households in each village were not available to the researcher – all reliable statistical data takes into account the commune as a whole, and does not detail the situation in component villages. Therefore, field observation was used instead to determine exactly how many households each particular village has, thanks to the fact that these villages have no street names, and the house numbering is done continuously, with one starting point and one ending point.

As shown in Table 3, the sampling frame, representing the total number of households in the 6 villages chosen for the purposes of administering the questionnaire is 1604. Out of these, the questionnaire sample consisted of 135 households, accounting for 8.42% of the sampling frame and giving a confidence interval of 8.07, at a 95% confidence level. Simple random sampling was used to select certain households for administering the questionnaires. Table 4 shows the proportion of each village in the overall sample, with 48.9% of the sampled households situated inside the park's borders and 51.1% located in the vicinity of the park.

Table 4. Sample size in selected villages

| Village | Sampled households | Percentage |
|-------------------------------|---------------------------|-------------------|
| Mitocul Bălan | 12 | 8.9 |
| Magazia | 23 | 17.0 |
| Cracăul Negru | 31 | 23.0 |
| Total inside the park | 66 | 48.9 |
| Valea Arini | 19 | 14.1 |
| Văratec | 24 | 17.8 |
| Filioara | 26 | 19.3 |
| Total outside the park | 69 | 51.1 |
| Total | 135 | 100.0 |

In case respondents were not found at home, an attempt was made to come back at a later time during the day and try again. However, if that attempt was again unsuccessful, the third house to the right or left, alternatively, was chosen in its place. The same procedure was applied in the case of refusal to fill out the questionnaire. Approximately 10% of the people asked to participate in the survey refused to do so, usually the elderly, on the grounds of being too old and unable to answer any questions.

3.6. Data analysis

Once filled-in, the information gathered from the questionnaires was coded and introduced in an Excel data sheet. Coding is defined by Weisberg *et al* (1996) as “the conversion of verbal responses into a set of numbers representing mutually exclusive and exhaustive categories”.

Closed-ended questions are usually preferred by researchers because they are relatively easy to code. In this case, besides the coding categories for closed-ended questions already included in the questionnaire, several other categories were assigned at a later date to handle supplementary or unanticipated responses to closed-ended or semi-closed-ended questions (as mentioned in section 3.4.).

As Weisberg *et al* (1996) mention, open-ended questions are a source of very interesting information, but, also, more difficult to code than closed-ended questions. The contextual method (Weisberg *et al* 2006) was used in this research, as the researcher listed all the answers and grouped together similar answers, assigning them codes and trying to preserve as much detail as possible.

The data was then analyzed using SPSS software package for Windows version 12.0 in order to find any relevant differences or associations among the variables involved and to be able to give recommendations on the basis of those results.

3.7. Ethical considerations

During carrying out the research and writing of the thesis, the researcher made sure she followed a strict ethical protocol, being guided by the following five major principles:

- Making sure all participation was voluntary and letting respondents know that before starting the questionnaire
- Obtaining the informed consent from the respondents before starting the questionnaire
- Giving reassurance to all respondents that they will suffer no adverse consequences as a result of participating in this research
- Offering respondents confidential anonymity by not using their names and making sure they are not identifiable from the text of the final thesis
- Providing privacy.

3.8. Delimitations and limitations of the research

At the beginning of the research process, the researcher's intention was to include in the sample all villages mentioned in the VNNP Management Plan as being situated within the park's area of influence. However, during the first field visit, it was discovered that the time allotted for conducting the field research does not allow the coverage of such an area, and

neither did the resources available for this purpose. The sometimes scarce and inflexibly scheduled public transportation between villages, the low availability of accommodation possibilities in some of these villages, and the poor condition of infrastructure especially in those villages situated inside the park's border are all contributing factors to the decision to delimitate the focus area for this research to that comprising villages belonging to Agapia, Bălătești and Crăcăoani communes.

Due to the fact that the researcher became aware of the exclusion of villages on the Northern border of the Park relatively late during conducting field research, and due to the short time available, they were not included in this survey.

In addition, the same constraints mentioned above meant that the time spent in each village for questionnaires was limited, which did not allow for persistence in approaching non-respondents. The strategy set aside for these cases and described in section 3.4 was used quite frequently. Also, it is possible that the number of unemployed women is artificially higher in my sample than that of employed women, due to their higher availability at the times the questionnaire was administered. It must be noted that these aspects may influence the extent to which the results of this research may be extrapolated. However, the researcher tried to keep the balance by administering questionnaires in the same village at all times during the day.

Moreover, the questionnaires could have probably been further improved and could have included more issues if not for the short time available for conducting preliminary research and pre-testing.

It must also be noted here, that this research does not cover the topic exhaustively, but constitutes a starting point and a case-study of a protected area in Romania. So far, there have been no other studies of this kind done in the area. The park's administration has focused on its relationship with representatives of local communities, and less on individual opinions. Based on the results obtained in this study, further research needs might be identified, as well.

An attempt was made to involve at least one monastery community in this research as well. Due to low accessibility of the monasteries situated inside VNNP, Văratec Monastery was selected. It is home for approximately 450 nuns and is one of the major tourist attractions in the area (Văratec nun, pers.comm.). There is no clear delimitation between the 185 houses belonging to the monastery and used by nuns and those of the villagers of Văratec, another reason for which the opinion of the head nun was of interest to the researcher. Besides playing an important role in bringing tourists in the area, the Monastery has claims that a large forest surface be returned in its property (Cătănoiu, pers.comm.). However, during several trips to the monastery, the head nun was not available for an interview.

With less constraints regarding available time, the questionnaire might have been further improved through more exhaustive pre-testing. Small weaknesses of the questionnaire in the form it was administered were noticed by the researcher. One such instance refers to question # 18. When analyzing the results, the impression of the researcher was that there was a tendency to give some facilities a greater importance due to the sequence they were presented in – if the respondent gave a high score for running water, he/she might have done the same for sewerage and waste collection.

A more in-depth pre-testing might have also contributed to a better identification of relevant issues to be included in the research. As it is, this research cannot be a comprehensive coverage of the topic and some of those issues will be pointed out as directions for further research.

4. FINDINGS AND DISCUSSION

This section provides an overview of the questionnaire data obtained from local communities living within and adjacent to Vânători Neamț Natural Park, together with the discussion of their significance. In addition, information obtained from semi-structured and unstructured interviews with VNNP personnel, with people involved in local NGOs (see Appendix 2), or simply from informal talks with local villagers is included where relevant.

The chapter is structured following the topics approached in the questionnaire, first providing socio-demographic information about the respondents and their families, then their opinions about tourism, local needs of the community and knowledge and attitudes towards VNNP.

4.1. Socio-demographic data

A good balance regarding the *gender* of respondents resulted from the administration of the questionnaire: 66 male and 69 female. This equilibrium between male and female respondents was achieved due to the fact that in the morning, women were usually home and answered the questionnaire, while in the afternoons and evenings, men participated more frequently.

The mean *age* of participants to this survey was 46.1 (Table 5), with a higher average of 49.3 in villages inside the park, compared to 43 in neighboring villages (Table 6). The mean number of people living in the same household is 4.34 (Table 5), while the maximum is 8 and the most frequent situation is that of 5 people sharing a household. For 66.7% of respondents, their village is also where they were born and lived all or most of their lives. That is the case especially for men, as women traditionally followed their husbands after marriage ($X^2(1) = 4.802, p < .05$).

Table 5. Basic demographic frequencies for the households sampled (N = 135)

| | Age of respondent | Number of people in household | Number adults in household | Years in village of respondent |
|-----------------------|--------------------------|--------------------------------------|-----------------------------------|---------------------------------------|
| Mean | 46.1 | 4.3 | 3.0 | 37.6 |
| Median | 45 | 4 | 3 | 39 |
| Mode | 39 / 49* | 5 | 2 | 17 |
| Std. Deviation | 12.708 | 1.603 | 1.054 | 17.769 |

* Multiple modes exist.

The distribution of respondents in age groups is relatively even, as well, with 38.5% of respondents between 18 and 40 years old, 46.7% aged 41 to 60 and the rest (14.8%) more than 60 years old. The smaller proportion of respondents over 60 years can be partly explained by the fact that elderly people were usually the ones declining to participate in the survey, saying they were too old to understand and unable to answer any kind of questions.

Also, all mean values for the number of people and number of adults living in the same household, and number of years in the respective village are higher in ‘inside’ villages, that in neighboring ones (Table 6). In all six villages it is very common that several generations live in the same household, e.g. 79 respondents lived in households together with 2 or more other adults (over 18 years old) and 54 lived together with 3 or more adults.

Table 6. Differentiated demographic frequencies for villages inside and outside VNNP

| | | Age of respondent | Number of people in household | Number of adults in household | Years in village of respondent |
|------------------------------------|-------------|--------------------------|--------------------------------------|--------------------------------------|---------------------------------------|
| ‘Inside’ villages (n = 66) | Mean | 49.3 | 4.6 | 3.3 | 42.1 |
| | Mode | 65 | 5 | 4 | 30 |
| ‘Outside’ villages (n = 69) | Mean | 43.0 | 4.1 | 2.8 | 33.3 |
| | Mode | 30 | 4 | 2 | 17 |

Figure 2 indicates the general *education level* of the respondents, with almost 30% of the people having gone through a vocational school after finishing secondary school, or even regular high-school. Just a small proportion of people have only primary or unfinished

secondary studies (8.9%), and those respondents are mostly elderly people – all 6 respondents with primary school as their highest obtained degree are over 60 years old, while the other 6 people with unfinished secondary school have ages ranging between 43 and 67 years old. In fact, there is a negative correlation between the age of respondents and their education level ($r_s = -.174$, $n = 135$, $p < .05$). The explanation for that lies in the fact that in the past only primary education was compulsory in Romania, while currently, obligatory school is extended to grade 10.

It is clear that women dominate the middle-lower education categories, with only 3 women in the sample having undergone or currently undergoing some kind of higher studies (Figure 3). By comparison, Mann-Whitney U-tests indicate that men have completed higher levels of education ($z = -2.437$, $p < .05$).

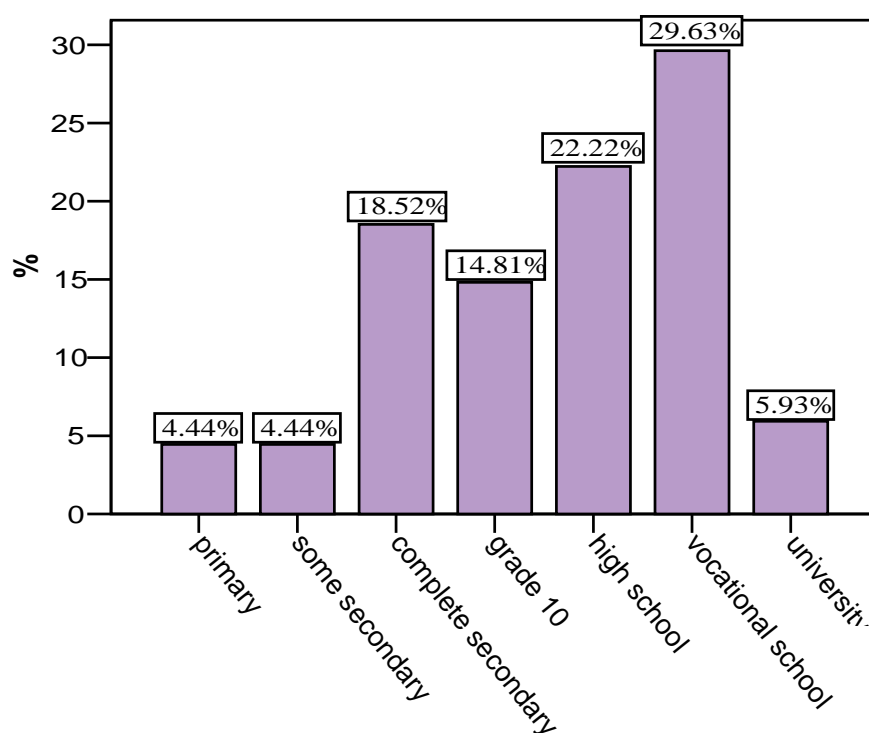


Figure 2. Education level of respondents (N = 135)

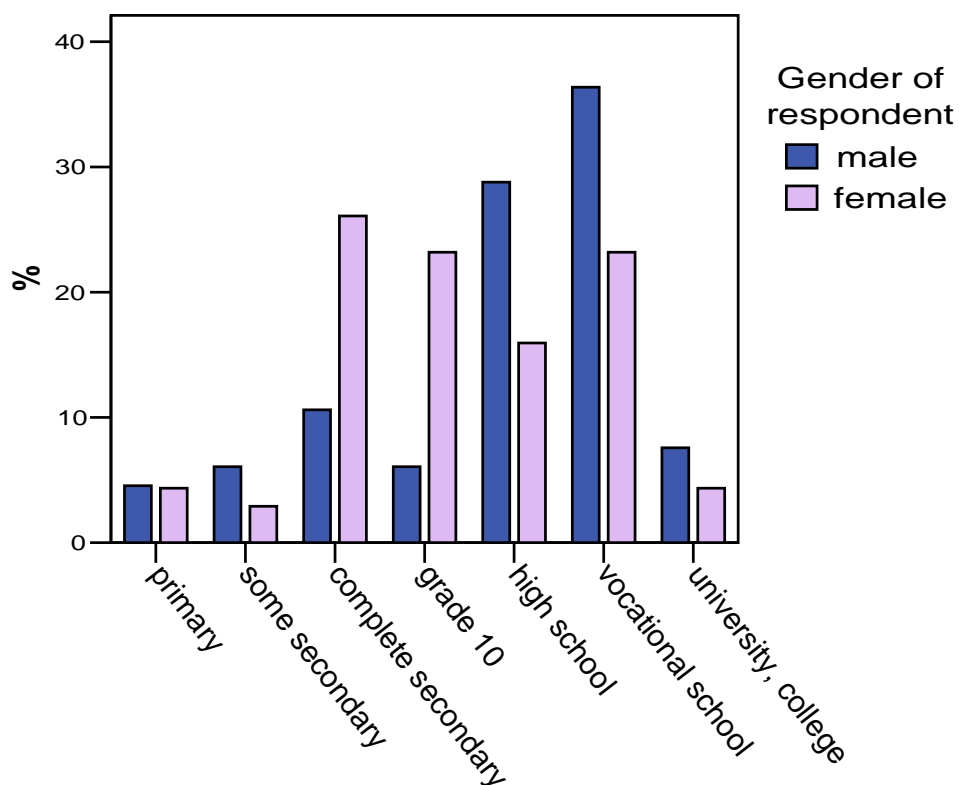


Figure 3. Education level of respondents, according to gender

Figure 4 groups the respondents according to their education levels and the position of their village relative to Vânători Neamț Natural Park. The figure shows a slight predominance of people living outside the park for higher education categories, with the exception of primary and secondary education, where people living inside the park have greater relative percentages, e.g. out of the 12 people with only primary or unfinished secondary education, only one lives in the park's neighboring area. However, the relationship between these two variables is not confirmed statistically ($z = -1.81$, $p = .07$)

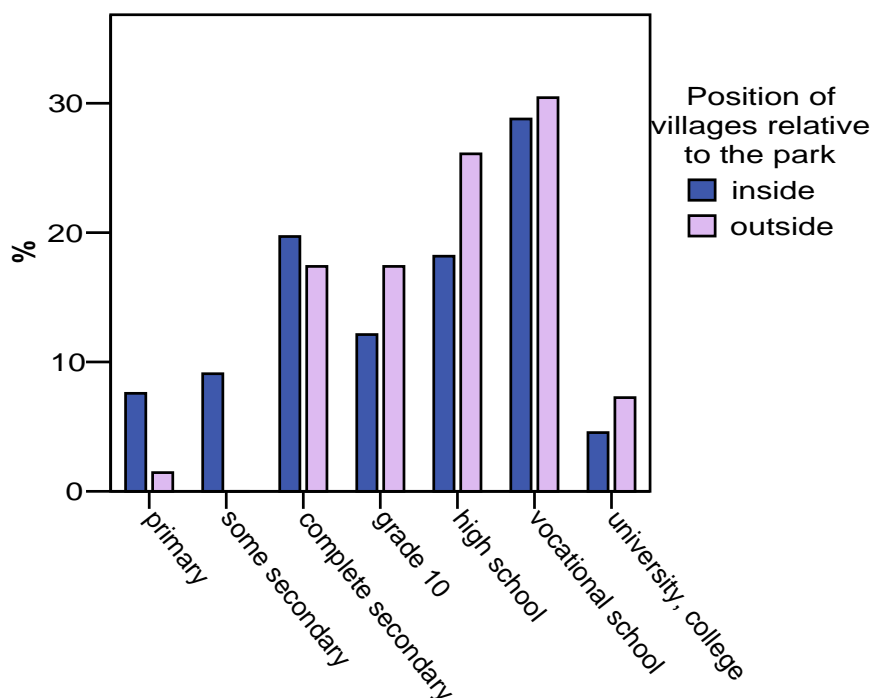


Figure 4. Education level of respondents according to position relative to the park

Among the respondents, the three major categories regarding *employment status* (Figure 5) are those of people working for an employer (31.1%), people who have retired (24.4%), and housewives (28.9%). In fact, one of the aspects people have complained about throughout the field research, while filling the questionnaire or in the course of conversation, is the lack of available jobs.

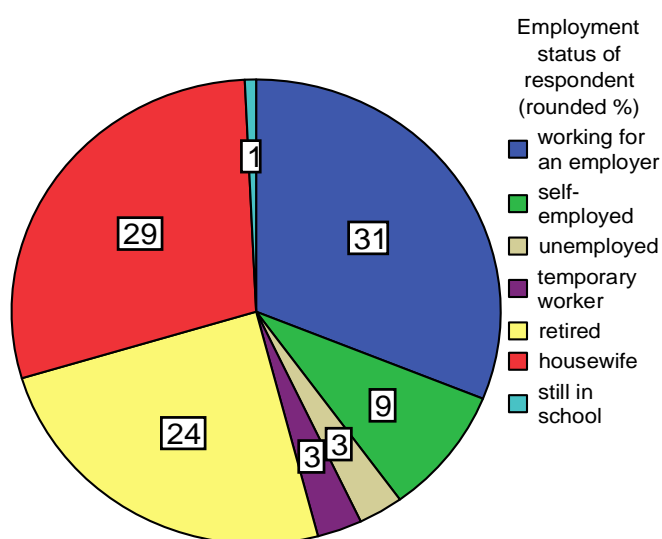


Figure 5. Employment status of respondents (%; N = 135)

More than 50% of the female respondents were housewives (Figure 6) and only 20% worked for an employer. Conversely, more than twice as many men are employed or self-employed. There is a significant association between the gender and the employment status of respondents ($X^2(6) = 45.821, p < .01$).

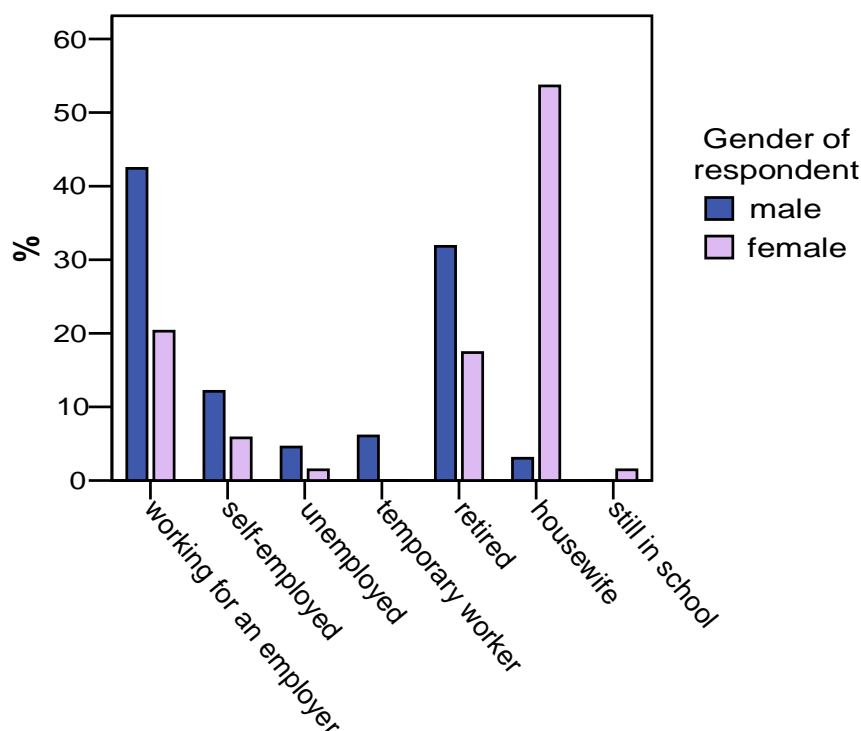


Figure 6. Respondents' employment status by gender

Concerning the situation in 'inside' and 'outside' villages, around 10 % more people are working for an employer outside the park's boundaries, compared to the inside, and approximately 8 % more are self-employed. On the other hand, 'inside' villages better characterize categories of people who have retired or are housewives. Chi-square tests indicate there is no significant difference between the employment status within 'inside' and 'outside villages' ($X^2(6) = 11.171, p = .83$).

One of the main problems the inhabitants of the area are facing is the scarcity of job opportunities, especially for women. Like in many other parts of Romania, rural areas in particular, people have left abroad in search of better paid jobs (Tomaşevici 2006). In fact, 13.4% of respondents reported that they or at least one member of their households are working abroad.

In terms of the average *monthly household income*, more than half of the respondents reported incomes in the range of 300-900 RON¹³ (65.2%), while 13.3% have very low incomes, <300 RON, and only 12.5% have incomes >900 RON. As for the relationship between education level and monthly household income, there is a positive correlation between the two variables, with high education levels presumably yielding higher incomes ($r_s = .304$, $n = 135$, $p < .01$).

Figure 7 differentiates between monthly household incomes reported in ‘inside’ and ‘outside’ villages. More respondents who reported incomes in the higher income categories live in villages adjacent to VNNP than in ‘inside’ villages. A note must be made here that the category of ‘over 1500 RON’ includes incomes in the 1500 RON range, but also quite higher revenues. The latter cases were included in this category, in order to protect the respective respondents’ confidentiality.

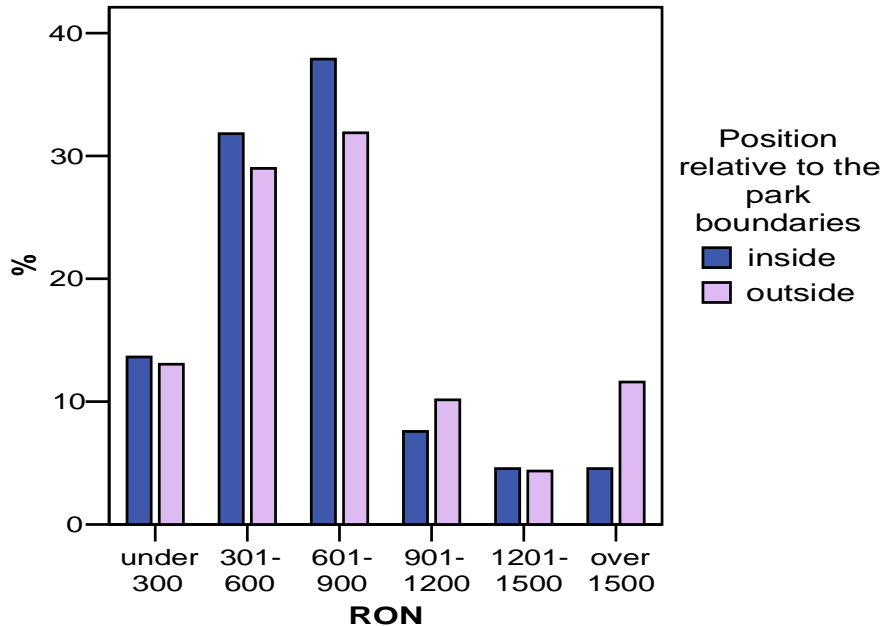


Figure 7. Monthly household income in villages inside and outside the park boundaries

¹³ 1 euro = 3,2 RON (the current Romanian currency – the Romanian ‘leu greu’).

4.2. Land and livestock

The traditional activities and sources of livelihood of local communities in the Vânători Neamț Natural Park and surrounding area are forest and wood products exploitation, agriculture (crops, horticulture, hayfields and livestock rearing), and practicing traditional arts and crafts and selling products in local or regional fairs (VNNPMP 2006).

A majority (87.4%) of respondents stated that they own land (Table 7), while the remaining 12.6% declared they do not own land personally, but that members of their households do. However, many complained that they only own small plots, insufficient to even qualify for receiving subsidies.

Table 7. Land ownership and use in selected villages

| Position relative to the park's boundaries | Land owners % | Growing crops % | Garden owners % | Hayfield owners % | Orchard owners % | Forest owners % |
|---|----------------------|------------------------|------------------------|--------------------------|-------------------------|------------------------|
| Inside villages | 92.4 | 43.9 | 92.4 | 90.9 | 3.0 | 0 |
| Outside villages | 82.6 | 31.9 | 75.4 | 63.8 | 26.1 | 4.4 |
| TOTAL | 87.4 | 37.8 | 83.7 | 77 | 14.8 | 2.2 |

Most frequently, the agricultural land in surveyed villages is used as following: gardens around the house (83.7% of respondents), hayfields providing hay as feed for livestock and a place for small-scale grazing (77%), arable land for growing crops, e.g. potatoes and corn (37.8%), orchards (14.8%) and forested land (2.2%).

The agriculture practiced in the area is mostly pesticide-free, and farmers use natural fertilizer (manure) (VNNPMP 2006). Also, hayfields, as landscapes, are quite representative for the area, and are places of quite high biodiversity (VNNPMP 2006).

Forest ownership was only reported by respondents living in 'outside' villages. Orchard ownership is village-dependent ($X^2(5) = 25.745$, $p < .01$), being present more frequently in Filioara and Valea Arini, which have better conditions for horticulture.

Meanwhile, hayfield ownership is higher in ‘inside’ than ‘outside’ villages ($X^2(1) = 14.047$, $p < .01$), due to land availability and local conditions.

Livestock rearing is another important activity in the area (Table 8): 83% of respondents own some kind of poultry, 77.8% own cattle, pigs (63%), sheep (47%), horses (22%) and 1 person raises rabbits. According to VNNPMP (2006), the area is not yet affected by overgrazing, although some communities suffer from insufficient grazing grounds, a fact that was also mentioned by survey respondents (see section 4.4.2.).

Table 8. Livestock ownership

| Type of livestock | Households owning livestock | | | | | |
|-------------------|-----------------------------|------|---------|---------|------|------|
| | n | % | Minimum | Maximum | Mean | Mode |
| Poultry | 112 | 83 | 3 | 30 | 13.5 | 10 |
| Cattle | 105 | 77.8 | 1 | 13 | 1.7 | 1 |
| Pigs | 63 | 46.7 | 1 | 15 | 1.62 | 1 |
| Sheep | 47 | 34.8 | 1 | 50 | 9.08 | 5 |
| Horses | 22 | 16.3 | 1 | 2 | 1.18 | 1 |
| Rabbits | 1 | 0.7 | 40 | 40 | 40 | 40 |

4.3. Tourism

As locals confessed, the community does not really enjoy benefits from tourism, except for a few individuals who managed to open guesthouses in villages situated outside the park. The lack of benefits from tourism is especially true for the three villages inside the Park (Magazia, Cracăul Negru and Mitocul Bălan), which are located at 4, 8 and 12 km away, respectively, from the main road that connects Piatra Neamț, the county residence city and Târgu Neamț. The side-road leading to them has only been stone-paved in 2005 and a project to fund its improvement has long been waiting approval, according to respondents. Also, there are no accommodation facilities available for tourists in these three villages. It is, thus, of no surprise that the few tourists visiting the area are mostly weekend tourists from the near-by cities of Piatra Neamț and Targu Neamț, on their way to fish or barbecue on the shores of the Cross Lake (locally known as Cuiejdel Lake) (see Appendix 4 for photographs of the lake). This is also reflected in the fact that 91.1% of respondents declared that neither

they, nor any member of their household have any direct benefits from tourism, such as income from providing accommodation, selling food and drinks or providing other kinds of services.

On the other hand, 84.4% of respondents think that the number of tourists coming to visit the area should increase and 64.4% provided the following reasons for their answer, with several persons providing more than one reason:

- 44.8% think the natural beauty of area make it worth visiting
- 34.5% encourage the development of tourism because they consider that an increase inflow of tourists would bring about investments in infrastructure, job creation, and, first of all, a much needed new source of income for locals.
- 21.8% think more tourists are welcome, but consider that there are no proper facilities to accommodate and entertain them
- 5.8% would like to see more tourists in the area, because they could provide accommodation and/or sell goods
- 2.3% consider that there already are enough tourists in the area, and still, the advantages are not visible for the community

When asked to indicate out of preset answers what they considered was the potential of the area in attracting tourists and to identify other options (Table 9), 83% considered the natural landscape as the best the area had to offer, 51.9% of respondents said tourists should come to visit the monasteries in the area, while only 17.8% thought the traditional lifestyle would represent a potential. These opinions are village-dependent when talking about visits to the monasteries ($X^2(5) = 41.133$, $p < .01$), with respondents living closer to some of these monasteries obviously indicating them more often as a strong tourist attraction.

However, this answer might also indicate that locals do not regard the area belonging to and surrounding VNNP as constituting a region with similar features and traditions that could better develop as a whole than separately, village by village or commune by commune.

This can be an opportunity for Vânători Neamț Natural Park, i.e. a unifying element bringing all inside and surrounding communities together and providing them with a shared identity. The concept of ‘Bison Land’ (see sections 2.6.4. and 2.6.5.) is a good step in this direction.

The other options for tourists identified by respondents (Table 9) also vary between villages ($X^2(55) = 130.55, p < .01$), an example of local knowledge of local conditions.

Table 9. Other tourist attractions identified by respondents

| | Frequency |
|--|-----------|
| Cuiejdel lake | 25 |
| Clean air, peace | 18 |
| Baltatesti thermal and mineral water resort | 7 |
| Accommodation exists, ATV rental* | 4 |
| Fresh, organic food | 4 |
| Plenty to see (historic, cultural and natural sites) | 2 |
| The bisons and wild Carpathian fauna reserve ‘Dragoș Vodă’ | 1 |

* in Văratec

Rural tourism represents a very desirable option in order to achieve sustainable development for local communities adjacent to protected areas (Allart 2001). Tourism has been considered “the most dignified exploitation of the national parks” (Ceballos-Lascuráin 1996, 44). This statement can certainly be applied to an IUCN category V protected area, such as Vânători Neamț Natural Park, which is precisely meant to combine landscape conservation and recreation.

Tourism can be seen as a mediator between the protected area and the local communities (Nepal 2000): it triggers economic development and creates a value for conservation in the eyes of local people, while for the protected area it can become an important source of revenue and increases environmental awareness, thus helping the objective of conservation (Allart 2001).

However, in order to develop rural tourism in the area, VNNP cannot act by itself; it needs the involvement of local communities, because they are the ones running the necessary support facilities and providing services. The park’s role is to protect the area’s natural and

cultural heritage, for and through tourism (Kreisel 2002), to enhance the local communities' capacity to develop towards rural tourism, and to make sure that such tourism does not have negative impacts, such as pollution (e.g. air pollution, litter, sewage) and excessive strain on natural resources, including biodiversity, nor overload local infrastructure (Allart 2001).

4.4. Needs of the community

4.4.1. Access to basic facilities

The third section of the questionnaire intended to identify what sort of basic facilities do inhabitants in selected villages have and what they think is missing or needs improving in their community.

In terms of *basic facilities*, all respondents have *electricity*, but only 35.6% have some sort of system of *running water*¹⁴, and only 3.7% have *central heating*. For most respondents, the water source is still represented by wells, which are quite vulnerable to the drought that the whole country has experienced this year (NMA 2007). All who have access to running water declared they have done so at their own initiative and using their own financial means, with no help from local authorities.

The situation is quite similar for 'inside' and 'outside' the park village in terms of central heating, but differs when it comes to running water – only 37.5% have running water in 'inside' villages, whilst in 'outside' villages this increases to 62.5%.

Whether the household has installed a running water system ($z = -4.839$, $p < .01$) or has central heating ($z = -3.226$, $p < .01$) naturally depends on the affordability of such facilities for the respective household (reported monthly household income).

¹⁴ tap in the kitchen, or an outdoor tap connected to a close-by well, from which water is pumped

4.4.2. Importance of facilities and other issues

Another aspect touched on in the local community needs section asked people to assign degrees of importance to certain facilities and issues (Table 10). The “total mean” column provides the overall result of the survey, listing the facilities/issues in the order of importance for participants in the survey, from most to least important. The remaining columns give a glimpse at the situation found in the 6 separate villages selected for the survey.

Table 10. Importance of listed facilities/issues for respondents

| Facilities/ issues | Total mean* | Mean* | | | | | |
|--------------------------------------|----------------|------------------|-------------|------------------|----------------|-------------|------------|
| | | Inside VNNP | | | Outside VNNP | | |
| | | Mitocul Balan | Magazia | Cracaul Negru | Valea Arini | Varatec | Filioara |
| Better roads | 1.53 | 1 | 1.22 | 1.23 | 2.05 | 1.67 | 2.31 |
| Medical services | 1.56 | 1.5 | 1.48 | 1.42 | 1.42 | 1.75 | 1.73 |
| Development of tourism | 1.57 | 1.83 | 1.57 | 1.52 | 1.63 | 1.54 | 1.5 |
| Waste collection | 1.68 | 1.92 | 1.79 | 1.71 | 1.89 | 1.46 | 1.5 |
| Conservation of forest | 1.76 | 1.5 | 2.13 | 1.71 | 1.84 | 1.79 | 1.58 |
| Subsidies for agriculture | 1.96 | 1.17 | 1.7 | 2.03 | 2.26 | 2.25 | 1.96 |
| Sewerage | 2.30 | 2.92 | 2.57 | 2.55 | 2.11 | 1.71 | 2.15 |
| Traditions | 2.34 | 2.75 | 2.61 | 2.9 | 2 | 1.58 | 2.19 |
| Improvement of public transportation | 2.44 | 2.5 | 2.35 | 2.32 | 1.63 | 3.21 | 2.54 |
| Higher schools | 2.46 | 2.83 | 2.83 | 2.84 | 2.84 | 2.83 | 2.65 |
| Running water | 2.47 | 3.59 | 2.43 | 2.74 | 2.42 | 1.5 | 2.62 |
| Protection of wild fauna | 2.60 | 2.67 | 2.65 | 2.61 | 2.53 | 2.79 | 2.38 |
| Veterinary | 2.81 | 2.42 | 2.3 | 2.13 | 2.63 | 2.58 | 2.77 |
| | | | | | | | |

*Where the lower the value, the more important that item is for the respondents.

Better roads were identified as the number one need not only in the three villages inside the park, but also overall (see section 4.3. as well). The respondents living in the three villages outside the park have ranked improvement of roads differently, depending on their

position inside the village, either close to the main street or in smaller unpaved roads. Better roads were considered essential, since their poor condition contributes to the isolation of some of these villages, and interferes with the development of the area by discouraging tourism or further investments in the area.

The park cannot, obviously, be entirely responsible for dealing with this issue, nor does it have the financial resources to do so. However, it can try to facilitate fund-raising for local community development, or, as road improvement in ‘inside’ villages is subject to a long promised, but slowly implementing project, it might be able to speed up the process and pressure local authorities into actually carrying their promises through. Of course this is easier said than done: according to the park’s community and education officer (Curea pers.comm.), the ‘inside’ villages, and Mitocul Bălan in particular, qualify for infrastructure development projects coordinated by the Romanian Fund for Social Development (RFSD) and run by members of local communities. Unfortunately, an initiative to promote such projects in the Mitocul Bălan area, around 2003-2004 failed, due to the low interest showed by the local community (Curea pers.comm.).

In the researcher’s opinion, however unfortunate, this situation should not completely stop any attempts to participate in the development of the local community. Instead, this could be seen as a learning experience – find out why the projects’ promoters failed to get through to people and what exactly were people’s reasons for not participating and build on that knowledge.

Medical services ranked second in importance for the participants in this survey. This is understandable, since none of these villages have permanent medical offices. Since they are all subordinate villages within higher administrative units (the commune), residents must go to the commune residence village in order to get basic medical services, while for more serious conditions they even have to travel to the nearest cities – Piatra Neamț, Târgu Neamț.

Some villages (*e.g.* Cracăul Negru, Văratec) do have medical personnel coming in and providing consultations a few hours per day, 1 or 2 days per week, but the locals declared the opening hours are not always reliable.

Respondents' opinions about the importance of medical services are dependent on age ($\tau = -.223$, $n = 135$, $p < .01$), as elderly people are one of the age groups that need access to medical services the most and are the least able to travel regularly to get it. There also is a relationship between gender and the importance they give to medical services ($z = -2.783$, $p < .01$), since female respondents tended to consider the latter more important than males did.

The *development of tourism* ranked third most important for the local communities surveyed, and even first in Filioara, where already tourism is more visible and where people realized that it can be an important source of income for households and the community.

There is a significant correlation between the importance given to the development of tourism and the education level of the respondent ($r_s = -0.226$, $n=135$, $p < .01$), with respondents with a higher level of education assigning greater importance to tourism development, seen as an engine for the development of the entire area.

Waste collection is another issue that stands out as important for the surveyed communities. In fact, it was considered the most important issue for Văratec and Filioara. Many respondents complained about the irresponsible dumping of waste in every riverbed, ditch or free space (see section 4.5.4). In some villages, there have been attempts to set up a system for collecting household waste (Văratec – very recent: the first announced collection of household waste has not taken place yet). In Valea Arini, people have paid an annual fee, but respondents already signaled that the weekly collection has become monthly collection or stopped altogether due to presumed lack of funding. In other villages, such as Magazia or Cracăul Negru, people said several bins have been installed in central places (*e.g.* local shop

or bar), but they are by no means enough. In villages like Mitocul Bălan (the remotest of all inside villages) or Filioara there is no such system in place and people incinerate their waste (see Appendix 4).

Conservation of forest ranked fifth in the order of importance by participants. In fact, 37.8% of all respondents believe conservation of forest is very important for their community, and 47.4% of them think it is important. People generally consider the forest as an invaluable asset for the area. Most frequently, people justified their answer by saying that the forest protects them against flooding, since deforestation was pointed out to be one of the underlying causes for the devastating effects flooding has had in various parts of Romania in the last few years. Also, they feel the forest provides them with fresh air and water and that it is a landmark of the region, therefore needing to be looked after.

Not surprisingly, *subsidies for agriculture* was the sixth most important issue, since a large part of the livelihood of these people comes from rearing livestock and cultivating land. However, many of the respondents complained they did not qualify for state subsidies because they do not own enough land¹⁵.

The need for a *sewerage system* was ranked 7th overall in the six selected villages. There is a minor ($R^2 = 0.11$) relationship between the importance assigned to the need for a sewerage system and the respondents' age ($\tau = .261$, $p < .01$), with younger people giving this issue a higher value than elderly people. Also, respondents living in villages adjacent to VNNP gave this issue a higher importance than those villages situated inside VNNP ($X^2(3) = 20.701$, $p < .01$). Surprisingly, there is no significant correlation between the importance

¹⁵ The minimum agricultural land surface for which subsidies are given is 1 hectare.

people assigned to getting a sewerage system and those who considered the lack of it and of any kind of wastewater treatment as an environmental problem in the area (see section 4.5.4.).

Keeping local traditions, lifestyle and architectural style came in eighth position in the ranking of facilities/issues under discussion. Many of the people the researcher spoke to complained that local traditions have largely been lost (e.g. some Christmas traditions, local crafts). Local arts, crafts and traditions are an essential window into the cultural and soul of a particular area, enabling the discovery and understanding of that area and of the people who live there (Kreisel 2002). In addition, they can become an important source of income for the local population, especially if VNNP's intention to market them under the park's 'Bison Land' trademark becomes a reality.

Several of the Small Grants Projects initiated in the area with the help of VNNP around 2001 (see Appendix 2) focused exactly on this aspect, e.g. keeping local traditions alive, especially traditional arts and crafts. The projects that involve teaching these skills to school children in Agapia and Vânători Neamț have been quite successful, as characterized by representatives of the respective associations (personal communications, Appendix 2).

However, the case of the "Silver Forest" Craftsmen Association in Valea Seacă does not give the same grounds for optimism. Out of the few artisans who were initially involved in the project, three passed away and the rest lost interest in the project. Moreover, the association representative pointed out that the young generation does not seem too eager to learn these traditional skills and pass them on, since it is no longer profitable to practice them.

Ninth in the ranking of participants to this survey came the *improvement of public transportation*. Some of the inhabitants in 'inside' villages complained about the schedule of public transportation available connecting them to the main road (DN15C) – with one bus in the early morning and one in the evening, and none during the day. In other villages (eg

Valea Arini), people must walk to the commune residence, Bălătești, to have access to public transportation. Respondents living in Văratec noted that the quality of the buses themselves could be improved. School buses are available for children in the inside villages, but surprisingly not for the rest of the target villages (Văratec, Filioara, Valea Arini).

Presence of *higher schools* in selected villages only occupied the tenth position. All villages included in this survey have at least primary school (grades I-IV), with the exception of Magazia (grades I-VIII) and Filioara (grades I-VIII). The school in Magazia also brings together children from the nearby villages, Cracăul Negru and Mitocul Bălan, while children in Văratec and Filioara must go to the commune residence, Agapia (see map of the region in section 3.5.). The reason for this distribution lies in the fact that the number of children in one village alone is not enough to support the existence of higher schools in every village, with their requirement for more staff and more qualified teachers.

The opinion on the necessity to have higher schools available in every village seems to be related to the age ($\tau = .205$, $p < .01$) and gender ($z = -2.544$, $p < .05$) of the respondents, as younger and female respondents assigned slightly more importance to this issue.

In what concerns availability of high schools, students in all selected villages are obliged to go in either of the two closest cities – Târgu Neamț or Piatra Neamț.

Eleventh in the ranking obtained in this survey were *running water facilities*. However, this is influenced by the fact that people who already have running water (35.6%), have, consequently, given it a low score. In fact, several participants indicated a central system for drinking water to be a top priority for the community – 11 people reinforced the importance of a central source of drinking water when asked to identify other community needs. Statistical analysis has shown a significant relationship between respondents' opinion

on this issue and their age ($\tau = .147$, $p < .05$), with elderly people considering running water facilities less important than younger respondents.

Protection of wild fauna ranked low in participants' views. Spearman's correlation coefficient ($r_s = 0.380$, $n=135$, $p < .01$) indicates that people who consider the conservation of forest important, moderately do the same in regard to the protection of wild fauna. Also, the protection of wild animals was ranked higher by respondents with higher education levels ($r_s = -0.210$, $n=135$, $p < .05$). However, during the informal conversations with respondents, many declared that as far as they can tell, there is not much wild fauna left to protect in their area, due to poaching (see section 4.5.4.).

The availability of **veterinary services** in selected villages turned out to be the least important of the specified facilities and issues. For all villages, veterinary services were available in their respective commune residence village (e.g. Crăcăoani, Bălătești and Agapia), therefore respondents did not see the need for improved access to such services. Logically, there is a relationship between the opinion on importance of having veterinary services available on the spot and the number of various livestock that a respondent owns ($\tau = -0.213$, $p < .01$).

In addition to ranking the facilities/issues mentioned above, respondents were also asked to mention any **other community needs** that were not mentioned and they believed to be important. Slightly less than half (45.2%) of the respondents did not identify any additional needs, but the following issues that were mentioned are prioritized below (in terms of frequency):

- job creation (14)
- central system for drinking water (11)

- pharmacy (8)
- cultural center, entertainment for youth, revival of traditions (7)
- pasture rehabilitation and extension of grazing grounds (5)
- new or safer school building (5) - respondents in Valea Arini complained about the unsafe school building, afraid an accident might occur; a few respondents in Văratec criticized the recently built school building on grounds of being improperly situated in a low-lying area, affected by rainwater easily gathering in the courtyard.
- higher pensions (4)
- hair-dresser (4)
- bridge renovation (2)
- need to offer potential tourists more to see and do (2)
- school bus (2)

Considering that one of the VNNP objectives should be to bring benefits to local communities and encourage their harmonious development (Philips 2002), this section provides an overview of what people consider important for their community. If park-people collaboration is to happen, then these issues need to be addressed.

The park needs to find ways to bring more funding for development projects in the area, either through state subsidies or from Romanian and international organizations/ governments/ programs. Local authorities, local entrepreneurs, and the park can work together to develop the infrastructure and programs needed to promote tourism activities and capitalize on local foods, events, crafts and hospitality (Allart 2001). Support for local businesses and a preference for local contractors are needed, as well as creating more employment opportunities in the area (e.g. jobs in conservation, in park visiting centers, in tourism).

4.5. Knowledge and opinions about Vânători Neamț Natural Park

A majority (87.4%) of respondents said they knew about the *existence* of Vânători Neamț Natural Park, and 12.6% declared they hadn't heard about it. There is no significant relationship between the respondents' knowledge about the park's existence and their age or gender. However, people who are employed or self employed seem to be among those who know about the park's existence, more so than respondents who are unemployed, retired or housewives ($X^2(6) = 16.81, p < .01$). Also, the education level of respondents influenced their answer to this question – a higher level of education generally translates into greater awareness of the park's existence ($z = -2.473, p < .05$).

However, it must be noted that not all respondents who declared they knew about the existence of VNNP are actually well informed. Many of the respondents either confused VNNP with the old “Dragoș Vodă” Bisons Reserve or were misled by the fact that the park's name contains that of the commune which is home to the new VNNP headquarters - Vânători Neamț.

A follow-up question (#20) was asked in order to clarify whether the respondents were actually aware of the relatively recent establishment (1999) of the 30,000 hectare Vânători Neamț Natural Park or whether their knowledge went beyond simply knowing about its existence. The respondents were invited to indicate whether their village was situated on the park's territory or in its vicinity, in the case of 'inside' villages, or close / far from the park, in the case of neighboring villages. Figure 8 shows the distribution of answers within the sample. More than half of the respondents (58.52%) could not provide the right answer.

These simple statistics show that whatever awareness campaigns or information dissemination means the park has used to inform the public about their existence, at minimum, they were not very successful in reaching the members of the local communities.

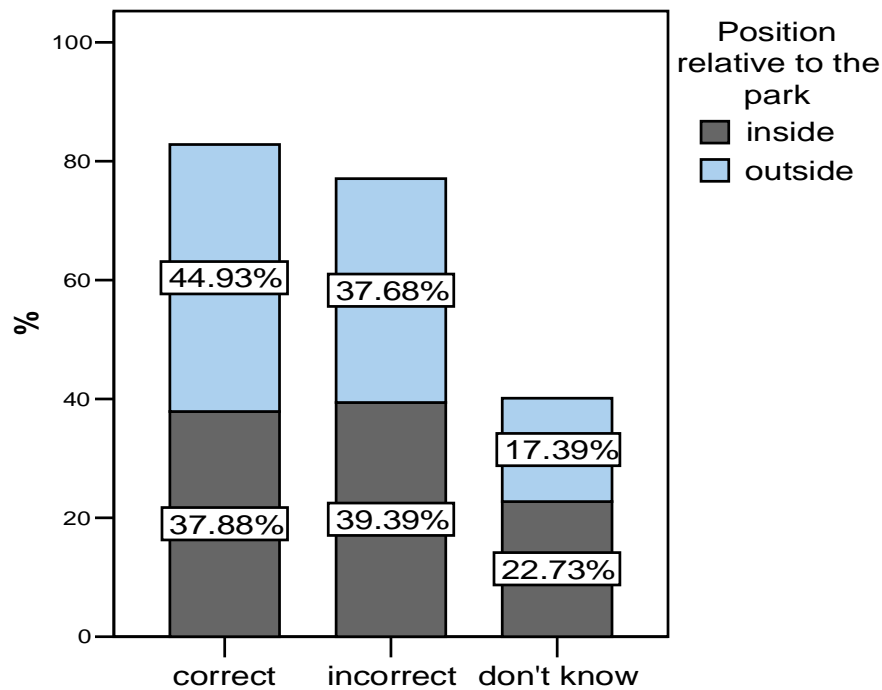


Figure 8. Village position relative to VNNP, as indicated by survey participants (N = 135)

Furthermore, the respondents were asked whether they know when the Vânători Neamț Natural Park was established. Only 8 people (5.9%) correctly indicated that it was approximately 8 years ago (1999). Two thirds didn't know at all, while 25.2% gave incorrect answers. It is true that answers to a question that tests the memory of respondents may not be entirely relevant (Fowler 2002), but, together with the results obtained for the previous inquiry (#20), they allowed the researcher to get an understanding of how informed people are in regard to VNNP.

Figure 9 explores the *information means* through which information about the park's establishment and existence was disseminated among survey participants. Most (22.96%) found out about VNNP by talking to fellow villagers, while secondly successful in spreading information were VNNP billboards (18.52%). Direct communication with park personnel came almost last (8.15% of respondents), which is surprising considering that personal communication was said to be one of the main means of communicating information about

the park to local communities, together with posting relevant information to interested parties, e.g. schools, town-halls (Cătănoiu pers.comm.).

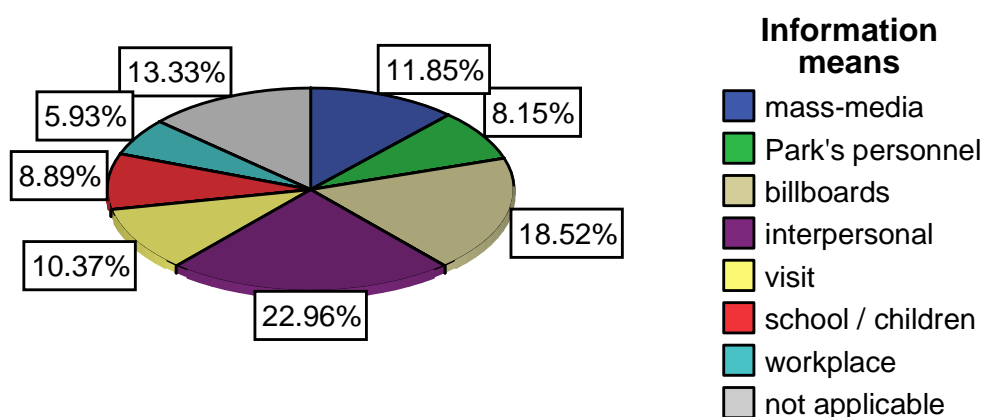


Figure 9. Sources of information about VNPN indicated by respondents (N = 135)

There is a correlation between the gender of respondents and how they found out about the park's founding ($X^2(7) = 18.492, p < .01$): men dominate the categories of mass-media, park's personnel, billboards and work place, while women have more frequently found out about VNPN from other villagers, from visits to the Bison Reserve or the monasteries in the region, and from their children or the local school.

People have learnt of VNPN depending on their activities, their mobility and their employment status ($X^2(42) = 79.336, p < .01$). It is only natural that people who work in the field of forest protection or exploitation are well informed regarding an important actor in the field and area; people employed as drivers are more likely to get their information from billboards, for example, and people who are retired or staying at home find out new information either from interpersonal contact or from the mass media (TV and radio). This information should be relevant for park personnel to develop differentiated communication strategies for various target groups.

When asked what they thought the main purpose of a natural park was, 10.4% of the respondents could not offer an answer, while 32.6% indicated nature protection. In this case, however, their responses might have been influenced by the name of the park itself “Vânători Neamț **Natural** Park”. Interestingly, almost a fifth of respondents chose tourist attraction to be the sole purpose of the park. This may be indicative of what people expect from VNNP and should be taken into account by the park’s personnel. The fact that 28.2% of participants did not know what to say or chose solely attraction of tourists, could also indicate that local people’s knowledge about the park and its objectives is quite low.

According to the park’s management plan (VNNMP 2006), its main objectives are to provide sustainable forest management, to conserve the landscape and the local traditions, to establish a bison breeding center and attempt to reintroduce a viable bison population in the area, and to encourage the development of tourism, always bearing in mind the aforementioned values.

Presently, one of the areas in which VNNP is quite active is getting involved in children’s education. Also, VNNP supports partnerships with high-schools, and universities in the region (schools from, Piatra Neamț; the Faculty of Forest Management in Braşov, the Faculties of Biology and Geography in Iaşi). However, in terms of adult environmental and park education, VNNP needs to do more, as results in this section show. Better awareness about the park’s activities and importance of conservation can encourage people to think and act like stewards of natural resources, especially if the local community starts getting more benefits from having the park in the area. A similar study (Kipson 2003) about the Nature Park Zumberak – Samoborsko gorje, in Croatia, showed that increased awareness about the park’s efforts in solving the local waste problem encouraged locals to take more care about how and where they disposed of their household waste. VNNP has taken steps toward setting up a waste collection system in several adjacent villages, and local schools organize waste clearing activities regularly, however, these are end-of-pipe solutions. More preventive action

is also needed, more adult education and incentives to stop people from illegally dumping waste.

4.5.2. Perceived advantages and disadvantages

Of the 135 respondents, none believed that the establishment of VNNP was an undesirable thing, 27.4% are undecided whether is a good thing or not, and almost three quarters (72.6%) were positive about the park's existence in the area. While 52 (38.52%) respondents did not provide a reason for their response, almost two thirds gave one or more answers including:

- 27.8% believe the park can become a new tourist attraction in the area and an alternative for local young people in what concerns entertainment, education, job opportunities.
- 15.7% believe that the park, through its activities, helps to keep the area cleaner.
- 13.3% of respondents simply said that the park is a good thing, through its mere existence, a new power actor in the area to take care of the region and provide something new to see.
- 10.9% appreciate the role the park has played in the education of children – good for the kids, for building their environmental sense of responsibility, plus they are involved in many activities and have a chance to participate in contests, and to travel around.
- 19.3% specifically mentioned the protection of fauna as a positive aspect related to VNNP; however, one person mentioned that even more should be done, especially for the animals in the “Dragoș Vodă” Reserve.
- 9.7% of respondents emphasized the park's positive role in forest conservation, as provider of clean air and water and protector against flooding and landslides. Many

people mentioned both the protection of forest and the protection of fauna and were included in a different category referring to the protection of the natural environment.

In terms of what people perceive to be true for themselves and the community, the survey revealed that almost half of the participants (44.4%) believe there are no *advantages* of living inside or close to Vânători Neamț Natural Park. Several respondents further remarked that if there are any benefits, than it is definitely not them who enjoy them. Some declared that there might be benefits, but only for the younger generation, or for people who already have some money and are able to invest and take advantage of any opportunities. Others identified only people living closer to the park as potential recipients of any help or assistance from VNNP.

On the positive side, 55.6% of all respondents perceived one or more of the options provided in the questionnaire to be an advantage. Of them, 53.3% (approximately one quarter of the entire sample) considered having a better protection of the natural environment an advantage, 39.3% thought the park's existence would increase the opportunities for the development of ecotourism in the area, while only 17% thought the park's existence would bring increased funding opportunities for projects involving members of the local community.

There is a correlation ($X^2(2) = 23.752$, $p < .01$) between whether respondents consider increased possibilities for ecotourism an advantage of having VNNP in the area and whether they or any member of their household have participated in any event related to VNNP (see section 4.5.3.). These results (Table 10) indicate that participation in park related activities positively influences opinions about the park and should consequently constitute a motivating factor for VNNP to organize more activities that involve members of the local communities.

Table 11. Perceptions of VNNP and participation

| Count | | Did respondent or household member participate in any VNNP activity | | | Total |
|--|-----|---|----|----------------------------|--------------|
| | | yes, personally | no | yes, my children at school | |
| Are increased possibilities for ecotourism an advantage of having VNNP in the area | yes | 12 | 20 | 21 | 53 |
| | no | 2 | 62 | 18 | 82 |
| Total | | 14 | 82 | 39 | 135 |

Further positive comments about VNNP reiterated the park's role in forest conservation, in keeping the area cleaner, in providing assistance for local schools. Somebody also considered the park to be a means through which people's sense of pride in the beauty of the area will be transmitted to potential visitors.

Keeping in line with the VNNP's relatively loose policy concerning restrictions in the park's area of influence (Cătănoiu pers.comm.), 97.8% of the respondents felt there are no *disadvantages* in living inside or close to a protected area. Only three people living in villages inside the park complained of not being allowed to graze their livestock wherever they wanted, since there already was very little appropriate space available for grazing.

An additional question asking respondents whether they feel the park's existence is affecting them in any way, good or bad, was meant to further identify people's attitude toward the park and to get an understanding of the impacts they perceive the park's establishment has had on their lives. An overwhelming majority (94%) declared they are not at all affected by the existence of Vânători Neamț Natural Park. This result emphasizes the nature of the current relationship between VNNP and the regular members of adjacent local communities: there are no conflicts between the park and the people over the use of natural

resources, but neither is there any real communication or collaboration, since it is easier for the park to deal with local authorities and schools in the area alone.

4.5.3. Willingness to get involved in park activities

Another aspect that was approached in the questionnaire was whether respondents or members of their families have ever participated in any programme, event, or activity organized or promoted by Vânători Neamţ Natural Park. Such events could refer to participation in projects identified, supported or implemented with the help of VNNP, ecological activities (e.g. river-bed cleaning activities, tree, planting, awareness campaigns) festivals, or contests. This information is relevant in order to identify whether VNNP has involved members of local communities in their activities, and, if so, whether those activities have been effective in promoting VNNP and its objectives, and the degree to which they managed to reach the common people.

A majority of respondents (60.7%) affirmed they have not participated in any such events as mentioned above, nor did any members of their families. Only 10.4% said they were personally involved in events somehow connected to VNNP. Those included activities carried out in local schools, activities related to park delimitation.

Whether respondents participated in such events is related to their employment status ($X^2(12) = 40.816, p < .01$), as the participation rate of respondents working for an employer is higher than of those having different employment situations. Their involvement also depends on the type of jobs the respondents have ($X^2(42) = 87.592, p < .01$): due to the nature of their work, respondents working in fields related to forest management, as well as school employees, are more likely to take part in such activities. The former usually take part in such activities as part of their work, since VNNP is subordinated to NFD, while the latter category usually participate as coordinators in activities involving school children.

Almost a third of respondents (28.9%) mentioned that their children were involved in activities connected to Vânători Neamț Natural Park. Not surprisingly, there is a connection between the information means regarding VNNP that people indicated and their response to this question ($X^2(14) = 69.294, p < .01$): 12 people said that they knew about VNNP from their children or from the local school. This might be an indication that some of the park's involvement in the education of local children is also reaching adults. Therefore, the park could use this information and develop strategies to increase adult environmental and VNNP related awareness by targeting children's parents, through child-parents type of activities (e.g. "Mother's Day is also Mother Nature's Day"; son-father/daughter-mother contests).

In terms of respondents' willingness to participate in VNNP coordinated events in the future, if notified, almost two thirds (62.2%) declared they would participate either unconditionally (33.3%), or if their time allows and/or there are some kind of benefits involved (28.9%). Predictably, respondents willingness to participate in future VNNP events depended on their age ($X^2(90) = 127.583, p < .01$), as elderly people were more inclined to say no. Since the link between attitudes and behavior has not yet been scientifically proven, and the former do not necessarily translate into the latter (Aipanjiguly and Jacobson 2002), this result alone does not necessarily guarantee high rates of participation in such future events. However, it should still be taken into account and considered indicative of people's willingness to participate in VNNP coordinated activities, given that the park finds a successful way to communicate their importance for the local communities, and even to provide some benefits for those getting involved.

4.5.4. Identified threats to environment protection

Question #29 required the respondents to indicate which they believe are the main environmental problems in the area are and to mention other issues they consider important

(Figure 10). The most pressing issue in the opinion of inhabitants of this region (86.7%) is that of irresponsible dumping of waste in improper places. In their opinion, there are no proper disposal sites in any of these rural communities, the waste collection system is either absent or at its beginnings, and waste 'is dumped everywhere'.

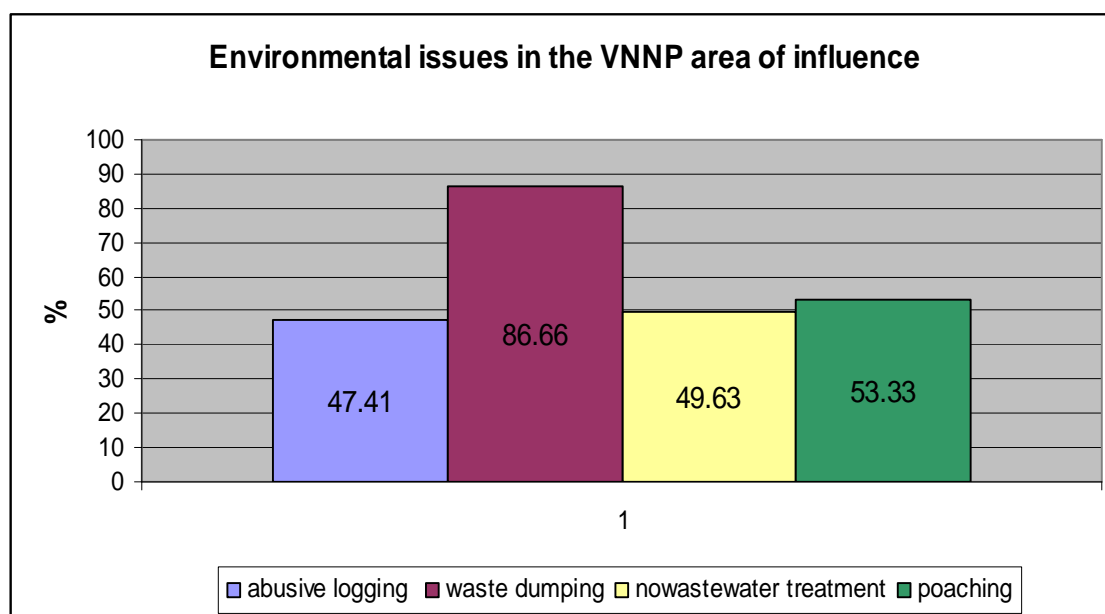


Figure 10. Problematic environmental issues of the area according to respondents

Abusive or irresponsible logging, the lack of sewerage systems and of any wastewater treatment facilities, and poaching were considered of relatively similar importance (Figure 10). The lack of a sewerage system and of wastewater treatment were considered more of a problem in 'inside' villages ($X^2(1) = 20.801, p < .01$) than in 'outside' ones, although the situation is reversed when ranking the importance of a sewerage system for the community (see section 4.4)

Besides expressing an opinion on whether the above issues represent problems in the area, respondents were also encouraged to identify other matters they think need attention. Only a small minority (10.37%) did so and they identified the improper storage of sawdust from the forest exploitation firms, timber trucks using local bridges without investing in their maintenance, the need for better protection against forest fires, car washing in the river, and garbage left by occasional tourists picnicking in the area.

Some of these issues have also been identified in the park's management plan (e.g. sawdust storage in river beds, poaching), showing that there are some common beliefs concerning environmental problems between the park and local communities and this should be used to get people involved in solving these problems together with the park.

4.5.5. Expectations and suggestions for VNNP

The last section of the questionnaire contained two open-ended questions asking respondents whether they expect any assistance from VNNP and, if so, what kind of assistance, and a final question encouraging them to give suggestions or remarks for the park's personnel.

Almost one half (40%) of respondents confirmed that they expect some sort of assistance for themselves and their community from VNNP, and 8.9% were not sure whether to expect any assistance or not, while only 23% had suggestions or remarks for the park's personnel. The respondents' opinions and suggestions are grouped around themes and presented below. Given that they represent the attitudes and thoughts of people whose activities affect the park and vice-versa, they should be taken into account by the park's administration and be considered in themselves recommendations presented by this thesis.

The *development of tourism* was the issue around which the respondents' comments revolved around most frequently. These comments include:

- more should be done to develop tourism in the area, so that the local communities develop alongside:
 - continuously promote the area in order to attract more tourists in the region;
 - create appropriate facilities – improve transport infrastructure, accommodation facilities and all necessary services (e.g. properly equip and advertise the Chitele Cabin);

- provide more reasons/opportunities for tourists to stay longer in the area; more for them to see and do; for example, make Cuiejdol Lake more widely known and accessible for tourists.
- delineate special recreation areas for tourists (e.g. resting places, barbequing places) and equip them accordingly with garbage bins, tables, benches, grills, etc.

Rural development was also an issue that came up, greatly matching the opinions expressed earlier in the survey (see section 4.4.). Respondents' expectations regarding this topic revolved around the following aspects:

- collaborate with local authorities and other potential actors to improve the quality of local roads;
- facilitate the development of other infrastructure development projects – central drinking water facilities, sewerage, bridges; and generally attract funding / investments for local communities.

An issue related to rural development referred specifically to the information VNNP could make available to individuals about various **opportunities**:

- identify and communicate potential opportunities for funding, projects, collaboration with the park; or support for any project ideas members of local communities might have (e.g. creating an authentic sheepfold¹⁶ for tourists to enjoy traditional activities and fresh, organic produce)
- job creation for young people; provide a reason for them to stay, instead of going abroad to work.

¹⁶ “Stână”, in Romanian

In terms of *knowledge concerning the Vânători Neamț Natural Park and its activities*, the following comments were made by survey participants:

- a more active involvement in the life of the local communities:
 - talk (more) with people in adjacent villages;
 - participate in local meetings; and
 - organize awareness campaigns and improve the information flow.
- inform the local population about Park activities, so that they can better pass that information onto tourists visiting the area.
- a better visual presence in the area – more visiting and information centers, and explanatory billboards scattered throughout the park's influence area.

Respondents also gave suggestions concerning *park activities*, such as:

- get more involved in solving the waste disposal problem (fines, controls to keep rivers clean, free of garbage; more garbage bins);
- more done to control poaching;
- a better coverage of the park's area by rangers – hire more rangers, make more frequent rounds;
- make sure there is an equilibrium between logging and plantation;
- increase efforts to combat pollution;
- take better care of animals in the Bison Reserve.

Positive comments were also mentioned in relation to VNNP and included expressing appreciation for the park's efforts toward forest protection, participating in making the area cleaner, and getting involved in the education of the young generation: through educating children about environmental matters, somebody said, VNNP will leave a mark and shape future generations towards a more environmentally friendly way of

thinking and acting. A few respondents even wished the park's personnel all the best and good luck in their activities.

Other remarks referred to:

- providing tree seedlings for the population inside the park
- doing more to keep local traditions alive and promote them (including traditional architectural style, traditional activities – hay-mowing)
- doing something about damage-causing animals (especially wild boars), ruining people's crops or hay fields in autumn (in Văratec, Filioara).

It must be noted here that these represent the opinions of a minority of respondents. Most people (60%) did not know or did not expect any kind of assistance from VNPN, and 77% of respondents had no further remarks for the park's personnel.

Obviously, the park cannot provide a solution for all the issues mentioned above. Even if VNPN would like to do so, they have limited human and financial resources, as well as limited decisional influence. However, the park administration should strive to make the park and its activities more visible among members of local communities, to bring more tangible benefits to these communities and to better 'advertise' the potential opportunities that come with living in or close to a natural park. The development of a local tourism that actually provides benefits and income to local people and finding solutions for providing basic facilities and infrastructure (road improvement, especially for 'inside' villages; medical services, effective waste collection and disposal systems) should become management priorities, alongside with biodiversity conservation.

5. CONCLUSIONS AND RECOMMENDATIONS

Vânători Neamț Natural Park is a relatively young protected area (established in 1999), in a country, which is home to high biodiversity, but with problems in creating an effective system of protected areas and implementing good policies for protecting its biodiversity. The park has benefited from international support and experience sharing, since its establishment was part of a major UNDP/GEF funded project. Since the initial external funding has ceased of 2006, the park's administration is currently trying to identify new opportunities to support its activities.

As a modern protected area, in general, and more so due to its nature, as an IUCN category V protected area, VNNP needs to make the relationship with local communities inside and outside its boundaries one of its central focuses.

According to the findings presented in this study, this relationship is characterized by relative neutrality, since over 90% of respondents declared they are not in any way affected by the park's existence. One explanation might be that almost all participants in this survey feel VNNP's establishment in the area has not brought them any disadvantages, and more than half feel they have not had direct benefits either. Moreover, knowledge about the park's existence, its coverage and its activities is relatively low.

In this study, attitudes toward VNNP were not significantly influenced by age, gender, education level, or income level, nor were they significantly different for villages situated inside or neighboring the park. The employment status and job nature of respondents did influence respondents' level of knowledge of VNNP and its activities, as did their education level.

There is a general positive attitude towards the park, with almost two three quarters of the respondents saying the establishment of VNNP is a good thing. Willingness to participate in VNNP coordinated activities was quite high, with almost two thirds of the people willing

to participate either unconditionally, or if time allows or there are some kind of benefits for them and the community. Moreover, this study's findings indicate that participation in park related activities positively influences opinions about the park. All these aspects provide a solid ground for cooperation and should constitute a motivating factor for VNNP to work toward a better collaboration with local communities.

As knowledge of VNNP and its activities has proven to be quite limited among members of adjacent communities, there is a need to improve the dialogue between VNNP and local people. So far, except for targeting members of the local communities within the UNDP/GEF project, the park's administration has preferred to work with local authorities, as representatives of the community, and with local schools.

However, enhanced communication strategies and increased efforts toward cooperation are needed from the park administration, since the park's future depends greatly on the extent to which relevant stakeholders are convinced of its importance. Local support is essential for the sustainable development of the area and to the success of VNNP's conservation efforts, especially if the intention to reestablish a viable bison population in the wild is to be received with trust and cooperation from local communities. Moreover, VNNP and the local communities are bound to work together in areas such as conservation of landscape diversity and of cultural heritage, visitors' management, implementation of grassroots projects, or finding a solution for the environmental problems the area is facing, such as the illegal dumping of waste.

If park – people collaboration is to happen, then the park has to address the needs of the communities. As identified by participants in this research, first in line are infrastructure developments, especially road improvement, and better access to health care and drinking water facilities, together with the development of tourism. Unfortunately, at present, only a small minority of respondents have any direct benefits from tourism and most think the park

should do more to promote the area, to help develop the necessary support facilities for tourists and to provide recreational alternatives for visitors.

The process of establishing a mutually beneficial relationship between the park and the local communities, and possibly even a deeper involvement of local people in park management and planning is not an easy process. However, the fact that there have not been any conflicts between them should not be taken for granted; instead it should be considered an advantage and people's positive attitudes toward the park used to set the basis for a success story of park-people relationships, of sustainable rural development combined with effective conservation.

In order for the park to achieve these objectives, this thesis provides several recommendations based on the findings of the research, as presented below.

--- *improve IT resources and Public Relations* - it is of outmost importance for the park to constantly update its website. A good website is essential for the park to make itself known to a wider audience, to provide information and advertise for all kinds of purposes, most obvious of which being tourism (e.g. others: undergoing projects or volunteer / research opportunities). At present, the website does not provide any new information; furthermore, the contact address for the headquarters and visitor center has not been changed (previous location was Văratec), and the contact emails for park personnel are not reliable.

--- *diversify VNNP staff* - protected area management has become extremely complex and requirements have diversified greatly: park staff need not only deal with conservation issues, but have knowledge of social sciences, of behavior, communication strategies, project management, budgeting and fundraising, advertising, and many others. In these conditions, it would be useful to hire experts with various academic training and experience (i.e. so far, out

of 17 staff members, all have a background in forest management, except for the accountant – economic background) and to provide regular training opportunities for existing personnel.

--- *provide more information about the park to local communities and the general public* - more numerous and more informative boards, extending the range of information they provide to include site specific details (e.g. endemic and rare species, marked trails). Also, more than one visitor/information center should be set up. The current headquarters is situated in the Northern part of the park, making it hard to reach for people visiting the Agapia and Văratec Monasteries, for example. To increase the visibility of the park, several small information centers could be created in locations already visited by tourists or brochures, leaflets could be distributed to already existing souvenir shops. This initiative may, at the same time create job opportunities for local people (hire local people or create summertime volunteer schemes for local youth) and potential incomes from selling souvenirs (e.g. park mascots: the bison, the bear and the lynx).

--- *clarify the park's objectives and activities for the local people through improved communication strategies* – face-to-face communication, participation in local meetings, keeping in contact with chosen representatives from every community (not only with commune local councils), adjusting the message in its form and language according to the target audience. By highlighting the importance of conservation within a wider development agenda, they should increase VNPN's visibility, and hopefully enhance people's environmental awareness and willingness to help the park achieve its objectives (e.g. waste dumping problem), not to mention that people might better promote the park and the ideas it supports among visitors of the area and among local communities themselves.

--- *make sure information about job opportunities or mutually beneficial initiatives (e.g. loans, support for rural development etc.) reaches the local people* – communicate it to contact representatives of local communities or post it on an information board that can be created in every adjacent village. It is also very important to realize that capacity building for local communities cannot stop at one big project (i.e. the local community component of the UNDP/GEF Biodiversity Conservation Management project). The park could also provide help to those interested in applying for such support (e.g. steps to be followed, project writing and management), if not themselves, due to lack of human, time and financial resources, or through an intermediary (e.g. support a local or regional NGO that could specialize in offering such consultancy).

--- *organize events, festivals promoting traditional activities and crafts (e.g. a hayfest) or be present at already existing ones (e.g. weekly fairs, if any; religious events)* – such events of local or regional importance bring together a large number of people and could become good opportunities to raise awareness, promote the area for tourists and help market local goods. Since the park is already extensively collaborating with schools in the area, it might also be a good idea to organize special events that involve parents, alongside their children: e.g. mother-daughter or father-son activities on specific holidays, or important environmental events (Earth Day).

--- *create a volunteer scheme and/or a student research scheme* – volunteers can be recruited locally, nationally or even internationally, supporting the park's activities in any way needed, raising awareness, and helping the local communities, especially if volunteers are selected from local young people. A volunteer scheme could also become a source of know-how and income for the park through volunteering fees, depending on the volunteers' backgrounds. The research programme would be mutually beneficial, compensating for the park's human

and financial constraints in analyzing various aspects of park management, social sciences, sustainable tourism etc. and helping students/volunteers gain hands-on experience and enable them to fulfill their study requirements.

This research aimed to analyze the nature of the relationship between Vânători Neamț Natural Park and local communities situated inside and surrounding the park. However, due to various constraints, which are described in the methodology chapter (see section 3.8.), more in-depth research is needed concerning various aspects, some of which are identified below.

1. Focus on the impact the reintroduction of the European bison will have on local communities and the whole area. The success of this initiative depends not only on creating the right environmental conditions for the bison to survive in the wild, but also on the way the communities will react and interact with them. People need to be properly informed about before the animals' release and instructed how to behave in case they encounter them. Also, they need to be convinced of the importance of such a project; their trust and cooperation needs to be acquired in order to prevent conflicts with the park and illegal poaching, which would undermine the success of the initiative.

2. A big focus of VNNP activities is on school education. A follow-up study could aim to find out if and how those activities actually affect the environmental behavior of children and whether they have any influence on adults. If the link is established between children education and parents' higher awareness or positive attitude, also considering various others influencing factors, then better strategies to enhance this causal relationship could be devised.

3. An interesting follow-up study could focus on identifying the capacity-building needs of local communities inside and around VNNP, in order to help the absorption of development funding opportunities.

4. Deepen the understanding of the role the monasteries have in the dynamics of resource/land use and interactions with VNNP. This could be relevant from various perspectives: to establish a good rapport with the powerful actor that is the Orthodox Church, through the local monasteries; to help the objective of forest conservation, since the monasteries are trying to regain ownership of large forested lands; to devise an effective sustainable tourism strategy for the area, since monasteries are important tourist attractions, by involving local communities more and directing more benefits toward them.

In conclusion, this thesis must acknowledge the remarkable achievements of the Vânători Neamț Natural Park administration to date: the establishment of a new protected area, the setting up of a sustainable forest management system and acquiring a FSC certificate, the wonderful work towards the reestablishment of a wild bison population in Romanian mountains, the involvement in educating the young generation toward a more environmentally friendly future, and all the efforts toward issues such as building a trademark for the region (e.g. the Bison Land), toward solving the waste collection and disposal problem, or toward maintaining local traditions, crafts and architectural style.

As Mr. Cătănoiu, the current head manager of VNNP, pointed out, the creation of the first three modern administration structures and management plans for protected areas in Romania within the UNDP/GEF Biodiversity Conservation Management project (for Vânători Neamț Natural Park, Piatra Craiului National Park and Retezat National Park) has represented a model followed by other protected areas in Romania. If VNNP succeeds in empowering local communities and involving them in its management, than it could give yet another example for other protected areas of how collaboration can be achieved.

References:

- Agrawal, A. and Gibson, C.C. 2001. The role of community in natural resource conservation. In *Communities and the environment: ethnicity, gender and the state in community-based conservation*, ed. Agrawal, A. and Gibson, C.C. New Brunswick: Rutgers University Press.
- Aipanjiguly, S. and Jacobson, S. 2002. Conserving manatees: attitudes and intentions of boaters in Tampa Bay, Florida. *Conservation Biology* 17(4): 1098-1105.
- Allart, E. 2001. *Successful collaboration factors between local communities and protected areas in Europe towards sustainable tourism development: a case study of Abruzzo National Park in Italy, Peak District National Park in the United Kingdom and Hohe Tauern National Park in Austria*. Master thesis in European Tourism Management. Bournemouth University, United Kingdom.
- Allendorf, T., Swe, K.K., OO, T., Htut, Y., Aung, M., Allendorf, K., Hayek, L.A., Leimgruber, P, and Wemmer, C. 2006. Community attitudes toward three protected areas in Upper Myanmar (Burma). *Environmental Conservation* 33 (4): 344-352
- Anthony, B. 2006. *A view from the other side of the fence: Tsonga communities and the Kruger National Park, South Africa*. PhD thesis for the Department of Environmental Sciences and Policy, Budapest: Central European University.
- Anthony, B. 2007. The dual nature of parks: attitudes of neighboring communities towards Kruger National Park, South Africa. *Environmental Conservation* 34(3): in press.
- The Association for Ecotourism Romania (AER) 2004a. Available at <http://www.eco-romania.ro/cuprins/parc/index.php?id=18> [last consulted July 2007]
- Barrett, C.B. and Arcese, P. 1995. Are integrated conservation and development projects (ICDPs) sustainable? On the Conservation of large mammals in Sub-Saharan Africa. *World Development* 23 (7): 1073-1084
- Beckmam, A. 2003. *Romania – Europe's treasure*. EU enlargement leaflet. WWF.
- Borrini-Feyerabend, G. (ed.) 1997. *Beyond fences: Seeking social sustainability in conservation*. Gland: IUCN.
- Borrini-Feyerabend, G., Banuri, T., Farvar, T., Miller, K., and Phillips, A. 2002. Indigenous and local communities and protected areas: rethinking the relationship. *Parks* 12(2): 5-15. URL: <http://iucn.org/themes/wcpa/pubs/pdfs/PARKS/parks12.2.pdf>
- Brechin, S.R., Wilshusen, P.R., Fortwangler, C.L., and West, P.C. 2002. Beyond the square wheel: toward a more comprehensive understanding of biodiversity conservation as social and political process. *Society and Natural Resources* 15: 41- 64.
- Brockington, D. 2004. Community conservation, inequality and injustice: myths of power in protected area management. *Conservation and Society* 2 (2): 411-432.

- Bruner, A.G., Gullison, R.E., Rice, R.E., and da Fonseca, G.A. 2001. Effectiveness of parks in protecting tropical biodiversity. *Science* 291: 125-128
- Ceballos-Lascuráin, H. 1996. *Tourism, ecotourism and protected areas*. Gland, Switzerland: IUCN
- Convention on Biological Diversity (CBD) 2007. URL: <http://www.biodiv.org/programmes/cross-cutting/protected/default.asp> [last consulted April 2007]
- De Vaus, D. 2002. *Surveys in social research*. 5th edition, London: Routledge.
- Fortin, M.J. and Gagnon, C. 1999. An assessment of social impacts of national parks on communities in Quebec, Canada. *Environmental Conservation* 26 (3): 200-211.
- Fowler, F.J.Jr. 2002. *Survey research methods*, 3rd ed. Thousand Oaks: Sage Publications
- Furze, B., de Lacy, T, and Birckhead, J. 1996. *Culture, conservation and biodiversity: the social dimension of linking local level development and conservation through protected areas*. Chichester: John Wiley & Sons.
- Hales, D. 1992. Changing concepts of national parks. In *Conservation for the twenty-first century*, ed. Western, D. and Pearl, M. New York: Oxford University Press.
- Hayes, T.M. 2006. Parks, people and forest protection: an institutional assessment of the effectiveness of protected areas. *World Development* 34 (12): 2064-2075.
- Hughes, R. and Flintan, F. 2001. Integrating conservation and development experience: a review and bibliography of the ICDP literature. *Biodiversity and Livelihoods Issues Papers* 324. London: IIED.
- International Centre for Environmental Management (ICEM) 2003. *Lessons learned from global experience. Review of protected areas and development in the lower Mekong River region*, Indooroopilly, Queensland, Australia.
- Ioras, F. 2003. Trends in Romanian biodiversity conservation policy. *Biodiversity and Conservation* 12: 9-23.
- IUCN 1994. *Guidelines for protected area management categories*. CNPPA and WCMC. Gland: IUCN
- Jones, B.T.B. and Murphree, M.W. 2004. Community-based natural resource management as a conservation mechanism: lessons and directions. In *Parks in transition: biodiversity, rural development and the bottom line*, ed. Child, B. London: Earthscan Publications
- Kipson, S. 2003. *Local communities and protected area management in Croatia: the study case of the Nature Park Zumberak – Samoborsko gorje*. Master thesis for the Department of Environmental Sciences and Policy, Budapest: Central European University
- Kreisel, B. 2002. *Generating income in protected areas. Issues of sustainable tourism development*. A paper presented within “A workshop in Bulgaria: Options for local biodiversity management in protected areas”, Sofia, February 8-10.

- Lam, L.M. 2004. *A study of stated attitudes and behaviour of local people toward conservation in Koshi Tappu Wildlife Reserve, Nepal*. Paper presented at the 15th Biennial Conference of the Asian Studies Association of Australia in Canberra.
- Lepp, A. and Holland, S. 2006. A comparison of attitudes toward state-led conservation and community-based conservation in the village of Bigodi, Uganda. *Society and Natural Resources* 19: 609-623.
- Locke, H and Dearden, P 2005. Rethinking protected area categories and the new paradigm. *Environmental Conservation* 32: 1-10.
- Manoleli, D. M. (ed.) 2005. Third national report for the Convention on Biological Diversity. Bucharest: Center for Ecological Services, University of Bucharest.
- McNeely, J.A. 1992. Protected areas and human ecology: how national parks can contribute to sustaining societies of the twenty-first century. In *Conservation for the twenty-first century*, ed. Western, D. and Pearl, M. New York: Oxford University Press.
- Michaelidou, M., Decker, D.J., and Lassoie, J.P. 2002. The interdependence of ecosystem and community viability: a theoretical framework to guide research and application. *Society and Natural Resources* 15: 599-616.
- Myers, N., Mittermeier, R.A., Mittermeier, C.G., da _Fonseca, G.A.B., and Kent, J. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403:853-858.
- Myers, N. 2002. Biodiversity and biodepletion: a paradigm shift. In *Biodiversity, Sustainability and Human Communities: protecting beyond the protected*, eds. O’Riordan, T. and Stoll-Kleemann, S. Cambridge: Cambridge University Press.
- National Forest Administration (NFA) 2007. Protected areas. Vânători Neamț Natural Park. Available at: <http://www.rosilva.ro/arii/index.html> [last consulted July 2007]
- National Meteorological Administration (NMA) 2007. Available at <http://www.inmh.ro/index.php?id=0&lang=ro>. [last consulted in July 2007]
- The Neamț Regional Statistics Department (NRSD) 2006. *The statistics book of Neamț county*. Piatra Neamț: RSDN, the Romanian National Institute of Statistics
- Nepal, S. K. 2000. Tourism, national parks and local communities. In Buttler R.W. and Boyd, S.W. (eds.). *Tourism and national parks: issues and implications*. Chichester: John Wiley & Sons
- Ormsby, A and Kaplin, B.A. 2005. A framework for understanding community resident perceptions of Masoala National Park, Madagascar. *Environmental Conservation* 32 (2): 156-164.
- Phillips, A. 2002. *Management guidelines for IUCN category V protected areas: protected landscapes/seascapes*. Best practice protected area guidelines, Series no.9. Gland: IUCN
- _____. 2003. Turning ideas on their head – the new paradigm for protected areas. *The George Wright Forum* 20 (2): 8-32.

- _____. (ed.) 2004. The Durban Action Plan. Vth World Park Congress. Available at: www.iucn.org/themes/wcpa/wpc2003/pdfs/outputs/wpc/durbanactionplan.pdf
- Pretty, J. 2002. People, livelihoods and collective action in biodiversity management. In *Biodiversity, Sustainability and Human Communities: protecting beyond the protected*, eds. O’Riordan, T. and Stoll-Kleemann, S. Cambridge: Cambridge University Press
- Ramphal, S. 1993. Para Nosotros la patria es el planeta Tierra. In *Parks for life: Report of the IVth World Congress on national parks and protected areas*, ed. McNeely, J. Gland: IUCN.
- Romanian Ministry of Environment and Sustainable Development (RMESD) 2007. Available at: <http://www.mmediu.ro/home/home.php> [last consulted May 2007]
- Schmidt-Soltau, K. and Brockington, D. 2004. *The social impacts of protected areas*. World Conservation Congress, IUCN
- Tomaşevici, B. 2006. România, în pragul crizei de muncitori. [Romania, on the verge of a work-force crisis]. Article posted on HotNews, October 17. Available at http://www.hotnews.ro/articol_58198-MAE-habar-n-are-cati-romani-au-plecat-din-tara-Romania-in-pragul-crizei-de-muncitori.htm [last consulted in July 2007]
- Unesco Pro Natura (UPN) 2001. Ariile protejate in Romania [Protected areas in Romania]. Available at: http://ariiprotejate.ngo.ro/ap_romania.htm [last consulted May 2007]
- United Nations Educational, Scientific and Cultural Organization (UNESCO) 2007. Available at: <http://www.unesco.org/mab/BRs.shtml> [last consulted April 2007]
- United Nations Educational, Scientific and Cultural Organization World Heritage (UNESCO-WH) 2007. URL: <http://whc.unesco.org/en/about> [last consulted April 2007]
- Vanatori Neamt Natural Park (VNNP) 2007. Available at <http://www.vanatoripark.ro/> [last consulted July 2007]
- Vanatori Neamt Natural Park Management Plan (VNNPMP) 2006.
- Weisberg, H.F., Krosnick, J.A., and Bowen, B.D. 1996. *An introduction to survey research, polling and data analysis*. 3rd edition, Thousand Oaks: Sage Publications
- Wells, M and Brandon, K 1992. *People and parks: Linking protected area management with local communities*. Washington, DC: World Bank.
- Western, D. 1994. Ecosystem conservation and rural development: the case of Amboseli. In *Natural connections: perspectives in community-based conservation*, eds. Western, D., Wright, R.M. and Strum, S.C. Washington DC: Island Press
- Western, D. and Wright, R. M. 1994. The background to community-based conservation. In *Natural connections: perspectives in community-based conservation*, eds. Western, D., Wright, R. M. and Strum Washington DC: Island Press.
- Yin, R.K. 1994. *Case study research: design and methods*, 2nd ed. Thousand Oaks: Sage Publications

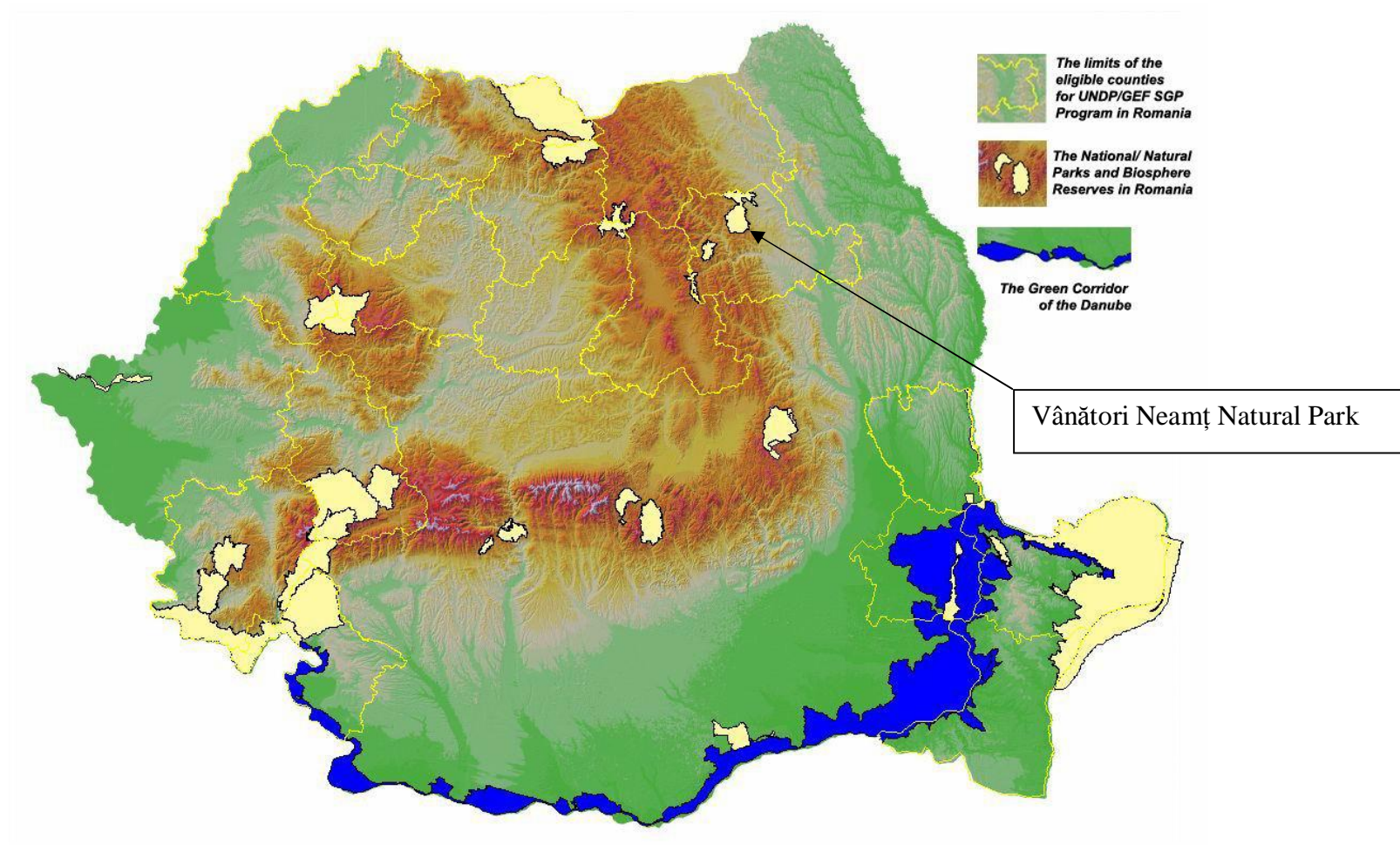
Personal communications:

Cătănoiu, Sebastian. Head manager of the Vanatori-Neamt Natural Park. Formal interview. Vânători Neamț, May 21, 2007.

Curea, Elena. Education and community relations officer. Vânători Neamț Natural Park Administration. Formal interview, Vanatori Neamt, May 21, 2007.

Nun in Văratec. Informal communication. Văratec, June 2000

Appendix 1. Map of National/Natural Parks and Biosphere Reserves in Romania



Source: IUCN http://www.iucn-ce.org/econets/database/files/10/060109052327_Existing%20PAs%20in%20Romania.jpg

Appendix 2. Details about the local NGOs established as a result of the SGP component of the UNDP/GEF Biodiversity Conservation Management Project

| Implementing organization | | Name of the project/ Aims | Location of the project (village/commune) | Activities | Current status |
|---------------------------|--|--|---|--|---|
| 1. | “Young Craftsman” Association Filioara | Promoting traditional arts and crafts among school children | General school I-VIII, Agapia/ Agapia | <ul style="list-style-type: none"> - establishing workshops for glass icon painting, sculpture, tapestry, traditional costumes (e.g. ie), painting eggs - identifying young talents - participation in various contests (collaboration with VNNP) | <ul style="list-style-type: none"> - monitoring phase - no additional sources of funding through other projects, only school funds; there are hopes that financing can be obtained by selling the products made by children |
| 2. | Văratec Ecotourism Association | Văratec Ecology Camp | General school I-IV, Văratec/ Agapia | <ul style="list-style-type: none"> - environmental awareness activities (learning about the forest ecosystem) - sports events, acquiring tourist orientation skills, hiking - contests; visits to VNNP | <ul style="list-style-type: none"> - monitoring phase - new financing from private donations and sponsorships - plans to build own accommodation facilities, headquarters. |
| 3. | Community Tourism Association Agapia (ACTA) | Development of ecotourism – integral part of the sustainable development of the area | Văratec/ Agapia | <ul style="list-style-type: none"> - 10 guest-houses, 30 members - participation at tourism fairs, promote the area through fliers and billboards - organizing a training for guest-house owners in the area | <ul style="list-style-type: none"> - project is finalized - stagnation, no new projects or funding (there were attempts, but high level of bureaucracy, difficulty in getting people involved) |
| 4. | “Friends of the Forest” Ecotourism Association | Ecological and ecotourism education for the young generation | General school I-VIII, Bălătești/ Bălătești | <ul style="list-style-type: none"> - ecological education and promotion of ecotourism - waste collection activities - promoting public awareness in environmental matters | <ul style="list-style-type: none"> - project finalized, - currently supported through school development funding |

| Implementing organization | | Name of the project/ Aims | Location of the project (village/commune) | Activities | Current status |
|---------------------------|--|---|--|---|---|
| 5. | AMECO Ecological Management Association, Bălătești | Rehabilitation of Pietricica – Bolovan Pasture | Florilor Street, no182, Bălătești/ Bălătești | - extending and improving the local pasture by reseeding and applying natural fertilizers (manure) | - project finalized, association no longer active - difficulties in collaborating with local authorities - not much contact with VNNP anymore |
| 6. | “Silver Forest” Craftsmen Association, Bălătești | Reviving and promoting traditional arts and crafts | Valea Seacă/ Bălătești | - bringing together surviving craftsmen: wood carving, carpet weaving, making traditional sheepskin coats, weaving baskets - participation in tourism fairs, all kinds of exhibitions, etc. - intention was to open a shop selling the resulting goods (did not become reality) | - project finalized - association not active anymore - 3 of the initial craftsmen have died and young people not very keen on continuing the trade - difficulties in involving people - relationship with the VNNP is maintained (invitation to their events) |
| 7. | COROLAR Ecological Association | ‘PRO – NATURE’ – ecology club for school children CEU eTD Collection | General School I-VIII, Magazia/ Crăcăoani | - ecological education (VNNP manual, tourist orientation, ecological theme plays etc.) - regular cleaning activities in the area, rivers, pastures, forest (collecting improperly dumped waste) - participation in contests (awards: visits to VNNP camps or other Romanian National Parks) | - project finalized; - club still active (financing obtained from school sources, contributions from local authorities and VNNP) |

| Implementing organization | | Name of the project/ Aims | Location of the project (village/commune) | Activities | Current status |
|---------------------------|--|---|---|---|---|
| 8. | ECO-HORIZON Association, Crăcăoani | Eco-Horizon Ecology Club | General school I-VIII, Crăcăoani/ Crăcăoani | <ul style="list-style-type: none"> - increasing environmental awareness not only among children, but also adults (distribution of fliers, brochures), especially concerning uncontrolled dumping of waste - tree planting, disinfection of local water sources (wells), clearing river beds of waste - participation in contests (collaboration with VNNP) | <ul style="list-style-type: none"> - project finalized - club still active (school development funds) |
| 9. | ECOMIL 2002 Ecology Club | Promoting and capitalizing traditional handmade goods in the Neamț area | School of Arts and Crafts, Vânători Neamț | <ul style="list-style-type: none"> - workshops – sculpture, using glass, wood and textile scraps to make icons, tapestries, and other various objects - waste collection activities on the territory of the commune - ecological education - collaboration with VNNP is continuous | <ul style="list-style-type: none"> - the SGP project was finalized - the club is still impressively active, running various projects (Comenius projects, national grants, partnerships with French and Italian schools, participation in national and international environmental contests) - establishing a Children's Environment Guard etc. |
| 10. | AGROFOREST Association, Vânători Neamț | Rehabilitation of local pasture | City-hall of Vânători Neamț commune | <ul style="list-style-type: none"> - rehabilitation of local pasture; - planting proper grass species, fertilizing with natural fertilizer (manure) | <ul style="list-style-type: none"> - project has ended |

| Implementing organization | | Name of the project/ Aims | Location of the project (village/commune) | Activities | Current status |
|---------------------------|--|--|---|--|--|
| 11. | ECO-CLUB 20 Ozana Ecotourism Association | Ecological education for the young generations | School no 2, Vânători Neamț | <ul style="list-style-type: none"> - ecological education - waste collection activities - promoting public awareness in environmental matters | <ul style="list-style-type: none"> - project finalized - club still active (school development funds) - collaboration with VNNP and the ECOMIL 2002 Ecology Club |
| 12. | ECO-NEMȚIȘOR Association | Promoting modern waste management in the Vanatori Neamt area | City-hall of Vânători Neamț commune | <ul style="list-style-type: none"> - encouraging the development of a modern waste collection system and of a proper disposal facility for the commune. | <ul style="list-style-type: none"> - the project is finalized - the landfill was built, meanwhile Târgu Neamț has increased its waste disposal capacity, and this particular landfill is now used for disposal of industrial and street waste. |

Source: Vânători Neamț Natural Park website (<http://www.vanatoripark.ro/finantari.html>) and face-to-face unstructured interviews with representatives of these NGOs.

Appendix 3. Questionnaire for local communities living within the Vânători-Neamț Natural Park (English version)

Questionnaire no _____

Village _____

Date, time _____

Hello. My name is Doina Mihaela Cojocariu. I am a student at the Central European University. I am conducting this research as part of my Master dissertation. I wish to find out what impacts the establishment of the Vânători-Neamț Natural Park has had on local communities. I am interested in your opinions regarding the park's existence and activities.

The questionnaire will not take more than 15 minutes. Your household was randomly selected and your participation in this survey is voluntary. All information that you share with me here will remain strictly confidential. I want to emphasize that this research is carried out on an independent basis, strictly for scientific and educational purposes, with no involvement from the park administration, or any other government institution. I would very much appreciate your participation in the study.

THANK YOU! ☺

Basic information (this information will remain strictly confidential)

1. Gender: Male ()
 Female ()

2. Please indicate your age: _____

3. How many people live in your household?

Adults (over 18 years old): Male _____ Female _____

Minors (less than 18 years old): Male _____ Female _____

4. How long have u been living in this village? _____

5. Please indicate the highest level of your completed education by ticking the appropriate answer:

Primary school ()
Secondary school ()
Highschool ()
University ()
Other _____

6. What is your current employment status?

Still in school ()
 Farmer ()
 Working with an employer ()
 Self employed ()
 Unemployed ()
 Retired ()
 Other: _____

7. Please indicate what your current primary occupation is

8. Please indicate your average monthly household income by choosing the appropriate income group (in RON):

<300 301-600 601-900 901-1200 1201-1500 >1500

9. Do you think that is enough to cover your households' expenses?

Yes () No () Barely ()

10. Do you own land? If yes, go to the next question, if not, go straight to question #12.

Yes () No ()

11. What is the current use of your land?

Growing crops () What crops? _____
 Pasture/Hayfield ()
 Garden ()
 Orchard ()
 Forest ()
 Others: _____

12. Do you own livestock? If yes go to the next question, if not go straight to question #14.

Yes () No ()

13. What kind of livestock do you own and how many of each kind?

Cattle: _____
 Poultry: _____
 Sheep: _____
 Horses: _____
 Others: _____

Tourism

14. Do you or any member of your household have any benefits from tourism?

- Yes, providing accommodation ()
- selling food and drinks ()
- selling souvenirs ()
- others ()

No ()

15. Do you think more tourists should come to visit this area? Please provide a reason for your answer.

Yes () No ()

Why _____

16. What do you think your area has to offer for potential tourists?

- Tour of the monasteries ()
- Unspoiled nature ()
- Traditional way of living ()
- Others _____

Needs of the community:

17. Do you have access to the following facilities?

| | Yes | No | Have to travel to a bigger village/town |
|------------------|-----|----|---|
| Electricity | | | |
| Gas heating | | | |
| Running water | | | |
| Primary school | | | |
| Secondary school | | | |
| Highschool | | | |
| Medical care | | | |
| Veterinary | | | |

18. Please indicate how important the following facilities are for you?

| | Very important | Important | Of little importance | Completely unimportant |
|--|----------------|-----------|----------------------|------------------------|
| Health services | | | | |
| Higher schools | | | | |
| Veterinary | | | | |
| Better roads | | | | |
| Better public transportation | | | | |
| Running water | | | | |
| Sewerage system | | | | |
| Waste collection services | | | | |
| Tourism development | | | | |
| Forest conservation | | | | |
| Protection of wild life | | | | |
| Subsidies for agriculture | | | | |
| Preservation of cultural heritage (traditions, architectural features) | | | | |

Please indicate others facilities you think the community needs:

The Vânători-Neamț Natural Park

19. Are you aware of the existence of the Vânători-Neamț Natural Park? If your answer is no, then go straight to question #23.

Yes ()

No ()

20. Where is your village situated relative to Vânători-Neamț Natural Park?

Inside the Park's boundaries ()

In the vicinity of the Park ()

Close to the Park ()

Far from the Park ()

I don't know ()

21. How did you find out about the Park's establishment?

Mass media (radio, TV) ()

Park personnel ()

Billboards ()

Interpersonal ()

Other: _____

22. Do you know approximately when the Park was established?

Yes () _____ No ()

23. What do you think the purpose of the Park is?

Nature protection (forest, flora and fauna) ()

Protection of cultural heritage ()

Attracting more tourists ()

All the above ()

Other _____

24. Please indicate how you feel about the following statement: “It is a good thing that the Park was established”.

I agree ()

I disagree ()

I don't know ()

Please provide a reason for your answer:

25. Do you think there are advantages in living inside/close to the Vânători-Neamț Natural Park?

Protected natural environment ()

Possibilities for ecotourism development ()

Possibilities to obtain assistance/funding ()

There are no advantages ()

Others:

26. Do you think there are disadvantages in living inside/close to the Vânători-Neamț Natural Park

Yes () _____

There aren't any disadvantages ()

27. Have you or any member of your household ever participated in a programme / activity/ event organized or funded by Vânători-Neamț Natural Park?

Yes () What were they _____

No ()

28. If the answer is no, would you be willing to participate in such events in the future?

Yes ()
No ()
Only if I have time/benefits ()

29. What do you think are the main problems in protecting the environment in the area?

Abusive logging ()
Dumping of waste ()
Poaching ()
Lack of wastewater treatment ()
Others _____

30. Do you think the Park's existence affects you in any way (good or bad)?

Yes () No ()

31. Do you expect any kind of assistance for the local community from the Vânători-Neamț Natural Park? What kind of assistance do you think they could provide?

Yes () No ()

32. Do you have any suggestions or remarks for the administration of Vânători Neamț Natural Park?

Thank you very much for your time! ☺

Appendix 4. Photographs

Figure 11. Vânători Neamț Natural Park – Administration headquarters and visiting center



Figure 12. The Cross Lake (or Cuiejdel Lake) – formed due to successive landslides naturally damming the Cuiejdel River





Figure 13. Children of Mitocul Bălan



Figure 14. River bed with burning garbage and PET bottles



Figure 15. Rural landscape in Mitocul Bălan



Figure 16. Waste collection in Bălătești



Figure 17. White stork nesting, a common site in Romanian villages



Figure 18. Sheep grazing in Văratec



Figure 19. Talking to locals

