

Men and women of the forest

**Livelihood strategies and conservation from a gender perspective
in Ranomafana National Park, Madagascar**

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| <u>Tiivistelmä Referat – Abstract</u> <p>The objective of this study is twofold: Firstly, to investigate how men and women living in Tanala villages in the Ranomafana National Park buffer zone differ in their natural resource use and livelihood. Secondly, based on this information, the intention is to find out how the establishment of the park has influenced people living in the buffer zone from the gender point of view.</p> <p>The data have been gathered mainly by using semi-structured interviews. Group interviews and individual interviews were carried out in three buffer zone villages. In addition, members of the park personnel were interviewed, observations were made during the visits to the villages and documents related to the planning and the administration of the park were investigated. The data were analysed using qualitative content analysis.</p> <p>It seems that Tanala women and men relate to their environment in a rather similar way and that they have quite equal rights considering the use and the control of natural resources. Probably this is the reason why the management of the Ranomafana National Park has practically not taken gender issues into account in the planning of the park or in administering activities related to it.</p> <p>Both Tanala men and women can own and inherit land, and in most cases they also exert full control over it. Similarly, women and men seem to control their own labour as well as the produce of their work. There is a strong gendered division of labour in Tanala villages, based on the conception of men doing the hard and difficult work and women's tasks being easy. This idea does not appear to correspond with reality, but it rather seems to be a social construction highlighting the importance of men's work at the expense of women's tasks.</p> <p>At the household level, men and women have equal say considering environmental resources management as well as other kinds of issues, but at the community level women are significantly less active than men in decision making. Since the park management has not paid any special attention to this, women's voices and their interests have not been heard as much as those of men in park related meetings. In consequence, there have been no development projects focused on women's cultivation activities, for example. The establishment of the park has also had another important gendered impact. Since the creation of the park local people have been forbidden to enter the park forest. In practise this ban has mostly affected women, and the forest has become a men's space considering both the access to it and its resources as well as the feeling of authority.</p> <p>As a conclusion it can be stated that for achieving socially just nature conservation, it is important to take gender issues into consideration even if gender relations seem to be quite equal. In Ranomafana area the situation could be improved, for example, by listening more carefully to women's interests and needs.</p> | | | |
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| <p>Tutkimuksen tarkoituksena on ensinnäkin selvittää, millä tavoin madagaskarilaisen Ranomafanan kansallispuiston ympärillä elävät, tanaloiden etniseen ryhmään kuuluvat miehet ja naiset eroavat toisistaan luonnonvarojen käytön ja toimeentulon muotojen osalta. Toiseksi tutkimuksessa tarkastellaan kansallispuiston perustamisen vaikutuksia näihin ihmisiin sosiaalisen sukupuolen näkökulmasta.</p> <p>Tutkimusaineisto on kerätty pääasiassa puolistrukturoiduin haastatteluin. Kolmessa puiston ympärillä sijaitsevassa kylässä tehtiin ryhmä- ja yksilöhaastatteluja, minkä lisäksi haastateltiin kansallispuiston henkilökunnan jäseniä, tehtiin havaintoja kylävierailujen aikana ja tutkittiin puiston suunnitteluun ja hallintoon liittyviä dokumentteja. Aineistoa analysoitiin pääasiallisesti laadullisen sisällönanalyysin avulla.</p> <p>Tutkimuksen perusteella näyttää siltä, että tanalanaiset ja –miehet ovat melko tasa-arvoisia suhteessaan ympäristöönsä ja sen resursseihin. Tämä lienee myös syynä sille, miksi kansallispuiston hallinto ei ole ottanut toiminnassaan ja sen suunnittelussa lähes lainkaan huomioon sosiaaliseen sukupuoleen liittyviä kysymyksiä.</p> <p>Sekä naiset että miehet voivat tanalakylissä omistaa ja periä maata sekä useimmiten myös hallita sitä haluamallaan tavalla. Samoin kummatkin voivat melko itsenäisesti hallita omaa työvoimaansa ja päättää työnsä tuotteiden käytöstä. Naisten ja miesten välillä vallitsee selkeä työnjako, jota perustellaan sillä, että miehet tekevät raskaina ja vaikeina pidetyt työt, naisten tehtävien taas katsotaan olevan helppoja ja kevyitä. Naistenkin työt saattavat kuitenkin olla raskaita, ja näyttäisikin siltä, että työnjaon perusteilla korostetaan miesten työn merkitystä naisten työn kustannuksella.</p> <p>Perheissä naiset ja miehet osallistuvat yhtä lailla perheen toimeentuloa ja sen käytettävissä olevia luonnonvaroja koskevaan päätöksentekoon. Kylätason päätöksenteossa miehet ovat kuitenkin merkittävästi naisia aktiivisempia naisten vaikutusvallan jäädessä pikemminkin kulusseihin. Koska kansallispuiston hallinto ei ole ottanut tätä eroa huomioon toiminnassaan, ovat etenkin naisten viljelyyn liittyvät tehtävät jääneet huomiotta puistoon liittyvissä kehityshankkeissa. Toinen keskeinen kansallispuiston vaikutus sosiaalisen sukupuolen näkökulmasta on se, että kun puiston perustamisen myötä sen ympärillä asuvien ihmisten pääsy puiston alueelle kiellettiin, on aiemmin kaikkien käyttämästä metsästä tullut lähinnä miesten alue.</p> <p>Johtopäätöksenä voidaan todeta, että mikäli luontoa halutaan suojella sosiaalisesti oikeudenmukaisella tavalla, tulee sosiaaliseen sukupuoleen liittyvät seikat huomioida myös silloin, kun sukupuolten välinen tilanne näyttää tasa-arvoiselta. Ranomafanan alueella tilannetta voitaisiin parantaa esimerkiksi pyrkimällä erityisesti kuuntelemaan naisia ja heidän intressejään.</p> | | | |
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1 Introduction

1.1 Gender and conservation

As most of the world's biodiversity is situated in poor tropical countries, we are faced with the tremendous challenge of combining the aims of nature conservation with improving, or at least safeguarding, the subsistence of people dependent on these natural resources. In recent decades, various attempts to integrate conservation and development objectives have been made with varying levels of success.

One proposition to resolve the difficulties encountered by these undertakings is the approach highlighting the heterogeneity of communities targeted by conservation measures. According to writers representing this point of view (e.g. Agrawal & Gibson 2001, Meinzen-Dick & Zwarteween 2001), it is crucial to understand that communities involved in conservation are composed of multiple actors with different and dynamic interests. For example class, ethnicity, gender, social status and economic position influence the relationship people have with their environment as well as their environmental rights and responsibilities. Therefore, the impacts of conservation measures might also vary significantly inside a community.

Of these factors contributing to the heterogeneity of environmental relations, gender is an interesting element to consider because it cuts through all the other categories. The relationship between gender and the environment has been widely studied during the 1980's and 1990's. However, scientific information on the gendered impacts of nature conservation has up to now been scarce (Belsky 2003, 91-92). Nevertheless, more practically oriented studies (Aguilar et al. 2002, Flintan 2003) have indicated that when gender and its implications in the distribution of labour, decision-making power and natural resource use are taken into account in protected area management, not only are its social impacts more equitable, but also the results and sustainability of biodiversity conservation are likely to improve. Many conservation organisations have thus taken notice of gender issues in their guidelines (WWF 2001, Biermayr-Jenzano 2003).

1.2 Ranomafana National Park

The multitude and uniqueness of Madagascar's plant and animal species alongside deforestation and other human-related factors threatening them makes the country one of the world's biodiversity hot spots. However, Madagascar is also one of the world's poorest countries, ranking 150 on UNDP's human development index 2004. Integrating nature conservation and human development is thus a crucial challenge faced by the country.

Ranomafana National Park in southeastern Madagascar is one of the locations where this challenge is encountered. The park was created in this area of mountain rainforest in 1991 by the initiative of American scientists who had observed a new lemur species in the area. The forest inside the park was declared closed to all exploitation by the people living in adjacent villages and the traditional form of shifting cultivation, *tavy*, was forbidden. An integrated conservation and development project called Ranomafana National Park Project (RNPP) was established to combine the objectives of sustainable biodiversity conservation with improved socio-economic development of the buffer zone residents.

The development objectives, however, have not been met sufficiently. Many of the people living around the park have seen their situation, which was poor to begin with, getting even worse because of the restrictions on forest use set by the park management (Peters 1998, Harper 2002, Korhonen forthcoming). As there have been no previous studies concerning gender issues in the Ranomafana area, it is interesting to investigate if and how women and men living in the buffer zone have been differently affected by the establishment of the park.

1.3 Aims of the research

1.3.1 General objectives and delimitations

My first objective is to investigate how environmental rights and responsibilities as well as the use and control over natural resources are related to gender in the villages situated in

the buffer zone of the Ranomafana National Park. I will also examine the factors influencing this gendered division by looking into such issues as decision-making power, labour division, norms and beliefs, for example. Secondly, I will study the ways in which the park management has taken gender issues into account in integrating conservation and development goals. Thirdly, based on this information, I will attempt to draw conclusions about the impacts of the park on people living in the buffer zone, their livelihoods and social relations from a gender perspective.

The practical goal of this research is to produce information on the gendered aspects of natural resource use and management as well as the possible gendered impacts of the Ranomafana National Park for use by the park administration and foreign organisations operating in the area.

The original aim of this study was to evaluate the gendered impacts of the Ranomafana National Park. However, as almost no previous gendered data from the area exist, I was obliged to widen my approach to investigate how the rights and responsibilities related to natural resources are divided between men and women in the area. Any impacts found have to be considered against this background of having no data from the years prior to the establishment of the park.

The research is limited to those aspects of the gender system that consider livelihoods and natural resources and to the factors I have assessed to influence them directly. It does not inclusively take into account eventual changes caused by the park on the ideological level, for example. The study is also limited to one of the two main ethnic groups living around the park, namely the Tanala.

1.3.2 Research objectives

The specific research objectives are the following:

Question 1:

How do men and women in the Tanala villages adjacent to the Ranomafana National Park differ in their natural resource use and livelihood? Where do these differences derive from?

Question 1.1:

Which activities form the livelihood strategies of the villagers? How are these activities distributed between men and women?

Question 1.2:

What kinds of factors influence the gendered division of natural resource use and livelihood?

Question 2:

What can be said about the impacts of the Ranomafana National Park on people living in the buffer zone, their livelihoods and social relations from a gender perspective?

Question 2.1:

How has the Ranomafana National Park management tried to take gender issues into account? How successful have these efforts been?

Question 2.2:

What kind of influence has the establishment of the park as well as its management's consideration or lack of consideration of gender issues had on the livelihoods and social relations of men and women living in the buffer zone?

1.4 Context of the research

This study is a part of a research project entitled Ecological and social changes in the threatened rainforests of Madagascar (ECOMADA), carried out in collaboration between the Department of Biological and Environmental Sciences and the Department of Social Policy of the University of Helsinki.

2 Theoretical framework

2.1 Women or gender?

Gender refers to the socially and historically constructed roles of men and women. It implies that the social differences between sexes are not inevitable products of biological discrepancies, but are formulated in the process of socialisation. The categories of women and men as well as the rights, responsibilities and expectations attached to them are therefore culturally specific. Focusing on gender means studying social relationships and systems of power into which they are incorporated (Rico 1998).

I have chosen to study gender relations and differences instead of focusing on women and their situation, because I find this point of departure more fruitful in considering sex-based differences in natural resource use and livelihood strategies. Gender enables us to examine not only women, but the relations between women and men and the possible inequalities considering both groups. On the other hand, speaking about gender implies historical and geographical variation between women, which is also important (Jackson 1993, 651). In addition, as Flintan (2003) and Jokes et al. (1996) have demonstrated, targeting women without really understanding gender relations can have adverse impacts in integrated conservation and development activities.

However, it needs to be highlighted that even within a certain cultural context and a limited geographical area, gender is not the only dimension of social organisation affecting people's relationship with nature and their livelihood strategies (Jackson 1993, Rocheleau et al. 1996). Women, or men, are differentiated for example by their class, ethnicity, age and social status (Jackson 1993, Rocheleau et al. 1996). The importance of gender issues in a certain context of integrated conservation and development depends on the extent to which differences between men and women influence resource use and control patterns, decision-making power and livelihood strategies in the area in question (Meinzen-Dick & Zwarteween 2001, 66).

2.2 Gender and the environment

The gender and development (GAD) approach analyses gender issues in the context of development from the point of view defined above, stressing the socially and politically constructed nature of gender relations (Joeques et al. 1996, Schroeder 1999). It concentrates on material aspects as well as on the ideological side of these relations, considering both the concrete living conditions of women and men and more immaterial issues related to power and ideas (Rathgeber 1995, Jokes et al. 1996).

The theoretical approach chosen for this study, the gender, environment and development (GED) framework, can be considered as an application of gender and development analysis to environmental issues (Joeques et al. 1996, 33). Within the GED approach socially constructed gender, interacting with other factors, is seen as a critical variable in affecting relationships between human beings and their environment. This relation is considered as interactive: not only are gender relations taken to influence environmental management, but it is recognised that environment also constitutes gender relations (Carney 1996, Dankelman 2002, Nightingale 2002). The GED approach further stresses the importance of considering the substantial interdependencies between women and men alongside gender differences (Jackson 1998, 315).

The GED framework consists of two different but very much imbricated theoretical approaches. Feminist environmentalism, mostly attributed to Bina Agarwal (1992, 1997), concentrates more on the material aspects of the relationship between gender and the environment. However, feminist political ecology (Leach 1994, Rocheleau 1995, Rocheleau et al. 1996) emphasises power relations and other social and cultural processes as well as the macro-level context that affect gendered environmental relations. Nevertheless, the disparities between these discourses are unclear and other writers have proposed different divisions. For example, Jackson (1998, 314) lists two more approaches, namely gender analysis and the micro-political economy of gendered resource use. In any case, all these viewpoints share the same central ideas and will thereby be considered together in forming the background for this study.

GED proponents view gender differences in relationship with nature as deriving from social constructions of gender and women's and men's different material reality. Not only are people's gendered interactions with their environment structured by ideological matters, but also the division of labour, property and power influences this relationship. Several writers, especially from the field of feminist political ecology, also stress the importance of wider historical, economical and political elements influencing this interaction. (Agarwal 1992, Rocheleau et al. 1996, Dankelman 2002, Goebel 2002.)

The distribution of labour, decision-making power and the rights and responsibilities related to environmental resources is central to the gender, environment and development approach (Jackson 1998). These more material issues related to resource use are rooted in wider ideological notions and gender relations in the society. Ideas of qualities and endowments attributed to each gender influence the labour division and the rights and responsibilities concerning natural resources (Leach 1994, 38). Issues related to gendered labour division, for example, are also considerably intertwined with power and authority (Jackson 1998, 318).

A gendered distribution of labour outlines men's and women's environmental relations in appointing them tasks related to certain natural resources while denying access to some others. Together with other social institutions such as tenure and property rights, the division and control of labour influences people's livelihood options and defines their relationship with environmental resources (Joekes et al. 1996). As Bina Agarwal (1997) has shown, there is an evident linkage between the gendered labour division and men's and women's different responses to environmental changes. In addition, the access to and the control over labour, one's own as well as the work of others, are often unequally distributed entailing differences in managing the environment (Leach et al. 1995, Carney 1996, Joekes et al. 1996).

Environmental rights and responsibilities have been observed to be unequally distributed between women and men in many areas of the world (FAO 1987, Rodda 1991, Flintan 2003). Women are carrying a bigger proportion of the responsibilities while having only

limited environmental rights compared to men. The gendered rights and responsibilities related to natural resources are often complex and overlapping (Rocheleau & Edmunds 1997). To clarify the analysis of these issues, Rocheleau et al. (1996, 11) list four domains of gendered rights and responsibilities in the context of resource tenure: the control over, the access to and the use of natural resources as well as the gendered responsibilities to provide and manage resources for use in the household or in the community. They separate the notions of legal and customary rights, which are not always congruent and can therefore further complicate the gender division of resources. In addition, it is important to note that environmental rights and responsibilities are dynamic and negotiable and therefore change over time (Carney 1996, Rocheleau & Edmunds 1997).

The distribution of decision-making power is another key factor when discussing gendered environmental relations from the GED point of view. Uneven power relations affect labour division and the rights and responsibilities related to natural resources (Rocheleau 1995). In this context, some writers (e.g. Goebel 2002) have stressed the importance of power inequalities in local institutions, others (Carney 1996, Schroeder 1999) have concentrated on the importance of intra-household politics, highlighting the need to consider the struggles over labour and resources taking place within a household. A useful analytical tool in considering this is the concept of conjugal contract, which centers on the formulation of the principles of intra-household resource allocation and decision-making (Jackson 1995). Understanding the practices of resource allocation and exchange in a broader context as well, that is within a larger group than a household and between groups, is also pivotal for comprehending factors affecting the use of natural resources (Leach 1994).

Another useful tool for the analysis of the relationship between gender and environment is the concept of gendered space. It reveals different patterns of mobility and knowledge and designates a spatial separation of activities and authority of men and women. However, this does not imply that a certain area would necessarily be demarcated as belonging to either women or men. Gendered space can indicate gender differences related to the use, the management or the knowledge about natural resources as well as variations in power in a certain area. These can be incongruent: for example, women can be responsible for the

management of a certain resource while men make the decisions about the resource itself and its produce. (Rocheleau & Edmunds 1997, Goebel 2002, Nightingale 2002.)

3 Methodology and data

3.1 Methods

The primary data collecting methods used in this study are interviews and observation. Firstly, I conducted group interviews in three villages situated in the buffer zone of the Ranomafana National Park using participatory rural appraisal (PRA) techniques to obtain some background information and a general impression of issues related to the study in that particular village. Participatory rural appraisal belongs to participatory research methodologies, which are characterised by a common ideological approach highlighting local people's position not as mere informants, but as partners in the research process (Laitinen 1995). I did not use this approach as such but only borrowed some techniques to make my questions more comprehensible and concrete by visualising the tasks.

Secondly, the villagers' individual interviews were made in a semi-structured way, using the same open-ended questions in every interview and only occasionally making additional inquiries. Thirdly, during my visits to the villages I recorded what was happening around me. This observation was not very extensive and mostly not participative, but it helped me to confirm parts of the knowledge acquired through interviews, especially on traditions and interaction between people.

In addition, I interviewed present and former members of the park management personnel in a rather thematic way, using pre-composed questions quite freely and adding new questions as the interview proceeded. In order to detect how the park management had taken gender issues into account in the past, I also studied various documents concerning different aspects of park administration.

The principal method used to analyse the collected data was qualitative content analysis. All the interviews were categorised and classified according to categories that were mostly established beforehand. Some categories were created during the analysis, as the need for new types of categories emerged. The coding was made using software called atlas.ti. In

addition to content analysis, I also used some of the principles of discourse analysis in deepening the data analysis.

3.2 Data gathering

The fieldwork for this research was carried out in four villages surrounding the Ranomafana National Park in Madagascar during the first three weeks of January 2005. During this time I mostly stayed in the town of Ranomafana making only day excursions to the research sites except for three whole days spent in one of the studied villages.

All the chosen villages are situated in the buffer zone west of the park and are at the most about four kilometres away from the *Route National 25*, the only road crossing the region. This means that they are quite easily accessible as it only takes from half an hour to one hour and a half to walk to the road from these villages and at most about one hour more to walk down the road to the bigger centres of Ranomafana or Kelilalina. The villages are also situated quite near each other, being at about two kilometres' distance from each other (except for the village where the test interviews were made).

There are about one hundred villages in the buffer zone of the Ranomafana National Park. Hence I chose to take into account only one of the two main ethnic groups living in the buffer zone of the park, thus narrowing my target to the lowland Tanala villages, considered to be more negatively influenced by the establishment of the park (Peters 1994).

Constrained by limited resources and time, I was unable to choose either villages situated very far away from Ranomafana or the ones only accessible by a very long walk through the forest. Finally, I aimed to select villages where little or no research had been carried out before as many people living in the Ranomafana area have already been burdened with several surveys and interviews with no apparent benefit for themselves.

In one of the four villages, chosen because of its immediate proximity to the town of Ranomafana, only test interviews were made. The first half of the group interview was conducted with a men's group and the second half with women. The personal interview was

tested out with one woman. After the test interviews I modified some of the questions in the group interview, especially the one concerning the mapping of natural resources which seemed to be hard to understand even for my research assistant.

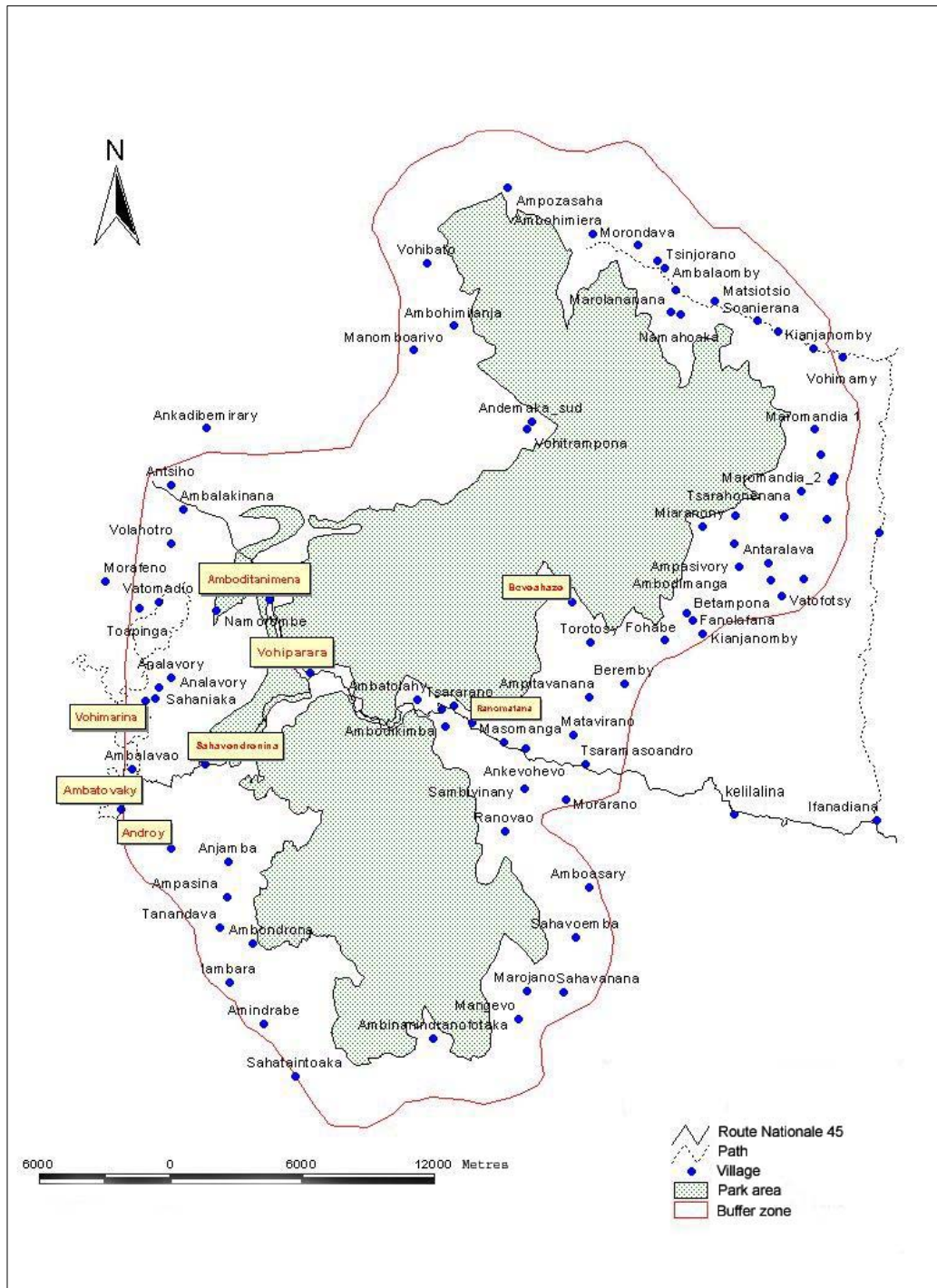


Figure 1. Map of the Ranomafana National Park and the villages situated in its buffer zone.

In the three actual research villages two group interviews were made, one with a women's group and another with a men's group. The participants, the number of which ranged from eight to twelve in each group, were chosen by the village's president (president of the *fokontany* or president of the *arrondissement*) according to the given directions. I requested the president to select people of varying ages as well as with different marital status and economic situation. The criterion used to measure the wealth of the participants was their land ownership – owners of *tanimbary* (rice paddies) were considered wealthier than those who only owned *tanimboly* (other type of land). This method of selection worked quite well in two villages, but not as satisfactorily in the third one, where older men were overrepresented in the group because of several elders stayed for the interview after the initial ceremony which required their presence. Also, in this village's women's group there were no women who did not own rice paddies. Another issue that should be taken into account is that in every village the *ampanjaka* (king of the village) participated in the men's group interview and his wife in the women's group.



Figure 2. My research assistant Chantal Soloniaina interviewing a group of women.

After the group interviews, three people from each group were chosen for an individual interview. This selection was made according to the criteria mentioned above in order to interview different kinds of persons. However, as the fieldwork was carried out in January when the villagers were working their land and transplanting rice, it was sometimes difficult to get the right kind of people to stay in the village for the individual interviews. In one of the villages the people interviewed were mostly only those who stayed in the village after the group interviews and did not go to their fields.

Three members of former and present park personnel were also individually interviewed. They were chosen because of their experience of socio-economic aspects of park administration.

I personally interviewed the park personnel in French and English and transcribed the interviews. My Malagasy research assistant, Chantal Soloniaina, carried out the interviews with the local people because of my limited skills in Malagasy. However, I was able to partly follow these interviews and make some additional questions. My assistant also translated the interviews and we transcribed them together.

3.3 Assessment of the methodology

The most important weakness of the data gathering phase is the fact that it was economically impossible to have a professional translate the interviews carried out in Malagasy. My research assistant translated what the interviewed people said. However, she did not transcribe the interviews word for word, and hence it was impossible to make any deeper discourse analysis of the answers. Because of the poor translation, I chose also not to use direct quotes of these interviews in my paper. I acknowledge that a better translation would probably have brought more depth to this research.

Despite the criticism expressed by some researchers concerning group interviews and especially participatory research methodologies, I think that my group interviews gave

important support and insight to the individual interviews. Thus I consider the group interviews a strength of this study. Another matter to reflect on is that there could have been more individual interviews, but I still find the quantity sufficient for a Master's thesis.

Many other details, most of them already mentioned in this chapter, have influenced the kinds of data I was able to gather and, furthermore, the results obtained. As to the research in general, the cultural differences between myself as a researcher and my interviewees are certainly very important. My research assistant was of great help in explaining and dealing with some of these differences, but definitely many more persist and affect the interpretation of data and hence the results of the research. Another important factor is my background as an environmentalist and my lack of experience of gender studies and anthropology. As to the generalisation of my results to depict the situation of all the Tanala in the Ranomafana area, it is quite probable that in the villages further away from the road than the ones studied the way of life and the influence of the park are different. However, my opinion is that as long as given limitations are kept in mind, the results of this study give a useful insight to the subject from this certain point of view.

4 The park and its people

4.1 Madagascar – a unique island

Madagascar, the world's fourth-largest island, lies in the Indian Ocean separated from mainland Africa by the 400 kilometres wide Mozambique Channel. With a surface area of 587 040 square kilometres Madagascar is slightly larger than France. A population of approximately 18 million people makes it relatively sparsely inhabited, but the population growth rate is high, over 3 percent. (CIA 2005.)

Madagascar was first inhabited only about 1500 to 2000 years ago. The first settlers came by sea from Southeast Asia and hence the Malagasy culture is a mixture of Malay-Polynesian, Arab and Bantu elements. The Malagasy people are quite homogenous with a rather uniform culture and one language spoken in different dialects in the whole country. Nevertheless, the people are officially divided into eighteen tribes, but the ethnic basis of this division has been questioned. (Huntington 1988, Harper 2002.)

Due to over 80 million years' of geographical isolation Madagascar's nature is unique. According to different estimations, 80 to 90 percent of its species are endemic, which means that they are found nowhere else in the world. In addition to uniqueness, also the diversity of Malagasy flora and fauna is remarkable. Species previously unknown to western science are continuously being found on the island. However, many species have already been driven to extinction by habitat loss and hunting and many others are endangered because of continuing deforestation and other human-related factors. To protect the unique nature, fifteen national parks, nine nature reserves and twenty-three special reserves have been created during the last two decades. (Wright 1997, Wright & Andriamihaja 2002.)

Madagascar is one of the world's poorest countries, ranking 150 on United Nations Development Program's human development index 2004 and with a GDP of 740 US dollars per capita. The Malagasy life expectancy at birth is less than 54 years and adult literacy is below 70 percent. The poverty is weighty especially on the countryside where people are

highly dependent on the natural resources around them. The unparalleled biodiversity together with the prevailing poverty show that efforts to combine nature conservation and human development are particularly necessary in Madagascar.

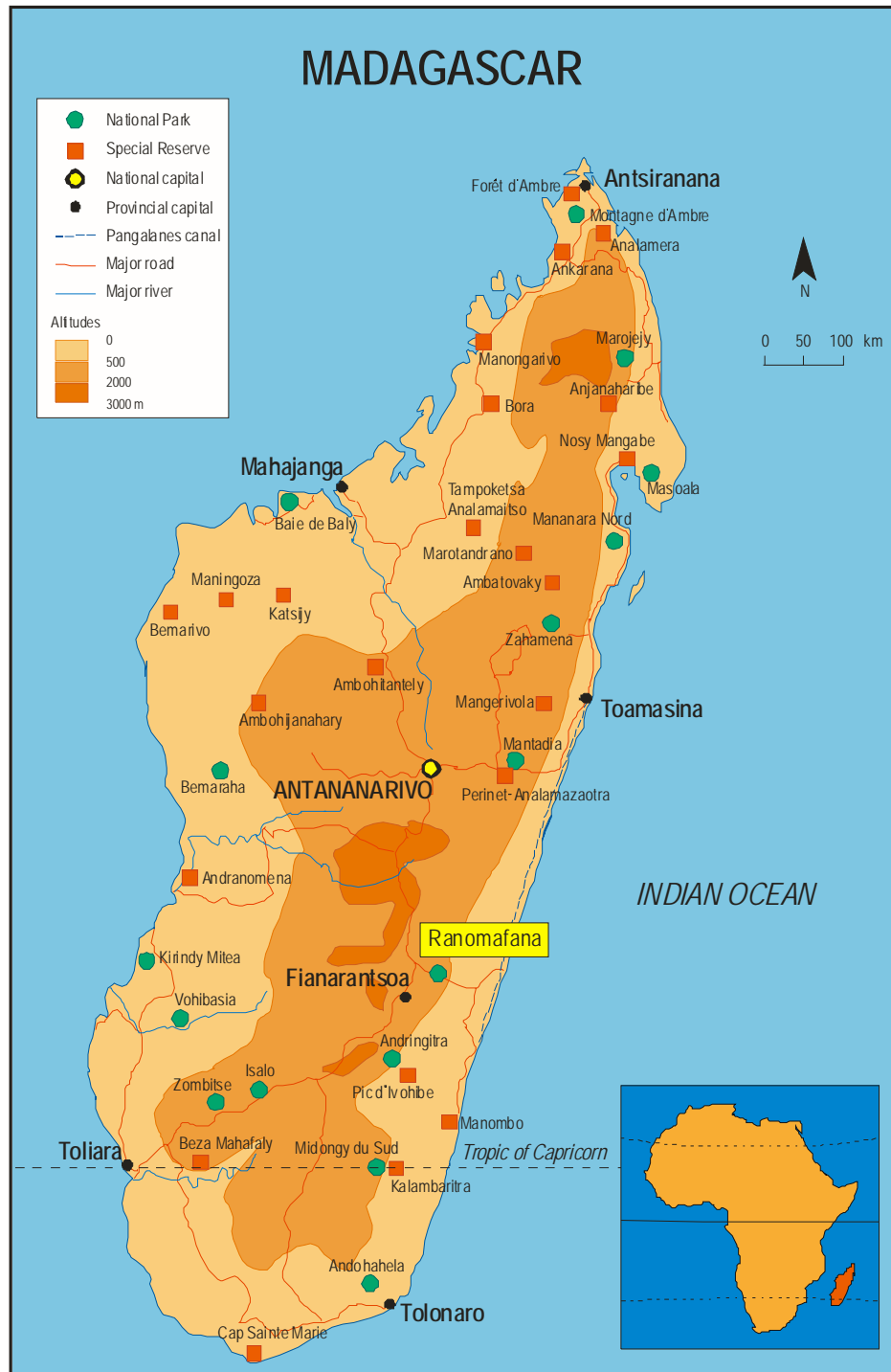


Figure 3. Map of Madagascar, its biggest towns and national parks (made by Anu Lappalainen).

4.2 Ranomafana National Park

The Ranomafana National Park is located in southeastern Madagascar in the province of Fianarantsoa, 90 kilometres from the Indian Ocean. The area is mountainous, the elevation ranging from 400 to 1500 metres. The park contains relatively undisturbed lowland rainforest, cloud forest and high plateau forest as well as a large variety of unique flora and fauna. The total area of the unpopulated protected forest is 43,500 ha and it is surrounded by a three kilometres wide zone containing the villages considered to exert significant pressures on the park. In this study, this zone is called the park's buffer zone. There are about hundred villages in the buffer zone with a total population of approximately 30 000 people (this is a rough estimation on the basis of the last census carried out in 1993). (Grenfell 1995, Wright 1997.)



Figure 4. The mountainous rainforest of the Ranomafana National Park is rich in biodiversity.

The Ranomafana National Park was established in 1991, soon after the golden bamboo lemur (*Haplemur aureus*), a species previously unknown to western science, was discovered there by American scientists in 1986 (Wright & Andriamihaja 2003). The park started out as an integrated conservation and development project (ICDP) funded by USAID and administered by a team lead by Americans. Its main objective is to protect the biological diversity of the area by combining nature conservation with improved socio-economic situation of the buffer zone residents (Grenfell 1995, 8). This goal is pursued by focusing on six types of activities: biodiversity research, park management and ecotourism, health, conservation education, rural development and monitoring (Wright 1997, 387). After the World Bank and the USAID had taken a radically more critical stand towards the ICDP approach and in the wave of decreasing development aid in general, USAID cut heavily down its funding in 1997 ending its funding for the integrated conservation and development project in Ranomafana. The responsibility of the park management as well as ecotourism and rural development was thus transferred to ANGAP (*Association Nationale pour la Gestion des Aires Protégées*), a Malagasy organisation nowadays managing most of the protected areas in Madagascar. Its activities were financed by a World Bank grant from the Global Environment Facility (GEF) funds. The health, conservation education and research facilitation components were assigned to a Malagasy NGO called *Madagascar Institute pour la Conservation des Environnements Tropicaux* (MICET) funded by small grants from various American sources. (Wright & Andriamihaja 2002, Wright & Andriamihaja 2003.)

The park management considers *tavy*, a local mode of shifting cultivation, as causing the most important pressure on the park alongside different types of natural resource extraction (Grenfell 1995, 37). Various other important causes for deforestation in Madagascar have been identified by scientist (Oxby 1985, Jarosz 1993) studying the issue, but the authorities still mostly concentrate on shifting cultivation. Hence *tavy* has been banned in Ranomafana National Park's buffer zone since the establishment of the park. All kind of exploitation of the forest inside the park has also been prohibited. In compensation for these losses in livelihood opportunities, the park management started development activities, which were initially run by two Malagasy NGOs, *Tefy Saina* and *Malagasy Mahomby*. Nowadays these

organisations have left the area and the rural development activities are the responsibility of ANGAP.

According to a national programme started in 1992, half of the amount generated by the national park entrance fees (*droit d'entrée dans les aires protégées*, DEAP) is directed to the buffer zone villages by financing microdevelopment projects. Groups of villagers apply for projects, which have, for example, built rice storehouses or dams or bought seeds. Initially, applications were approved or rejected by the park management, but in 1995 a more participatory organisation was created. A DEAP committee was established in each *fokontany* (municipality) to motivate the villagers to apply for funding and to make the preliminary decisions about the approval or rejection of the proposals. A management committee (*comité de gestion*, COGES), a collective body for the whole buffer zone also composed of local people, was created to make the final decisions. (Grenfell 1995, 109-110.) In 2004, during a period of organisational changes, these committees functioned no more and all the decisions about microprojects were made at ANGAP Fianarantsoa while a new committee (*comité d'orientation et de soutien de l'aire protégée*, COZAP) was created. This new board will no longer make decisions about funding, but only give advise and monitor the projects.

According to Ferraro (2002, 262), the local opportunity costs of the Ranomafana National Park are significant, even though on a national or global scale the costs are quite small in comparison with the benefits. Another way to put it is to say that the poor people living in the Ranomafana area have paid for the global conservation benefits. As Korhonen (2005) notes, those people who have suffered the most from the restrictions posed by conservation, have benefited least from the park management's development activities.

4.3 People of the forest

Generally, people living in the buffer zone of the Ranomafana National Park are divided in two different ethnic groups, the Betsileo and the Tanala, both belonging to the eighteen tribal groups acknowledged by the Malagasy government. These groups are not only

regarded as geographically separate, the Betsileo inhabiting the highlands west to the park and the Tanala living in lower elevations in central and eastern areas of the park, but they are assessed to be culturally different. (Kightlinger et al. 1992, Peters 1992, Grenfell 1995.)

However, Kightlinger et al. (1992, 19) have noted that in some communities these ethnic differences have become obscure. According to Philippe Beaujard (1983, 24), the Tanala are not a clearly distinguishable ethnic group, nor have they formed a common political entity in the past. He states that the term Tanala rather refers to a similar way of living in a forested environment. Further, Harper (2002) sharply criticises the separation of two distinct cultures and the strong stereotypes attached to each ethnic group in the management of the park (see, for example, Ferraro & Rakotondranjaona 1991, 88). I will not go further in this discussion, but only observe that the use of the term Tanala in this study is a generalisation, and although most of the people interviewed during the research considered themselves as Tanala, some of them identified themselves as Betsileo or as having a mixed ethnic identity.



Figure 5. A typical Tanala village in the Ifanadiana region.

The Tanala are generally divided into two subgroups, the Tanala Menabe living in the mountainous area north of the domicile of the Tanala Ikongo. However, Bodo Ravololomanga (1992) distinguishes a third group, the Tanala of the Ifanadiana region, living between the two groups mentioned. The people inhabiting the Ranomafana National Park buffer zone are Tanala of Ifanadiana.

The word Tanala, or Antanala, literally means “people of the forest”. In spite of their name, the Tanala are not hunter-gatherers, but farmers who have used the forest and its products to supplement the living they get from cultivation (Ferraro & Rakotondranjaona 1991, 87-88). Traditionally their most important livelihood has been shifting rice cultivation known as *tavy*, which includes the felling and burning of the forest, intercropping non-irrigated rice varieties with various vegetables for a few years and finally planting banana or coffee trees or leaving the plot fallow (Hanson 1997, 37-39). In addition to being an important livelihood, *tavy* is part of people’s cultural identity, representing ancestral tradition, independence, power and labour control (Jarosz 1993, Harper 2002). The park management views the practise of *tavy* as the most serious threat to the park and therefore it has been banned since the park was established (Wright 1997, 392). The park administration tries instead to promote the growing of irrigated paddy rice, but the type of flat land suitable for paddy rice cultivation (*tanimbary*) is limited in the buffer zone areas inhabited by the Tanala.

In the villages studied for this research, the most important livelihoods are the cultivation of rice (both *tavy* rice and irrigated rice) and bananas, while the production of beans and cassava, and in some villages coffee and wage work in other’s fields, are also important. These activities are complemented with the growing of peanuts, leafy vegetables, sugar cane, maize, taro, pineapple and sweet potato, as well as with animal husbandry and weaving mats, baskets and the like. It is worth noticing that few of these livelihood activities mentioned by the villagers themselves are related to natural resources extracted from the forest.



Figure 6. Paddy rice fields (*tanimbary*) in the back, *tavy* in foreground.

The social organisation of the Tanala communities is similar in all the villages, but the importance of different institutions in decision making might vary a little between different villages. The traditional leader of a Tanala village is *ampanjaka*, the king or the “one who rules”. He makes village decisions together with the elders of the village who are called *ray aman-dreny* (fathers and mothers). They might also organise meetings for the whole community (*fokonolona*) to discuss common issues together. Administrative power is held by the elected president of the *fokontany* or the *arrondissement* (different administrative areas).

5 Gender and the Ranomafana National Park

5.1 Aspects of Tanala gender relations

The Tanala of Ifanadiana are traditionally patrilocal, which means that in a marriage the wife comes to live in the village of her husband. Although this is not as strictly followed nowadays as before, it is still the general rule. However, the descent system of the Tanala highlights the meaning of both of the parents: the line of descent is traced from both father's and mother's side. In a way, a child appertains even more naturally to his / her mother and her kin, because the father has to perform a ritual to incorporate the child into his own group, while an infant is automatically considered to belong to his / her mother's group. (Ravololomanga 1992.)

Individuals can freely choose their spouses as long as a strict rule of exogamy is followed. For the marriage to be approved by the community, the spouses cannot belong to the same descent group, which is a wide prohibition as descent is traced from both parents' side. (Ravololomanga 1992, 53.) A divorce is also a personal decision, which can be made by either the husband or the wife. Divorces are relatively common in Tanala society. According to an old tradition, in case of a divorce all the possessions of a couple, except the land, are divided into three parts of which the husband gets two and the wife one. This custom is now changing towards an equal distribution of property between the spouses. Children who are old enough to decide can choose themselves with whom they will stay. Those who are too young to decide usually stay with their mother.

In general, men, women and their older children take care of the family's young children. Even though it is usual to see men with children, the main responsibility seems anyhow to lie on women's shoulders. A few of the interviewed people considered childcare as women's task only, but in spite of that, the men who take care of children are not stigmatised as are the men who cook when their wife is in the village. These men are taken for gourmets.



Figure 7. It is usual to see Tanala men taking care of their children.

In general, men are considered to be responsible for earning revenues for the household, even though women as well as men work for wages in other's fields and sell the products of their cultivation. Nevertheless, women manage the money. Whatever a man earns, he gives it to his wife who keeps the money, and if he needs to buy something, he asks for money from his wife. This arrangement manifests trust towards the wife and, on the whole, it is considered bad if the man keeps the money as he could be prone to spend it on *toaka gasy* (local rum).

On the community level, decisions are made by the king (*ampanjaka*) and the elders with the occasional participation of the village council (*fokonolona*). In principle, there is no impediment for a woman to be an *ampanjaka*, but in practise it is very rare. Only one of the eighteen villagers interviewed for this study mentioned that he had heard of such a case.

According to Peters (1992, 166), it only takes place when the previous *ampanjaka* has no sons.

As to the elders, even their name, *ray aman-dreny*, which literally means fathers and mothers, indicates that women are involved in this position. All the people old enough, usually at least 50 or 60 years of age, are considered elders (Peters 1992, 167). However, it depends on them how much they are involved in community affairs, and according to Peters (ibid., 167), only few women really participate in decision making. For example, most of the *ray aman-dreny* who gathered to welcome me as a foreign visitor to their village and perform the necessary traditional ceremony were men. Nevertheless, all the villagers stated that if women wish to participate, they have equal rights to express their opinions and make decisions. Still, my observation was that even when women were present in public meetings, only some of them – often the oldest ones or those in otherwise advantageous positions – actively participated and shared their opinions.

Women also attend less often the meetings of the village council, the *fokonolona*. Even though almost all the women told that they participate in the meetings, the statistics of the park management show that only few women show up and even fewer share their opinions in the park-related meetings organised in the Tanala villages. There seems to be a tradition of women not expressing their views publicly in the presence of men. This custom is illustrated by the saying *aza manao akohovavy manino*, “do not be the crowing hen”. It relates especially to the younger women, elderly women being more prone to speak up in public.

The question of the decision making power at the household level is very interesting. People coming from outside the Tanala society seem to view the communities as dominated by men’s authority with women having little to say in the decision making process. However, all the villagers persistently stated that husband and wife make all the important decisions together and that the only exception to this rule is when one of them is absent from the village (cf. Korhonen 2005). The answer seems to lie in men’s more influential position in

public arenas. Women's power is more invisible, as a person who has worked for the park management for twelve years observed:

”People respect ladies actually in the Tanala. It's contradictory, because in the society, in the daily life of people, it seems that the ladies are really passive. But actually, they have power. Even if the men decide in the meetings, if the ladies don't accept it, it stays a word, it doesn't become concrete, because the ladies at home they say: it's not good... So they have very discrete power, the Tanala ladies.”

An illustration of this hidden power is the tradition of *kabarim-biavy*, which literally means “women's speech”. If a woman is seriously violated by a man, be it her husband or somebody else from her village, and the community is unable to resolve the conflict in any other way, all the women of the village leave their homes and start walking together southwards. Men are left alone to handle the cooking, cleaning and taking care of male infants. Hence, they are eager to send a delegation to apologise and offer a zebu (highly appreciated and very valuable in the Tanala society) for the restoration of the honour of the offended woman. The *kabarim-biavy* occurs very rarely, and many of the younger people do not even know what it is. Still, it demonstrates the power women can resort to in case all other means are ineffective. (Ravololomanga 1992.)

Another conclusion one can draw from the villagers' congruent answers considering decision making is that both spouses' participation in making decisions is valued. Men are not ashamed of stating that women have their say in issues concerning the household and vice versa. This can be considered as a sign of equal appreciation of both men and women in the Tanala society.

5.2 Gendered natural resource use and livelihoods

5.2.1 Rights to land

Contrary to the situation in most parts of mainland Africa (Jokes et al. 1996, 2), in all the villages studied for this research, the gendered rights to the ownership and the inheritance of land are rather equal in the Tanala communities. In the studied villages, when a couple dies, their land is usually distributed equally between all of their children, though Ferraro and Rakotondranjaona (1991, 87) note that this might vary from one village to another in Ranomafana area. If one of their daughters has married and moved to a village very far away, she leaves her part of the land to one of her siblings, usually her brother, as men in general stay in their natal village after they marry. If the daughter has not moved very far away, she usually keeps the land she inherited. Because of this system, many of the fields of the people living in a certain village are actually situated on the territory of another village, sometimes even quite far away. Hence, a couple may cultivate land owned by the husband, the wife or both, depending on whose parents the land is inherited from. If they have bought or cleared new land together, they own it together as well.

In case of land tenure, customary and legal rights are mostly congruent in the studied villages. If the land is officially registered at the *Service de Domain*, a governmental organisation dealing with property rights, it is done in the name of the owner, be it a man or a woman. However, in the case of jointly owned land a couple may decide to register it to only one of them, usually the husband. When married, the spouse of the landowner as well as their children have the right to use the land, but in case of a divorce, the use rights of the spouse cease. The jointly owned land may be divided between the spouses or handed over to their children. If the couple is still married when the owner of the land dies, the land is shared between the spouse and the children, if they are old enough to cultivate it.

Another inconsistency between customary and legal rights considering land tenure is the case of a divorced woman who has left the land she inherited from her parents to one of her siblings. The person to whom she left the land uses the land as his own and might even have registered it in his own name. However, in case of a divorce the woman returns to her natal village and, according to the local customs, regains the use rights to that piece of land. In spite of this, the land may remain officially registered in the name of her brother. This has not posed problems so far, as the customary rights are widely appreciated (Ferraro and

Rakotondranjaona 1991, 86), but might cause insecurity in the future, as the land rights and the social relations mediating them are constantly being reinterpreted (cf. Carney 1996, Jokes et al. 1996).

5.2.2 Gendered space

In the studied Tanala villages, there are no strict gendered restrictions on the ownership or use of natural resources or the type of work one can do or even on the areas one can go to. Even though a labour distribution definitely exists, none of the work is indisputably forbidden to the representatives of the other sex. The only areas with limited access are the tombs, where nobody can go, and the *alam-biavy*, “women’s forest”. *Alam-biavy* is an area surrounding a part of a stream or a riverbank where women go to wash themselves. Men are supposed to announce their presence when approaching the *alam-biavy* and they are forbidden to cut trees or even branches there. (Ravololomanga 1992, 47-48.)

According to Korhonen (2004), the forest, an essential part of the environment for the Tanala, is perceived differently by men and women. She states that for men, the “forest and going into the forest are representations of freedom, forming one of the most essential elements of the identity of being ‘a Tanala man’”. According to her, women view the forest more as an important part of the whole environment.

The most significant aspect of the spatial differentiation of gendered activities and authority is women’s traditional position in taking care of tasks inside a household in contrast to men’s responsibility of bringing food or money to the household. Traces of this principle are still found in the discourse both men and women use even though women are nowadays as active as men in the work done in the fields.

5.2.3 Distribution of labour

In Tanala villages there is a strong division of labour, even though much of the work is carried out together. Most of the household tasks, such as cooking, cleaning, fetching water

and washing the laundry are considered as women's responsibility. When old enough, girls most often fetch water, pound the rice, clean the house and sometimes even cook (Harper 2002, 63). From time to time, men may help their wives in washing the laundry, for example, and they can cook if their wives are out of the village and their daughters are not old enough to do it. They are thus able to perform the tasks, but in general, women carry them out because taking care of what takes place inside a household is viewed as their duty. Men handle such household tasks as reparations and collecting firewood (Harper 2002, 63). These might involve going to the forest for firewood or timber for construction. The fact that men are responsible for collecting firewood is interesting, as in many developing countries and especially in mainland Africa, it is usually women's task (Rodda 1991, 47-50).

When a member of the family falls ill, both husband and wife take care of the patient. If the sickness is serious, all the members of the community might participate in taking the patient to the hospital. If medicinal plants are used, men collect them, because it involves going to the forest and they most often have the required knowledge.

The cultivation of many cash crops, such as bananas, coffee and pineapple, is exclusively men's responsibility, because the work is considered to be heavy. Even though women can also be involved in selling the produce, men seem exert more control over cash crop cultivation. However, a woman might also cultivate bananas or other local cash crops if she does not have a husband or another male relative or enough money to hire somebody to do it for her. A clear difference between poor and wealthier women can be seen here: a wealthy Tanala woman would not work with bananas or do other heavy men's tasks, but sometimes a poor woman does not have other possibilities.

Most of the other agricultural work is carried out together, although different tasks are divided between men and women. For example, in cultivating paddy rice (*tanimbary*), men dig and fix the channels and prepare the land with spades. After this men and women pick out the weeds. Women plant the seeds and transplant the seedlings. Men and women do the weeding together as well as watching out for the birds, which might also be children's task. Finally, both men and women harvest the rice (Harper 2002, 70). The only productive

activities strictly attributed to women are the cultivation of leafy vegetables and peanuts, as well as weaving. If a family owns chicken or pigs, anybody, including the children, might take care of them. However, men or boys tend the cows, which are a symbol of wealth and only used for ceremonial activities (Ferraro and Rakotondranjaona 1991, 116). According to Harper (2002, 57), men own the farming tools.



Figure 8. Turning paddy rice fields with spades is men's task. The work is heavy, and if the family has enough money, they usually hire somebody to do it for them.

In spite of women taking care of most household chores, they work in the fields as much as men (Harper 2002, 57). While women prepare the meals and wash the dishes, men have free time for chatting or napping (see tables 1 and 2). Nevertheless, men are considered to work harder and a general reason given for the labour distribution is that men carry out the laborious tasks while women do the easy work.

“So women are good for weaving plants, mostly, for harvesting crayfishes. But men, they are made for taking wood for construction, precious wood, honey and what else... firewood or medicinal plants. So something more... more difficult like cutting the trees for house construction or cutting the precious wood for sale or looking for medicinal plants, a little hard it’s for men. ... And cooking is also women’s task, and harvesting crayfishes, it’s not hard... so it’s the women [who do it], and sometimes kids help women to do it.”

- A man from Ranomafana previously employed in the park management

This discourse linking the difficult and heavy work with men and the light tasks with women cuts through all the data acquired for this study, even though in practise it sometimes does not seem to correspond to the demands of the task in question. For example, collecting firewood, a men’s task, is considered difficult and heavy while fetching water, which is women’s responsibility, is viewed as easy work. Yet again, weaving is considered as women’s task concurrently because it is easy and because men do not know how to do it. Sick (1998, 194-197) has observed similar kind of attitudes among coffee-producing households in Costa Rica. It seems that the social reality is constructed and different tasks are valued in a way that stresses the importance of men’s work at the expense of women’s contribution.

Table 1. Women’s daily schedule in one of the studied villages

| Time | Activity |
|-------------------|--|
| 5 – 5.30 a.m. | waking up |
| 5.30 – 6 a.m. | cooking rice and coffee for breakfast |
| 6 – 11 a.m. | working in the fields |
| 11 a.m. – 12 p.m. | preparing lunch |
| 12 – 2 p.m. | eating lunch and resting |
| 2 – 4 p.m. | working in the fields |
| 4 – 6 p.m. | fetching water, collecting and preparing leafy vegetables for supper |
| 6 – 8 p.m. | cooking and eating supper |
| 8 p.m. | going to sleep |

Table 2. Men’s daily schedule in one of the studied villages

| Time | Activity |
|---------------------|---------------------------------------|
| 6 a.m. | waking up |
| 6 – 6.30 a.m. | having breakfast |
| 6.30 a.m. – 12 p.m. | working in the fields |
| 12 – 1 p.m. | eating lunch and resting |
| 1 – 5 p.m. | working in the fields |
| 5 – 7 p.m. | resting, chatting, listening to radio |
| 7 – 8 p.m. | eating supper |
| 8 p.m. | going to sleep |

Both men and women can hire other people to work for them if they just have money. There are no restrictions on access to hired labour of opposite sex and as most of the tasks clearly belong to either men or women, it is usual that a wealthy single woman, for example, will hire a man to do “men’s work”, such as clearing fields, and vice versa. The primary recourse in such a case is, nevertheless, one’s kin. Both men and women can also engage in paid work for others and it is in fact a rather common practise in Tanala villages.



Figure 9. Men carry the bananas to the road or to the market. This kind of a load might weigh up to 80 kilograms.

Women and men seem to exert equal control over the produce of their work. Depending on the heaviness of the product, either the husband or the wife might go the market to sell it or they could do it together. As mentioned earlier, in any case the woman will get the money to keep it until a decision is made of how it should be used.

Table 3. Summary of men’s and women’s rights and responsibilities related to natural resources in the studied Tanala villages. Categories according to Rocheleau et al. (1996, 11).

| Category | Gendered rights and responsibilities |
|--|---|
| control of resources | <ul style="list-style-type: none"> - legally, women and men have equal rights to land ownership - also customarily women as well as men have the right to own land and to control the land they own - both spouses participate in making decisions about the resources the family owns - after the establishment of the national park, local people have lost any control they had over the forest to the park authorities |
| access to resources | <ul style="list-style-type: none"> - in principle men and women have equal rights to inheritance, but women do not always practise their right - women and men seem to have equal access to the land under family’s control - because the establishment of the national park, the forest and it’s resources are nowadays mostly accessible to men only |
| use of resources | <ul style="list-style-type: none"> - the distribution of labour and hence the use of resources is determined by the characteristics attributed to each gender – men do the “hard” and “difficult” work, women are responsible for the “easy” and “light” tasks - both men and women have the right to sell the products of their cultivation - women and men decide together about how to use the money they have earned by selling their produce |
| responsibilities to provide and manage resources | <ul style="list-style-type: none"> - men are traditionally responsible for sustaining the family – bringing money and food to the household - men are responsible for the cultivation of the most important cash crops - men should collect firewood and they are mostly responsible for the collection of medicinal plants - women are responsible for managing the household, doing most of the reproductive work and feeding the family - women also take part in the farming activities and it is mostly their task to carry out home gardening - women are responsible for managing the money of the household |

Table 3 summarises the gendered rights and responsibilities related to the natural resources the Tanala use. Next I will study how these differences in rights and responsibilities have been taken into consideration in the management of the Ranomafana National Park and what kind of effects the establishment of the park and the activities related to it have had from the gender perspective.

5.3 Gendered influence of the park

In general, the Ranomafana National Park administration has not taken the gender approach into account so far (Korhonen 2005). Gender issues have not been considered in the policy papers concerning park planning, management and evaluation. The personnel have not been trained in gender issues. The meetings organised with the villagers have usually been in common for men and women, even if the level of participation of women has been very low, 2 – 5 %. In spite of women's poor participation in public reunions, separate meetings for men and for women have been organised only occasionally, when dealing with such issues as contraception or AIDS, or sometimes in the context of handicrafts.

However, some efforts have been made to promote gender equality in relation to the park activities. The park employees have tried to encourage villagers to elect women to the park-related committees (DEAP; COGES, COZAP), but so far the results have been poor with only 4 % of women in the DEAP committees and no women in the other two. During the existence of the park there have been various attempts to involve women in producing crafts to be sold for tourists. However, the efforts at craft making have not been very successful so far. There are two micro-development projects especially destined for women, one dealing with craft making and selling and the other one with beekeeping. Also, the park organisation itself employs many women, who have sometimes even formed the majority of the higher rank officials. Nevertheless, few of the local people working for the park as guides or park agents are women.

The main occupation of Tanala women is farming and they also define themselves as farmers. In spite of this, the park management and the development projects related to it

have paid no attention to those farming activities of which women are mostly or completely responsible. (Korhonen 2005.)

Some of the interviewed members of the park personnel stated that it is more effective to work with women. On one hand, this is because women talk more about the things they hear and therefore share more efficiently the messages of the park management than men. On the other hand, women's attitude towards work is considered to be more serious and hence the realisation of activities more concrete.

During the year 2004, the national administration of ANGAP added the number of women-headed households benefiting from the project to the micro-development project applications. This figure is now taken into account alongside other factors when deciding which projects will be financed. As to the future, the ValBio research station is planning to concentrate more on women in its development activities.

For the villagers, the most important changes in their lives brought by the establishment of the park are restrictions in the forest use and the ban on *tavy*. The Tanala used to go to the forest to collect crayfish for sale and home consumption as well as timber for construction, which could also be sold. The prohibition of *tavy* mostly affects the poorer people who do not own paddy rice fields and leads to difficulties when the cultivated land cannot be expanded. However, the park has also benefited some people in the form of projects that have built schools, barrages or given support for agricultural activities.

The most significant gendered impact of the park is the limitation of women's access to the forest resources. By assuming the authority over the forest, the park management has converted the forest into a space of educated, wealthy and often foreign people. On the local level, only the most privileged – the ones who work as park guides, for example – are allowed to enter the park. For the great majority of the local people to whom the forest is forbidden, it has become a space only men dare to enter. If forest resources, such as medicinal plants or firewood, have to be collected, men do it. Women do not enter the forest because they are considered unfit to hide and run away from the park agents. This is a

notable change, because as Ferraro and Rakotondranjaona (1991, 96) note, women's forest product collection was important before the establishment of the park, even though the use of the forest has never played as important a role in the area of this study as in the western parts of the buffer zone (*ibid.*, 90).

The change of the forest from common grounds to a men's space is not only a question of mobility. According to Korhonen (2004), women also perceive the park forest as something meant for men and are not keen to talk about the subject themselves. She quotes a woman from the Tanala area, who states that the park authorities gave the forest to the men and hence she has nothing to say about it.

The establishment of the park and the way its management has been organised have reinforced one of the main inequalities in Tanala gender relations, namely women's feeble participation in public decision making. Even though the management of the park is not very participatory, local people can take part in the park-related committees and they are, from time to time, invited to discuss with the park employees visiting their villages. As the committees have influence on what kind of development projects will be funded and the meetings might have effect on the views of the park employees on the importance of different local needs, public participation has become more important than before. As the park administration has not tried to develop ways to facilitate women's participation, women are left out of the decision making and advancing their own interests. The results can be seen, for example, in the types of development projects funded from the DEAP funds. As stated before, there are no projects concerning the cultivation activities women are mostly responsible of.

On the other hand, a park employee pointed out that because of the development activities where men and women have worked together in groups, women have started to express their opinions and participate in discussion more openly than before. Still, women's level of participation compared to men remains low.

6 Conclusions

It seems that Tanala men and women relate to their environment in a rather similar way and that they have quite equal rights considering the use and the control of natural resources. It can at least be said that the environmental rights and responsibilities of the Tanala living in the Ranomafana area are distributed more equally between women and men than in many other areas of the world (see for example Rodda 1991, Leach 1994). Probably this is the reason why the Ranomafana National Park management has practically not taken gender issues into account in the planning of the park or in administering activities related to it. However, this does not mean that there would have been no need to take the gender perspective into consideration in the park management. Even though gender inequalities in the Tanala society are not striking, environmental relations are not completely equal either.

Labour and environmental responsibilities in the Tanala villages are divided between men and women according to characteristics attributed to each gender. Women's tasks are considered "easy" while men do the "hard" and "difficult" work. In this way, men's work seems to be more appreciated, even if women in reality work as hard as men and might even work longer hours. The labour division is traditional, but also voluntary – if a woman would like to carry out "men's tasks", it is possible without being stigmatised. In fact, men often do women's work and vice versa if their spouse is out of the village and they do not have children old enough to carry out the task for them.

Land tenure, a central aspect of environmental rights, is fairly well organised in the studied Tanala villages from the gender point of view. Women and men have equal rights to land both customarily and legally, and these rights are also respected in practise in most cases. In general, there have been no spatial restrictions related to gender on mobility or the use and management of environmental resources before the establishment of the park. However, since the creation of the park local people have been forbidden to enter the park forest. In practise this ban has mostly affected women, and the forest has become a men's space considering both the access to it and its resources as well as the feeling of authority.

At the household level, men and women seem to have equal say considering environmental resources management as well as other kinds of issues, but at the community level women's participation in decision making is less active. Since the park management has not paid any special attention to this, women's voices and their interests have not been heard as much as those of men in park related meetings. In consequence, development activities have focused on men's tasks or the common ones while development projects dealing with women's activities have only involved craft making. Although women primarily define themselves as farmers and are responsible of cultivation of some varieties of plants, there have not been any projects dealing with these tasks.

Even though the relatively good position of women in the Tanala society forms an encouraging basis for striving for more equal conditions, the park management has not used this opportunity to empower women further. They have not had any systematic approach to gender issues and, in practise, these issues have received almost no attention. As I have showed, this lack of consideration has culminated some of the existing gendered inequalities.

Despite the limitations of this study (see chapter 3.3), I think it gives some insight into the impacts of conservation activities from a gender perspective. The results seem to confirm the indications of previous, more practically oriented studies (Aguilar et al. 2002, Flintan 2003) about the importance of gender issues and their consideration in all phases of nature conservation as a condition for achieving sustainable and socially just conservation. Gender perspective has to be taken into account in protected area management to assure that also the voices of the people who are in a weaker position in their communities – often women – will be heard and that their position will not be weakened by the conservation activities. Men's voices are often easily heard, but it might require special consideration and planning to make women's voices audible.

From the point of view of environmental protection, the results of this study point to a large conception of the environment where people and cultural constructions are also considered

as a part of the environment. Nature conservation cannot be restricted to protect only the natural environment, but people, especially the ones with limited resources and power, should be cared for as well.

On a practical level, the results of this study could be used as directions for taking gender issues better into account in the Ranomafana National Park and other protected areas. Particularly important in Ranomafana from this point of view would be to find ways to activate Tanala women to speak up and express their opinions in the public sphere. In this way their interests could be better taken into consideration in the park decision making. Another important point is that the need of development projects dealing with the farming activities women are mostly responsible of should be taken into account.

During the research some interesting questions arose that could not be fully answered within the scope of this study. The mechanisms of participation in the public decision making and the changes brought to it by the park and its activities would be an interesting subject for another study of the Tanala from a gender perspective. On a wider scale, more research on the gendered impacts of nature conservation is needed. Some of the previous studies have suggested that conservation shows to be more effective and the results more sustainable if gender issues are taken into account in the planning and management of protected areas. However, this is yet to be verified so that it would make a good subject for future research.

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