

## Retrospect and Prospects of Combining Conservation and Development in Nechsar National Park, Southern Ethiopia

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### Abstract

The study was carried-out to assess the retrospect and prospect of conservation and development in Nechsar National Park among Guji Oromo pastoral community in Southern Ethiopia. To this end, data was collected through interview, focus group discussion and from written sources. The collected data was analyzed in qualitative approaches. The study results show that the park is in critical conditions as previous conservation efforts failed to provide significant improvement to neither the community nor biodiversity resources. Various ecological crises are vividly observed in the park. The pastoral Guji community residing within the park is completely dependent on Nechsar National Park resources for pasture and water for their livestock. The study identified that the previous attempt made to achieve conservation of the Park based on traditional top-down approach recognizes the community as a threat to conservation. There are challenges identified concerning the issues of conservation and development in the park as far as the Guji community is concerned. As a result the community has never been part of government conservation and tourism based benefit in the park. The effect in community eroded sense of ownership and developed negative perception towards park activities. This research also suggested the need of incorporating intangible cultural resources of the community which can be used as an asset for conservation adding on already identified traditional (natural) attractions in the Park. The study recommended the implementation of community based conservation in the park recognizing Guji community as active part of the conservation effort in and around the park. It also tried to see the possibility of enhancing protected area conservation through community based conservation to guarantee sustainability.

**Keywords:** Community; Conservation; Conservation and development; Settlement

**Abbreviations:** EFDREPA: the Federal Democratic Republic of Ethiopia Environmental Protection Authority; EWCO: Ethiopian Wildlife Conservation Organization; FAO: Food and Agriculture Organization; ICDPs: Integrating Conservation and Development Projects; IUCN: International Union for Conservation of Nature; MOA: Ministry of Agriculture; NNP: Nechsar National Park; PATTEC: Pan African Tsetse and Trypanosomiasis Eradication Campaign; SNNPRS: Southern Nations, Nationalities and Peoples Regional State

### Glossary

Gamogofa Zone: is a county found in SNNP where NNP located.

Arbaminch: is the seat of Gamogofa zone administration.

Shecha and Sikela: are sub-towns in Arbaminch city named after Guji Oromo local language, they claim this to show how they long the lived there before the declaration of NNP.

DHV Consultant. BV: if from where the NNP map of this research copied. DHV Consultants. BV (1996). National Rehabilitation in Southern Ethiopia Project. EU Project No.7ACPET068. Third Six-Monthly Report. 1Juky 1995-30 November. 1996. EWCO.

### Introduction

It is obvious that human being tried to conserve the environment in different tradition for centuries. Protected area is “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” [1]. However, most of the establishments of protected areas do not consider the interest and livelihood needs of communities living in or adjacent to these areas causing conflict between communities whose livelihood depend on the protected areas and conservationists. Since livestock

herding and agriculture is the main source of income and livelihood in developing countries, human-wildlife conflict is more experienced there for natural resource consumption which brought wildlife under serious threat [2]. Human wildlife contests begin when livestock try to win food and water against the will of wildlife and vise versa. It is for the sake of dealing with this conflict, the idea of linking conservation and community development often called community based conservation approaches that incorporate simultaneous interest of people and nature with varieties of activities emerged.

The need of linking conservation initiatives in protected areas with local community livelihood to ensure sustainability through community based conservation is highly required in Ethiopia as well. Having described the potential of Ethiopia in terms of biodiversity ranging from Afro-montane climate at high altitude to Dallol depression, the GEF Portfolio Identification Document pointed out the problem of grazing and settlement, fuel wood and charcoal among others are serious concern for the decline of original forest cover in the country [3]. In Ethiopia, lowland is a place of conflict in land use for livelihood and grazing on the one hand and wildlife management on the other. Whereas highland is facing agricultural land expansion and fuel wood consumption stressing pressure on wildlife habitats [4].

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In protected areas, gazetting is essential to specify areas allowed for human action and areas exclusive to wildlife. However, in Ethiopia among National parks only Semein Mountains National park and Awash National Park are properly gazetted while the remaining is prone to various crises [4-6]. Consequently, the current conservation effort has facing challenges due to environmental degradation related with man-made and natural disasters as Bonine, and Dalzen, 2003 cited in Fasssil [7]. The subject of this research, Nechsar National Park (here after, NNP) is found in Southern Nation Nationalities and People regional government in southern Ethiopia, covers 514 kilometer square located 510 kilometers south of Addis Ababa, Ethiopia's capital. The pastoral community who dwell inside the park as agro-pastoral always makes the demarcation and conservation very difficult since 1970s.

### Statement of the problem

The NNP is mainly inhabited by two communities; Guji (pastoralists who dwell with in the park) and Kore (very adjacent to the park as farmers) are for long believed to be the main challenges to the park conservation objective. The problem is more complex regarding the Guji community which is the subject of the study. Guji live inside the park territory as agro-pastoral that made the demarcation of the park territory very difficult since 1970s [8]. Since the establishment of the park, resettlement as the only solution had been tried at least three times but ended in failures. As a result, park and the community see each other in suspicion where the community feel deprived from the right to use park resource as the main livelihood. Park-community conflict arises in the interplay to secure conservation in one hand and to maintain traditional livelihood on the other. Moreover, Guji community is begun to engage in agriculture in addition to pastoralism. This development together with population increase is likely to result in deforestation and degradation of forest cover and dwindling of wildlife species.

Pastoral Guji is now successfully establishing permanent settlement in few parts of the park while the park management is getting weaker and unable to manage activities in the park. Today, the park management body seems incapable to conduct sustainable conservation with the involvement of communities. Despite all these prevailing problems, NNP has no Management Plan to carry out effective conservation. The park is also running with poor infrastructure, weak linkage with concerned bodies to boost conservation, deforestation and decline of wildlife resources. The present development associated with Guji community in NNP made the problem more complex than before as deterioration continue.

Conservation in place perceives that community as a threat to biodiversity. The study shows that Guji community has not been part of government conservation rather seen as threat to park existence; hence, they are marginalized from any park related planning and decision making which made them antagonistic towards any park development. Most of the previous studies focus on biological diversity and natural setting of the park as well as issue of resettlement. For example Abiyot in 2009 and Asabe in 2011 studied the issue of resettlement whereas Clark in 2011 and many others studied deeply the natural and biodiversity resources of the NNP. Consequently this research dealt retrospect and prospect of conservation efforts and the feature of conservation and development.

### Objectives of the study

**General objective:** The overall objective of the research is to assess the retrospect and prospect of community based conservation in Nechsar National Park.

**Specific objectives:** To assess the possibility of linking community based conservation and developments in Nechsar National Park.

❖ To examine the challenges of implementing Community based conservation in the park.

#### Research questions

❖ What are the major challenges of community based conservation in Nechsar National park?

❖ What is the prospect of community and conservation in Nechsar National park?

### Research design and approach

The qualitative research design was employed for this study. The need of choosing qualitative design was to study things in their natural setting, interpret phenomena and getting in touch with everyday social events. Non- Probability sampling has been used by which those selected were believed to be well informed about the problem. Particularly, purposive sampling was applied because respondents were chosen purposefully who were believed to have the required information like community elders, park and government officials. The most common sources of qualitative data include interviews, observations, and secondary data were used. Primary data was obtained through interview with informants in the site, field observations and focus group discussion. Secondary data was collected from written materials and other sources. The nature of qualitative research requires data collection up to the point of saturation. Data saturation happened when the researcher faces no longer new information as continued the collection [9]. The point of saturation for the research was occurred by interviewing 40 individuals in Nechsar Guji village. In addition eleven interviews were conducted outside Guji village with government officials and experts. There were also three focus group discussions conducted in the same village. Since Guji is a homogenous society sharing almost similar view in case of NNP, the stated numbers of interviewees were found sufficient in addition to focus group discussion.

### Source of data

**I. Primary data:** Interview was the main instrument used to collect primary data. Interviewees were peaked in 'Snowball' manner starting from interview with someone in the community to the most needed individuals or groups until the point of saturation achieved. The semi-structured interview was also carried out with the community members', government and park officials as well as experts. At the community level 40 individuals who have had daily practices, experiences and attachment with the park were interviewed with semi-structured interview.

Key informant interview was held with five community elders whilst the remaining informants were interviewed in market place, farm and in pasture land employing semi-structured interview. Other Key informants were the park chief warden, two government officials from Gamogofa Zone, and two EWCA experts, whereas one communication officer from Oromia Regional State and one official from Oromia forest and wildlife enterprise were interviewed. In addition, out of six experts in NNP four of them contributed to the interview as well as five scouts. In-depth interview was employed to collect information from key informants on the issues and concerns of CBET, historical relationship of Guji and the park, conservation of wildlife, the future fate of the community and the park etc. Interview with the community members and focus group discussions held in the village were also deal with mainly in areas mentioned above.

**Focus group discussion:** Focus group discussion helps to access information from a group of people in a natural setting pave the way for good contact between the researcher and community members. For the purpose of this study focus group discussion was applied in Guji village mainly with pastoralists and; participants for focus group discussion did selected in cognizant to age, roles in the community, participation in the issues and activities associated with the NNP. Three focus groups were identified with six members each; two focus group discussions with elders and one group with youth. Focus group with women and girls was unsuccessful because it was difficult to arrange focus group with woman as they reluctant to take part in. May be due to cultural reason girls were not free to carry out discussion with someone else in their own will especially in translation. In addition, fears of researcher’s identity as some of them were not in a position to offer genuine information freely. As a result the researcher carried out informal interview and discussions in Guji hut having coffee and traveling on feet to market or Arbaminch using boat to verify the formal responses.

**Observation:** Observation and site visits were made to supplement data from key informants. To understand events in the field observation was carried out in Guji village while taking field notes in issues stated above. Secondary data also collected from park documents, archives, books and brochures. Secondary data was mainly obtained from EWCA library where previous researches, magazine, report and articles. In addition documents in Institute of Ethiopian Studies contributed for secondary data source as well. Web sources like articles, researches and journals were equally important to accomplish the study.

**Data analysis and interpretation:** In spite of the chosen methodology, data analysis is the process of inferring meaning from data gathered. To this end, unlike the quantitative, qualitative research usually analyze data throughout the study [9]. Here, thematic analysis was used in reducing large sum of qualitative data in to themes and patterns for analysis. In qualitative research data can be classified as belonging to a particular group and comparison with observation do not belong to this group [10]. Qualitative data from households and stakeholders was summarized into specific themes and patterns on the issue of tourism, and conservation in NNP. The sort out information in categories they belong given meaning to those data obtained from primary and secondary sources through thematic organization that allows comparison between components of the same category and between categories. It means, obtained data was organized by questions in order to identify consistencies and differences. The organized information was categorized in theme. For instance, one of the questions says; what is your concern in NNP? The response categorization based on their concern can be the reduction of cultivation the size of cultivation land, loss of pasture land, disease transmission from wildlife, eviction (categories) etc. In another case, the main problem in most protected areas of developing countries is human-wildlife conflict which can be categorized in relation to wildlife loss, wildlife attack on domestic animals and crop, disease transmission etc. The response in each questions were compared with in the same categories and across categories. Finally, summarized, meaning given to the text, and finally the result was interpreted.

**Profile of respondents:** Sometimes in social sciences research characteristics of respondents have significant impact in explaining their views about the problem. In this part characteristic of respondents in view of age, sex, education, occupation of 40 community member, three focus group and 11 interviewees of experts and officials stated (Table 1).

There were only 5 females interviewed because females were reluctant to take part in interview upholding the patriarchal culture of the community which restrains them to act independently. Marriage is one of the most important social institutions in human life which may influence respondents view. Out of 40 respondents, 36 of them get married that mean most of them carry responsibility in the family. The responsibility in the family and community level may affect the response given. Since the community culture appreciates early marriage and polygamy, majority of the respondents have already got married. In addition, based on the profile in table above it is possible to understand that most of the community livelihood is depend on the natural resource of NNP. The out most majority 28 out of 40 informants led their lives based on traditional pastoralism and agriculture (Tables 2 and 3).

Age and Educational level of the respondents are two of the most important characteristics to understand the view of community since it determines the maturity level of respondents to some extent. The working age group range from 18 to 46 contributed the lion share of the interview because they have active day to day attachment with the park as farmers and pastoral. It is these groups carry out most development activities in the park and participate well in time of conflict and cooperation as well. Those specified in range 46-70 were mainly community elders who have had long years of historical connection with the park, representative of the community to negotiate in time of conflict with neighboring communities and park administration etc. In terms of education, Guji community is almost uneducated because the history of education is very recent in the park where grade 1-5 School has opened only in 2009. For long, Guj as pastoral remain illiterate but recently it is improving associated with the development of permanent settlement in the park. There is only one female who completed grade 10 in Guji community staying away from NNP for years for education purpose. In the same way the educational, age and other social characteristics of participants of focus group discussion share similar experiences since the community is almost homogenous.

## Review of Literature

### Protected areas and conservation

**Protected area:** Protected area is 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 [1]. OAU in article III (d) use the term “Conservation area” which means any protected natural resource

Gender	Marital Status		Occupation
Male 35	Single	3	5 students 1 Kebele official, 1 agriculture extension worker and 28 agro-pastoral
	Married	3 2	
Female 5	Single	1	1teacher and 4 housewives
	Married	4	

Table 1: Profile of respondents.

Age in years	Frequency	Remark
18-20	15	
29-45	20	
46-70	5	Key Informants
Total	40	

**Table 2:** Ages profile of Respondents.

	Frequency	Remark
Degree	No	
Diploma	1	
Certificate	1	Female
Primary(1-8)	10	
Secondary school(9-12)	7	
Illiterate	31	
Total	40	

**Table 3:** Educational profiles of Respondents.

area, whether it be a strict natural reserve<sup>1</sup>, a national park or a special reserve[11]. In Article II (2) of the OAU, National Park is:-

Areas exclusively set aside for the propagation, protection, conservation and management of vegetation and wild animals as well as for the protection of sites, land-spaces or geological formations of particular scientific or aesthetic value, for the benefit and enjoyment of the general public; and in which the killing, hunting and capture of animals and the destruction or collection of plants are prohibited except for scientific and management purposes and on the condition that such measures are taken under the direction or control of the competent authority(Ibid., p.3).

IUCN further classified protected areas in six-category system based on the extent to which human involvement or development is allowed. According to this classification, the first category is the most conservative and almost completely free from human intervention and development, whereas the last category is tolerant toward integration of development and conservation. The first category faces least human impact while the category VI faces the most. National park is designated under CATEGORY II as protected area managed mainly for ecosystem protection and recreation. National park is “a natural area of land and/or sea, designated to protect the ecological integrity of one or more ecosystems for present and future generations, b) exclude exploitation or occupation inimical to the purposes of designation of the area, and c) provide a foundation for spiritual, scientific, educational, and recreational and visitor opportunities, all of which must be environmentally and culturally compatible” [1].

Protected area system in Ethiopia is the product of IUCN classification based on strict conservation principle. In Ethiopia, two important proclamations to govern conservation area have been passed. These are Proclamation NO.541/2007, a proclamation to provide for the Development, Conservation and Utilization of wildlife and, a proclamation to provide for the establishment of the Ethiopian Wildlife Conservation Authority (proclamation No.575/2008) [12]. Proclamation NO. 541/2007, Art. 2-(8) define “national park” mean an area designated to conserve wildlife and associated natural resources to preserve the scenic and scientific value of the area which may includes lakes and other aquatic areas (Ibid.p.28). While (Regulation

<sup>1</sup>In Article II(1) Strict Nature Reserve is an area under state control “While throughout which any form of hunting or fishing, any undertaking connected with forestry, agriculture or mining, any grazing, any excavation or prospecting, drilling, construction, any work tending to alter the configuration of the soil or the character of the vegetation, any water pollution and, generally, any act likely to harm or disturb the fauna of flora, including introduction of zoological or botanical species, whether indigenous or imported, wild or domesticated, are strictly forbidden(OAU,1968)”

No.163/2008), prohibit any human activity like grazing, agriculture, bee keeping or honey harvest with in the park.

**Conflict in protected area:** Conflicts between wildlife and people, particularly those who share the immediate boundaries with protected area are common phenomenon all over the world [13]. Nature conservation in Africa has been based on western notions brought to the continent during colonial era [14] where protected area management is primarily based on the interest of the nation while people living adjacent to the protected area is subject to restrictive laws. Conservation without the consent of the local community creates negative perception towards wildlife and other protection categories which may result in conflict [15]. Conflict in protected area is the result of diverse interests, goals and aspirations that individuals or groups within legally established and secluded environments have, which all too often resulted in either positive or negative impacts on the use value of the area [16].

As far as the overall conflict between “people and parks” or between human needs and conservation is concerned, human-wildlife conflict perhaps holds the dominant place. Therefore, the attitude of local people toward wildlife is essential for effective conservation [17]. The main cause of human-wildlife conflict is the result of increasing human population and competition with wildlife for the same declining living spaces and resources [18]. Conflicts appear when the actions of humans or wildlife have an adverse impact upon the other [19]. Another factor in precipitating the conflict in protected areas is the feeling of marginalization, loss of source of livelihood and lack of concern from the park authorities. In another word, differences in objectives between conflicting parties concerning protected area contribute to the prevailing conflict. For instance, the objectives behind conservation project is to conserve natural resources for long-term use, where as the concern of the communities of protected areas is the need to have a means of livelihood for survival [16].

Conflict between communities and protected area is also manifested in the form of claiming ownership of protected area. The claim of ownership sometimes result in violence reaction and counter action; Example, armed clash in Khao Yai National Park in Thailand [16]. In many developing countries human-wildlife conflict is serious obstacle for the implementation of conservation objectives and management of protected areas. Human-induced problems facing wildlife are land-use conflict, habitat destruction of the wildlife, blockage of migratory corridors and wildlife exploitation. Whereas wildlife related problems to local communities as a result of conservation are, marginalizing the local people, denying people access to traditional and legitimate rights, risk to human life due to attack of wild animals and disease transmission that creates the perception that conservation is liability for the community [13,20].

### Integrating community development and conservation

To talk about community based conservation, it is better to characterize the concept of community and community participation. Community has been defined based on different concepts and disciplines. The English word community is based on two ancient words; the Latin “Communitas” meaning common; and the older Greek “biocenosis”, it is an ecological term meaning “a group of integrated and interdependent plants and animals”. Currently, the word community has two interpretations. The first one is more recently developed possess social ideals of solidarity, sharing, and consensus. The second and commonly used is refers to actual groupings of people based on affinity; common characteristics, ethnicity, age gender or

through geography [21]. Community is also characterized as a set of population groups live in a specific conditions together in organization and of social and cultural cohesion. Society is usually considered as community and this has fostered ideas about community-based conservation and community conservation [22]. For the purpose of this research community implies group of people in specified geographic area who share the same language, ethnic origin and history<sup>2</sup>.

The McGraw-Hill's Dictionary defines participation as taking part in an event or activity [23]. While community participation is to denote that "intended beneficiaries are encouraged to take matters into their own hands, to participate in their own development through mobilizing their own resources, defining their own needs, and making their own decisions about how to meet them" [24]. Various terms, such as community development, public participation, and community empowerment have been used to show community participation in local affairs. In terms of tourism planning point of view as Haywood 1988 cited in Okazaki, 2008, community participation as a process of involving all stakeholders (local government officials, local citizens, architects, developers, business people, and planners) in such way that decision making is shared [25]. Community participation can vary from manipulative to self-mobilization; that is passive versus active participation. If the participation of the community is passive the benefit is going to be indirect and limited to job creation. While, active participation of the community ensures their involvement in planning and management of tourism resources and protects their community interest [26].

Conservation is an effort to maintain and use natural resources wisely in an attempt to ensure that those resources will be available for future generations [27]. Whereas development is the improvement of man and his living conditions which include improvement in the standard of living, healthcare, infrastructure etc. [28]. However, the key point is to decide on the right ways of conservation and development perspective. The concern is that should conservation carried out in expense of community development or community development should be achieved in expense of conservation? It is also asked that if conservation and development can be achieved simultaneously [16]. Traditional conservation see community as a threat to biodiversity conservation, as a result the old approach was failed to ensure the conservation objectives and led to a new paradigm shift in conservation [29].

The "old" conventional conservation is based in the western concept of wildlife conservation which emphasizes in the notion of pristine ecosystems without taking the interest of locals in to account [20]. Due to this, the so called community-based conservation (CBC) emerged since 1980s, which is participatory in its approach aimed to attain conservation and community development simultaneously [16,22]. More precisely, Community-based conservation<sup>3</sup> (CBC), is a means of achieving integrated conservation and development considering both concepts as complementarities rather than two antagonistic parties with recognition of human livelihood and biodiversity conservation [30,31].

Community based conservation is often said people oriented

<sup>2</sup>In this research community refers to Guji Oromo who dwelling in geographic region of NNP, they are Oromo ethnically and speak Affan Oromo, share the same history different from other Oromo groups and Gujis' elsewhere in relation to NNP.

<sup>3</sup>Some literatures use the term community based resource management (CBNRM) which recognizes that local communities are often best placed to conserve natural resources, as long as they stand to gain more than they lose from doing so (Elliot and Sumba, 2011)

approaches that incorporates simultaneous interest of people and nature with verities of activities like integrated conservation and development, primary environmental care and collaborative management [32]. Common objectives shared by all community-based conservation initiatives are, involvement of local knowledge and traditional values in conservation of biodiversity, foster socio economic development with biodiversity conservation, and decentralize power from the center to grass root level in the community in terms of management [30]. ICDPs (Integrating Conservation and Development Projects) are advocating conservation by creating opportunities of alternative income sources and socio-economic development to the community [33]. To ensure sustainable conservation, the protected area managers ought to have full information regarding the socio-economic condition of the community, and protected areas has to contribute for the conservation of cultural and biological diversity [32].

Since the major objective of ICDPs is to reduce the pressure on a protected area through generating benefit to communities, it has at least three strategies to achieve the objectives. The first strategy is focus on strengthening park management through research which could be possible in the course of development of park management plans and other related issues. Creating buffer zone can be put under this strategy which is sometimes taken as a protective band of land that encircles the protected areas [31,34]. In buffer zones certain limited exploitation of resources and activities are allowed like research and tourism [34]. Compensation and substitution is considered as the second main strategy of ICDPs aimed to help those people who have no or few alternative means of livelihood apart from exploiting natural resources in the park [33].

Compensating economic loses of the community due to park establishment, to ensure alternative resources as substitute, and provide alternative means of income in place of already existing source of income in monetary or other means is also the strategy of ICDPs [35]. Substitute targets on specific resources, for example, if a park area was formerly used as a source of fuel wood, outside the boundaries might provide an adequate substitution. In cases where substitutes are not possible, ICDPs may provide alternatives access to new ways of earning a living in the form of direct employment, low-interest loans, improved access to markets, new skills training, etc [30,35]. Finally, the ICDPs give heavy emphasis to local social and economic development of communities along protected area boundaries through poverty alleviation and community development activities.

The attitude of local community towards the conservation area is a determinant factor for the successes of conservation. To this end, preparing ways of improving and establishing strong relationship with the community should be the priority to achieve sustainable conservation [36]. Good knowledge of the attitude of local people is a base for strengthening relationship with the protected areas which could be used as an input for policy and management action as well as future success [37]. Among five principles and guidelines adopted by WWF and IUCN/WCPA, the first one recognizes the contribution of local people for the maintenance of many of the earth's most fragile ecosystems, through their traditional sustainable resource use practices and culture-based respect for nature. Therefore, the local communities should be accepted as equal partners in the development and implementation of conservation strategies that affect in the establishment and management of protected areas [38].

## Results and Discussion

### Brief history of Guji Oromo in Nechisar National Park

Guji Oromos are pastorals who have settled within Nechisar National park (here after NNP) and have become isolated from the main body of Guji Oromo 40 km to the east [39]. According to informants, Guji Oromo elsewhere is divided into four tribal groups namely Uruga, Aladu, Mati and Okku. Mati and Okku tribes are mainly populated in Bore and Kibremengist while Aladu and Uruga are the main Guji Oromo groups settled in the park. On the other hand, Guji elders said that there is no single family or individual from Mati tribe and only one family from Okku tribe reside in the park. Guji in NNP are further divided into clans and families headed by their respective clan chiefs. These are mainly, Bala, Obbitu, Analtu, Woyisittu, Dhantu, Darartu, Masintu etc.

It is surprising to see each and every Guji identifies the identity of their relatives in which tribe, clan or family he/she belongs. The way Guji greets their own clan is different from greeting across other clans. More surprising is that Guji identifies each other clan based on the way they wear jewelers and sometimes hair style. Having seen any cattle, sheep or goat in the market or grazing field, it is easy for Guji to identify the cattle is belong to Balla or obbitu clan; they have recognized symbol for each clan on the ear or other body part of their cattle. Guji elsewhere meets in Me'a Bokko around Gedeo (Dilla) in each eight years to attend transition of power in Gada system (i.e. political and social organization of the Oromo). However, the seat of Guji Gada is Hagere Mariam or Bule Horra as locally. The government of Gada in Hagere Mariam appoints its representative to NNP Guji called Murra. Murra or a group of elders' carryout activities assigned by Gada in NNP but when serious issues arises the Murra may refer cases to Hagere Mariam. Everyone in the community adhere to any order from Gada in Hagere Mariam or Murra in NNP. Though majority of Guji are now protestant Christian, they accept the word of Gada as divine voice. Ignorance of this traditional system of Guji community for conservation sake has be considered by some as one of the cause of deteriorating conditions in NNP.

One of the issues associated with Guji is where were they? And how they came to being in NNP? Currently majority of Guji live in Oromiya regional state and minority of them found in different parts of Southern Nation and Nationalities regional states(here after SNNP), where NNP is found too. The geographic territory of NNP is under the authority of SNNP and the administration of the park is run by Ethiopian Wildlife Authority (here after EWCA) while the Guji community ethnically Oromo who dwell inside the NNP territory is under the administration of Oromiya regional state government. Though the NNP is officially part of the SNNP province, some minor groups in Oromiya regional state claim the park. According to Getachew the history of Guji living in the Nechisar region dated back to 16<sup>th</sup> century. It means that the arrival of Guji in the park was coincided with the Oromo population movement of the 16<sup>th</sup> century which has no historical or oral record to proof this argument. Given the Oromo tradition of war and culture of assimilating other ethnic groups, the Guji Oromo should not have been the minority in the region as far as 16<sup>th</sup> Oromo expansion to other part of the Ethiopia is concerned unless other convincing argument is given. There is also another argument that sees Guji as an encroacher and reduces their presence to 1990s, which argue that when the Socialist government of Ethiopia overthrown by the EPRDF, Guji used this vacuum in central government as an opportunity to settle in NNP. The park management recognizes the presence of Guji long before 1990s but as any pastoral community staying for only short season and leave to other areas [40].

One of my informant whom I interviewed in Arbaminch (Feb,2013) recognizes the existence of Guji not only in and around Arbaminch but also along the way from Arbaminch to Elgo and Wozeqa in 1960s. In addition, there are lot of information to prove Guji presence in 1960s and 1970s. Two government officials interviewed in Gamo Gofa Zone believe that Guji came to the area after the declaration of the region as NNP in 1974. Local government official in the office of Tourism and Government Communication told that "there was no one in Nechisar to claim and complained about park establishment and no evidence of human presence in the area in 1970s (January, 20, 2013). However, officials believe that Guji as pastoral used to come to the region seasonally but never established permanent settlement in the park except new experience since 1990s. Nevertheless, the response based on focus group discussion and interview shows Guji Oromo has slightly different stand in this regard. Guji elders claim their presence in Nechisar back to Emperor Menelik and little before him saying "our fathers even paid tribute to Menelik while they live in Bonke and Gandulo . We ourselves remember paying tribute to Asfa Mezo who was land lord in Amaro as representative of Emperor Haile Selassie(1930s-1974). The tax collector during this time was said to be Chiqqa Qoro"(Abba Abire and Abba Nigusse, March 1, 2013) (Figure 1).

According to the elders, Guji paid tribute to the imperial regime in two places depending on where they settled. Initially, those settled in Bonke and Gandulo were paying to imperial authority in Chencha (oldest city in Gamo Gofa highland) whereas those in Irgaansa(Nechisar Plain) to Dilla and Hagre Mariam but latter both Guji groups were included under Amaro Kelle. However, it is difficult to verify that pastoral community who were moving here and there paid tax as equal as settled community before 1950s( see map for places). Guji informants claim that they used for pasture today's city of Arbaminch in Cheechaa (a sub-town of Arbaminch now called Shecha) and Siqalla, now Sikela [40,41]. Guji present evidence to the name of Channo Dorga<sup>4</sup> (10 km on the way from Arbaminch to Addis Ababa) to their long time presence in the region as they claim the village was named after Dorga Done a prominent Guji elder.

Literally, Arbaminch mean forty springs from which the city acquired the present name. Nevertheless, my Guji informant in Sulula village defended the name as originally from Guji influence whose evidence is that today's reverine forest and so called forty springs was habitat for Arbba (Elephant) and Defersa (Bufalo). As a result, Guji identify this place by the name Arbba or Badda Arba (Forest where

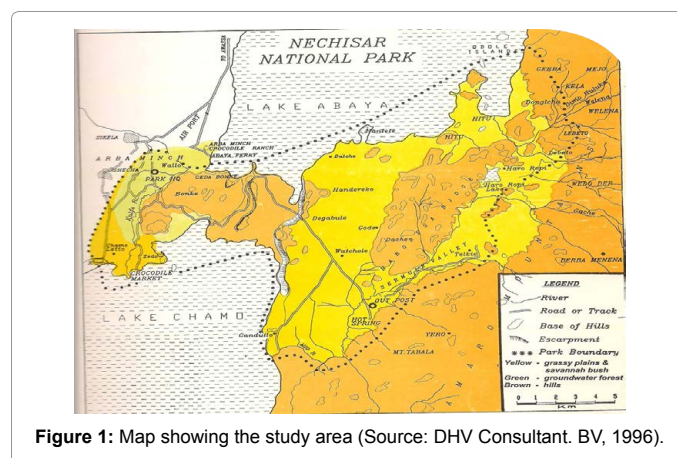


Figure 1: Map showing the study area (Source: DHV Consultant. BV, 1996).

<sup>4</sup>Channo is a village under Arbaminch Zuria Woreda Administration. It has three Kebeles(district) named Channo Chalbbaa, Channo Dorga and Channo Mile.

Elephant inhabit). However, due to the foundation of Arbaminch city and the resulted significance of spring (Minch in Amharic) to the city pulled the name towards Arbaminch from Bada Arbba. The view of Bada Arba or Arba is not well known even among majority of Guji informants with the exception of very few aged people. Actually, various sources written in the park show the existence of Elephant (Arba), African Buffalo and Rhinoceros in the very beginning but now these species no longer exist in NNP. Most arguments recognize the presence of Guji in the area during park establishment but their difference lie on whether the community was permanent settler or temporary dwellers.

The wildlife survey carried out and recommendation given in 1960, made the need of park establishment mandatory in Nechsar plain mainly because this area was “unspoiled and practically uninhabited by man, these plains abound in wildlife.” According to MOA, the area had very little human settlement along the periphery except few inhabitants around the park and few pastorals periodically encroaching in to the park [8]. It was also reportedly observed that thousands of cattle while grazing in Nechsar plain and creating serious habitat degradation in 1969 and 1970.

The argument of this research is that the issue of conservation is abandoned in NNP in favor of dilemma sometimes political. Moreover, the value of traditional system and institutions is not yet assumed recognition for conservation and achieving community based conservation. For example, the Gamogofa administration sees the case of Guji as territorial aggrandizement rather than a threat to biodiversity conservation while the Oromia Regional state is appreciating Guji to secure permanent settlement in the park without any care for the very objective of national park. Understanding the situation broadly is very helpful for effective conservation and enhancement of local livelihood through community based conservation. Little attention has been given to accommodate the local livelihood and conservation. As a result degradation of the park resources is very visible such as decline of wildlife, expansion of agriculture and deforestation.

**Nechsar National Park after 1980:** Based on Stafford and Telfor the visit of Bolton in 1969 and 1970, confirmed that thousands of cattle were being grazed in Nechsar plain causing severe degradation [42]. In 1974 during park establishment, there were few settlers in NNP where only temporary Guji hut and permanent villages on the eastern hills were seen on the slope of Amaro Mountain [43]. According to 27 interviewed Guji informants, these settlements were in Bonke hill, Wallo (Bada Gagura), Gada Bonke, Dache, Handarako, Talke(Golbo)<sup>5</sup>. Wallo is located around Arbaminch Airport still inhabited by Guji Oromo. Nechsar Guji identifies wallo by the name Bada Gagura mean forest for bee keeping in Afan Orom(local language) where Guji used to keep bee (Gagura) for honey production.

In 1982 the then government of Ethiopia resettled Guji out of the NNP mainly to Odoo Darba. However, this move was accompanied by force, thus it is connoted as evection by Guji informants and some sources. Hillman in 1988 as advisor of EWCO describing the necessity of resettlement in Action plan outlined that ‘Resettlement of people from Nechsar National Park has proved difficult, necessitating the use of force, and incursion still occu’. Assabe explained that Guji were moved to Odoo Darba [some 15 km to the east] where no road and medical center, as a result thousands of cattle and many people died [14]. Actually, the problem of road and medical centre is not only confined to Odoo Darba but anywhere in the Park. When Guji loose the main park territory mean not losing their medical centre or any infrastructure rather pasture land.

<sup>5</sup>For locations of settlements see Nechsar National Map

After the ‘resettlement’ (eviction), NNP was free from grazing. Nonetheless, during this time Guji still habited in the eastern side of the park along Sermale river valley while burning large areas of wild life habitat in dry season and grazing their livestock in the park besides some incidence of poaching [42]. The 1990 observation of Stafford after the resettlement reveled that problems associated with Guji had been resolved with the exception of small number of cattle less than ten across Nechsar plain was seen. The only human presence observed in NNP were those coming from Amaro crossing the park daily in large number to Arbaminch City. There were also small group of people in eastern side of the park in hot spring for healthy reason staying for few days but causing no damage. In addition, two small markets were occasionally held on the west side of Sermale river and near the hot spring [44]. However, the eviction created tension and ill-felling towards the park authority making park areas towards the north difficult to visit and patrol (Example, toward Haroo Ropi). In this period under observation by Stafford the most damaging was fuel-wood collection that would be transported for sell in Arbaminch city, home consumption and construction.

In 1991 the Derg regime was overthrown by the EPRDF, this critical event created a political vacuum in the centre and resulted in turmoil for brief period [45]. The political instability was an opportunity for Guji to return back to where they had been evicted and took brutal action against the wildlife, considering wildlife as a cause of their eviction [40]. In Ethiopia, between 1991 and 1992, wild animals were indiscriminately hunted, forests were destroyed, and settlements were established in protected areas [45]. It means the revenge against protected area was a common occurrence in immediate days of the EPRDF takeover of power from Derg led military government. In the same way, the communities evicted from in and around Senkelle sanctuary used the instability in the central government to return back quickly, and posed heavy damage to the property of sanctuary, and resettled within the sanctuary [20]. Since the previous government action deprived the access of local community to their traditional source of livelihood elsewhere in protected areas of Ethiopia based on the concept of traditional top-down approach for conservation, created prolonged antagonism towards protected areas in the country.

The EPRDF period brought the NNP administration in to the government of SNNP from 1991-2004. The EPRDF period is known by three important developments. The first one is the era of National Parks Rehabilitation in Southern Ethiopia Project (NPRSEP) immediately after 1991 when the European Union offered to fund wildlife conservation project that value €16 million. Its objective was to rehabilitate three national parks in southern part of Ethiopia: Nechsar, Omo and Mago national parks [46]. It was the beginning of the new phase of resettlement question in new government which is not the focus of this study. The second one is competition of claim over Park territory among two Regional states; Regional States of Oromia and SNNP. It means conservation comes secondary in favor of territorial need. Then onward the Oromia region has been accused of favoring Guji settlement and undermining conservation effort by some officials. While the SNNP is blamed ostensibly giving over emphasis to wildlife issues under estimating the need of local community and the very nature of human entitlement. The third development was transition of NNP administration to Dutch based African park Company (2004-2008) which has been criticized by some as protectionist [14]. The transitions was on private-public partnership basis, mean that the park remains the public property under the state while its management run by private conservation organization or African Parks.

Gazetting NNP was the primary concern of African Parks; as a result responsibility of resettling the communities in the park was given to the state. In 2004, the state resettled the Guji communities who reside in the core areas of the park to Odo Darba, Abulo Alfacho and other neighboring areas of the park. However, the Guji once again returned back and settled in an immediate vicinity of the core area but not yet entered the plain. In October, 2008, the African Park Network announced its withdrawal from NNP. It means a contractual obligation stipulated by APF for the government to resettle the Guji, would not be carried out (<http://www.conservationrefugees.org>). Since 2008, the park administration has transferred to Ethiopian Wildlife Conservation Authority (EWCA). This research argue that this period marked the beginning of the weakest ever administration in NNP where number of wildlife dwindling, deforestation and farming expanding in alarming rate, the communities around the park and park administration see each other in suspicion.

### Settlement in Nechsar National Park

Today Guji is transforming from Transhumance Pastoralism to establishing permanent Settlement in Irigaansa Kebele (Ganda Irigaansa as Guji to denote the whole settlement in NNP). Based on observation, interview and focus group discussions carried out, this research argues that the need of establishing strong settlement on agricultural base is very recent event, not more than 10 years. Nowadays, Guji Oromo reside in two main villages (Kebeles) in and around NNP, viz. Oddu Darba and Irigaansa Kebele (Ganda). Since Oddu Darba is out of the traditional park boundary (15 Km to the north east) not important for this research. Irigaansa Kebele (Ganda Irigaansa as Guji) is to denote the whole settlement in NNP. According to the village source, Irigaansa village is further divided in to two main Zones (sub-villages); First, Talkie (Golbo) contains small settlements but posing greater pressure on Nechsar plain are Gode, Arda Gudina, Sullula, Mado, and Dache. The second sub Zone is named Hitu, confined to north of Nechsar palins with no or little influence on the park. The total population of the park is estimated 4000-5000. (See NNP map for settlements described below).

**Telkie (Golbo):** is the site of Guji kebele administration inside the NNP ( Bulchiinsa Ganda Irigaansa in Afan Oromo) where the main agriculture land located. Locally Talkie is named Golbo which mean a land between two hills namely, Gashe towards the Amaro border and Sama'alo west of Talkie. Talkie area has been cultivated by Guji since 1980s [44] and the Kore people before even this period. The Guji from Sulula, Gode, Ardagudina and even from the remote Hittu and Darba are using Talkie as their farm land along Sermale river valley. Guji, especially elders not prefer to live in Talkie because, it is found in the frontier with Amaro ethnic group. As Guji informants, "Talkie is found in gorge where the Amaro people used to attack us from the top of the hill, as result for defensive purpose Guji prefer to reside areas near to the core area of the park as their main dwelling site". So it is difficult to find settled elders in Talkie apart from visiting for market purpose twice in a week while Ardagudina and other scattered settlements near the Nechar plains are preferred for residence. Talkie hosts market twice in a week (Tuesday and Friday) where Guji exchange milk and milk products with agricultural products (particularly Cocco or false banana) with Amaro neighbors. Guji from Zedo in Arbaminch Zuria woreda, Wallo or Bada Gagura around Arbaminch air port, traders from Gidicho Island in Abaya Lake and Qorga from Mirab Abaya Woreda, and many other groups of people attend the market.

**Ardagudina:** Guji also established permanent village in Ardagudina, which is an undulated land at the top of the Haroresa

ridge and preferred site for living for Guji. It is 15 minute walk on foot from Ardagudina to the Nechsar Plains while minimum of three hour from Talkie. It is a preferred site for settlement where Guji community is hoping to transfer their village sit from Talkie to Ardagudina. Nowadays, forest cleaning, deforestation and building of permanent homes are underway in Ardagudin. In addition, the only primary School from 1-5 for the whole Irigaansa village, and one private clinic in hut are found here.

**Gode, Datche, and Maddo:** Gode is located at the tip of Harroressa ridge around Watchole south west of Ardagudina. The Guji claim that the land of Watchole where Gode located is the legal boundary between the park and community. As it was observed the settlement in Gode has been extending to the Nechsar plain and creating pressure on wildlife. Datche settlement is part of Nechsar plain north east of Dagabule extending from Lake Abaya to Haroresa ridge, where lots of Zebra and Grante's Gazzele feed. In dry season the number of household do not exceed 70 where as the pressure is intense in summer. Maddo is also found within the Datche territory immediately down the slop of Harroressa ridge from Ardagudan. In dry season (December to March) there are few households in Datche, where as in Maddo every hut is free of human presence as observed. However, during summer or when any time rain begins Guji return with their cattle from Sulula, Talkie and other parts back especially to Datche and Maddo.

In conclusion, the need of establishing permanent settlement around the core areas in Nechsar Plains of the park is creating the future fate of conservation difficult. For the defensive purpose and need of grass for their livestock, Guji is abandoning their settlements around Sermale valley for agriculture and shifting toward the core area of the park to establish permanent settlement. This new development of land use change and settlement in NNP requires new conservation strategic intervention to contain the likely ecological crisis in the form of community based conservation (Figure 2).

### Potential resources of CBET in Nechsar National Park

The NNP has diverse natural and cultural resources that could be used as an eco-destination. The Natural and cultural potential of NNP is described in the following topics. In the coming topic cultural resource potentials is to be discussed, referring to only Guji Oromo culture in NNP.

#### Natural attractions of Nechsar National Park

**I. Vegetation:** Nechsar National Park lies within the Somali-Masai Regional Center of Endemism, an area of 1.9 million km<sup>2</sup> covering most



Figure 2: Talkie village (Author Survey).



part of east Africa between Tanzania and Northern Ethiopia [47,48]. The park is endowed with 800-1000 varieties of plant species. Four to five major types of vegetation can be identified in NNP.

1. The Somali –Masai Acacia –Commiphora deciduous bush land and thicket is one of the predominant vegetation types. It is the largest habitat or dominant vegetation type of the park in size and rich in animal species composition [47].

2. The Somali-. Masai Edaphic grassland covers large part of Nechsar plains. The Grassland covers about 270 km<sup>2</sup>, extending from Degabule in the West to the Harre hills in the east and from Dache in the north down to the course of Mio river in the south[47]. It is the potential grazing land of the park where zebra and gazelle as well as critically endangered Swayne's hartebeests entirely depend on this habitat.

3. Wooded grassland is the third vegetation type which is found in most areas next to the bush and grassland on rugged mountainous area including top of the hills and on some low lying area and/or depressions. It provides both browse and grazing, supporting most of the wild animals in the reserve (Burchelle zebra, Greater kudu) especially during the dry season [49].

4. Herbaceous fresh water swamp and aquatic vegetation. This category of vegetation confined to Kulfo River swamps at its mouth in Lake Chamo inside the park and marginal vegetations of the two lakes (Abaya and Chamo) supporting different lake shore plant species(Ibid). Finally, the Ground Water Forest and Riverine Forest Vegetation includes thick forest of the ground-water forest, Kulfo Reverine forest and associated bush land. The tallest forest occurs along, the reverine banks and in the forty spring areas [48]. The riverine forest and evergreen groundwater forest in the western edge supports an exceptionally diverse range of species; includes big trees, which have closed canopy of natural forest. The forest is closely associated with the series of freshwater springs, known as "Arba Minch", meaning "Forty Springs". NNP has got all these scenic beauties but know in danger of losing it significance given the present rate of degradation associated with human encroachment is concerned.

**II. Nechsar Plain:** One of the spectacular unique land cover in the park is the plain feature which extend towards the east to the foot hills of Amaro Mountain approximately cover an area of 270 km<sup>2</sup>. This is the major grazing habitat for wild animals such as Burchell's zebra, Greater kudu, Grantee's Gazelle and the endemic species of Swayne's hartebeest. Its scenic beauty especially in summer season is very attractive for hiking. In addition, the 'bridge of God' which is an isthmus separates the two lakes also an authentic setup of natural beauty. It is a land between two lakes where the two lakes are situated 4.2 km apart with elevation difference of 61 m.

**III. Lakes:** Lake Abaya and Chamo are the two largest rift valley lakes, portion of the lakes fall inside the park. Lake Abaya is the largest rift valley lakes in Ethiopia approximately 55 km of its shorelines is part of the park. The sediments carried by rivers from highlands protect sunlight penetration and affect phytoplankton production in the lake, thus it has relatively low productive while Lake Chamo being characterized as Euthrophic Lake and supports a high density of large crocodiles, with a particular concentration of them at the beach known as "crocodile market". The lakes host the largest hippo population in Ethiopia and abundant fish including Nile perch. Lakeshores areas are also an interesting component of the great biodiversity of the park. If the proposed ferry rides for tourist from Dilla to NNP in 1967 via Lake Abaya was implemented, it should have provided an amazing

experience in addition to flora, fauna and the scenic splendor of the park [8].

**IV. Crocodile Market:** Located on northern Lake Chamo, its name is derived from the large population of Nile crocodile which is endemic to Africa. Along with crocodile population, it is also the best site to view hippo herds and flock of birds, pelicans, and lesser flamingo and other water related birds of the country.

**V. Hot springs:** Located in eastern part of the park. The hot water flows from the foot of Mome hill (part of Amaro Mountain). It is considered by locals as having a healing effect and frequently used by local peoples of Amaro, Guji and residents of Arbaminch city. It has potential significance of upgrading to sauna bath for tourists as well. It would be attractive and sustainable if Guji Oromo engaged in this business having upgrading the status like Masai community does in Masai Mara National Reserve ( Interview with Hellen Nukuria, April, 20, 2013).

**VI. Hikes:** Wonderful hikes can be undertaken along all sorts of routes, along many of the central steep hillsides and plains in the park. To this end, there are five camping sites for visitors but it needed to be more. The potential could be cultural camp site in Guji village which might be completely owned and led by the community. There is also possibility of ferry ride along the lakes from Dilla to Nechsar (Guji) with wonderful experience which could be owned and run by the community.

**VII. Fauna:** NNP is home for varieties of species of mammalian, avian, reptiles and fish. It is estimated that 332 species of birds, and 84 species of mammals from which four of them are endemic to the nation found in the park. According to the park source, the major mammalian groups in NNP include Burchell's Zebra, Grant's gazelle, lesser kudu, Greater Kudu, Gunther's dikdik, Anubis baboon, Colobus monkey, and Hippopotamus. There are six endemic mammals have been identified in the park; Swayne's Hartebeest, White footed Rat, Ethiopian grass mouse, Mahomet's mouse, Crocidura Pheura and Scottish Hairy Bat [43]. Spotted hyena, mountain reedbuck, black-backed jackal, side striped jackal, golden jackal, Defassa waterbuck, bushbuck, klipspringer, warthog and bush pig are still present and lions, Leopards, and cheetah are occasionally seen. The small mammals are about 22-23 species and an estimated between 315-400 species of birds, of which 2 species are endemic to Ethiopia but the famous is NechSar Nightjar.

**Cultural Resources of NNP:** People inhabited in and around NNP are rich in cultural resources which can be attractive for tourists. Here, the focus is manly intangible cultural resources of the Guji Oromo people who reside in the park. They have attractive culture of traditional clothes, traditionally home-made utensils which could be potential source of souvenirs, living style and others are to mention a few. Here the focus is only on intangible heritages of cultural music and dancing as potential tourism resource.

**I. Cultural Music and Dancing as Potential source of CBET:** Traditional music and dancing can be carried out in wedding, pasturing their cattle, ritual purpose, and other occasions. Most of them are conducted mainly among a group of young boys on the one side and girls on the other. Few of the music ceremony take 10-24 hours each. Qoqqe is cultural music carried out mainly in summer season, which takes one week (7 days in a week and 24 hrs in a day) beginning in one village and ends in the neighboring village. The host collects butter, honey, and other food items for guests who will stay for one week. The music ceremony starts only after the blessing of local elders.

The objective is to honor Graaginbo (spiritual teacher), traditionally believed that avoiding the Qoqqe ceremony would bring natural disaster to the community and its wealth.

Dokko, is a music ceremony carried out by girls during harvest or time of collecting grass for hut construction. Like Qoqqe, the hosts prepare all the necessary requirements and announce the deadline of Dokko to all girls in the village. Girls prepare their cloth and keep themselves in their respective residence. When the deadline arrives adult boys bring girls to the place of Dokko because it is unethical girls to come to Dokke alone. Then Dokko continue for 24 hrs in each day without any tiresome. Weedduu looni, is the song herders sing as the cattle are teeming in line grazing on their way to the kraal or fold [40]. It is also about giving praise for cattle, takes place mainly where the household has beautiful girls not yet married. Neighboring young boys enter in to the compound of this household via cattle fold first and come to the residence with dancing. If the family of the household allows the girls to join the song, girls' come out and other girls from the whole village join the ceremony. Then dancing continues from 7:00 PM clock in the evening to 6:00 am in the morning. There is allotted time for girls and boys (boys only listen when girls sing and vice versa). In the same way the duration of music and dancing ceremony regarding wedding is depend on the way or process of marriage come to being.

Based on the marriage criteria music and its ceremony take place in three ways. For instance Kadhdha, is a marriage ceremony which is usually held after prolonged process of fulfilling the requirement of traditional marriage conditions. Initially a boy identifies a girl with whom he in love with, then he tells only to his father as he has got girl to marry. Following this, his father alone goes to the family of that particular girl without any previous announcement to her family. Because things he may see in his way, what is happening in residence of girl's family determine the success of marriage. If his father sees someone carrying water or pasturing cattle in his way to girl's family mean a sign of good future of the couple. When father arrives in the family of a girl, if she was at sleep mean a bad fortune and that is the end of their marriage ambition. Whereas, if a girl is preparing coffee at the time of his arrival, it is good news, so they arrange deadline to come back with elders. This type of marriage has lots of preconditions and it may take more than 2 years. Before exactly one week to the wedding, music and dancing starts for 24 in a day without tiresome and ends at the last day of the week around 4:00 pm. It may seem difficult for human being to dance and sing for 24 hours a day and 7 days in a week but Guji do.

Haawadi, is the second type of marriage which can be arranged only with the good will of a bride and groom. This marriage needs reconciliation between the two families, since carried out without wedding and upholding cultural values. Four days after reconciliation, music to begin for 1 day or 24 hrs only unlike khadhdha. Finally, marriage by rapping has no good status as the two; as a result no music or dancing is allowed at all.

**Hospitality of Guji Oromo:** Guji is very hospitable people especially for those who eat and drink with them. Guji believe that anyone who eat and drink even once with their member, mean then onwards that person is the member of their family regardless of his background. They have culture of washing feet of new comer to their village whatsoever the objective of his arrival is. Illmom<sup>16</sup> is the main evidence, by which they acquire poor neighboring ethnic groups (mainly Amaro) as their

<sup>16</sup>Illmomma is different from Gudiffecha because Gudiffecha is acquiring from the very childhood where as Illmomma is acquiring anyone who is unable to sustain his life, for whom Guji give cattle and right to be family.

children and give them portion of their livestock as the new member of their family. According to my Kenyan colleague from Masai, the tradition of Illmomma also exists in Masai community. In summary, these mentioned above are at least some of the evidences concerning hospitality but there are lots of Guji socio-cultural intangible resources worth mentioned and need to be part of the tourism resources of NNP. Moreover, biodiversity and physical attractions of NNP for ecotourism development is an exposed fact.

However, to accommodate the natural potentials of the park in to the very principle of sustainability, the inclusion of human or cultural aspects of the communities affecting the park is required. The community under study has got a lot of traditional input of authentic cultural attractions capable of diversifying the need of tourism industry apart from relying only in the notion of wilderness alone. Communities in Kenya, Tanzania and Uganda shares similar story with Guji living within the park, but others especially Kenyans are using indigenous culture as input for community based conservation.

### Farming in Nechsar National Park

The notion here is based on the fact that pastoralism is compatible with wildlife conservation relative to agriculture. This research argues that Guji is transforming from pastoralism towards agricultural way of life very recently since 2005, and this conversion is serious concern for future wildlife conservation in NNP. Kirubel in 1980s observed the existence of temporary Guji residence in Nechsar plain while permanent villages on the eastern hills were seen on the slope of Amaro mountain [43]. It is obvious that temporary settlers are not in a position to carry out sedentary agriculture and settlement. Permanent settlers on the slope of Amaro Mountain were likely to be Amore people (Kore) who were agriculturalist during that time. Guji Oromo was also later started farming along Sermale river valley as well [44].

In the beginning as 15 Guji informants told, farming was regarded as a work of poor people who had few numbers of cattle. These poor Gujis' used to cultivate land across Sermale river while the wealth remain in Nechsar plain as pastoral. Agricultural products had brought about by Amaro agricultural people in exchange (bartering) of milk and milk products of Guji. The main meal item of the time was "Petele"; it was prepared from cattle blood having sacked at the cattle neck alive. The sacked blood could be cooked like powder. Butter preserved for long time looking yellow color could also used as food. They said that there was no shortage of milk or milk products to seek another meal source in earlier time of Guji in NNP. Guji only understand the importance of crop cultivation and began to engage in huge scale since 2003. Especially after 2008 when both presidents of Oromia regional state and SNNP settled issues politically, the move towards establishing permanent settlement intensified. It was also since 2008 Guji began to construct home, milling machine, school and other means of permanent settlement began. Nowadays, every Guji household in Irgaansa Kebele owns farm land around Sermale valley with effective supervision from kebele administration. Nonetheless, out of the Sermale valley the Kebele administration has no control over land distribution, whoever can clean forest and declare its own plot of land. Blower, to show the scale of deforestation in 1960s said that in Ethiopia by customary law, if a man cleared a patch of forest, the land was his own [50]. This expression still works in NNP outside the fertile Sermale valley.

Nowadays, Guji cultivate products mainly Maize, and banana, mango and avocado to some extent, as well as false banana (enset) rarely. But still their main source of livelihood is cattle, sheep, goat, and

donkey, the significance of donkey is increasing since its introduction in recent years. There are only two mules has been observed which have come to Irigaansa to experiment if it is compatible with the environment; whereas no single horse is found in Irigaansa Kebele. In Conclusion, it is to argue that agriculture is a very recent phenomenon in Guji life which is making things worse in NNP. Unchecked expansion of settlement without any technical and environmental training support from either of the two regional states or NGOs left the fate of NNP in position of uncertainty.

Therefore, Guji in state of change, which mean they are no longer nomads rather a transhumant pastoral approaching to establish strong settlement. Hence, it is high time to think of community based conservation and before it is too late. Pastoralism is to some extent compatible with wildlife conservation where as agriculture intensifies human wild conflict because it can not fit with maintaining wildlife [51]. Since Guji is becoming agriculturalist, it is not difficult to predict the future. In Kenya for example, the less threatened protected areas are in arid and semi – arid parts of the country surrounded by pastoralists as compared to agricultural settlement [52]. Therefore this study argues that the transformation of Guji from pastoralism to agricultural economy in NNP is serious threat to biodiversity conservation.

### Culture and conservation

Studies show the need of indigenous culture for conservation. Guji has some necessary culture to endure conservation as recorded in some studies. Guji believe that killing wildlife invoke severe infliction on his family, clans and offspring. In addition, some Assabe indicate that hunting wildlife for food is a sign of poverty and sometimes results in marginalization in social interaction in cases of marriage arrangement, rituals, and rites of transition [14]. However, the belief in infliction sometimes associated with hunting is only confined to few species in a specific situation as analyzed in the coming topic.

Guji has conservation means to adopt with changing environmental situation of change in water and grass for their livestock. Example; Belessa, is conserving water for their livestock in dry season mainly in Sarmale river valley. One or two households dig hole for watering livestock and the hole is washed minimum once in a week using Bole (salty clay) to prevent contamination. Diribba is another way of water conservation around Nechsar plain having returned back from Sarmale area in summer season. They store rain and flood water in the big hole between March to May rainy season. This water in the hole is mainly used for human and livestock drink which stay around human settlement. Guji return to Nechsar plain only if Diriba is filled with water. As a result, they check water holes beginning of April if the rainfall begins. After December when Diriba begins to dry and tick infestation increases on the plain the Guji return back to Sermale valley once again and vice versa. Traditionally, to prevent drought and shortage of water and grass for pasture, Guji elders carry out Judo like game called Harrousa or Boku at the hill top annually in September and October.

Moreover, in the ceremony at Koba Mountain<sup>7</sup>, Gada representatives curse part of the forest cover or vegetation for the reason researcher not find exactly. In the cursed land no one is allowed to pasture, to collect any kind of wood and let the area as reserved. It is a good tradition of conservation despite the cultural objective is not for conservation. Guji has also got the tradition of Dhabayu which is very similar to Erecha where they praise god to ensure sustainable environment for their

<sup>7</sup>There is no Mountain named Koba up to the knowledge of researcher. It is a place where cursing and traditional Judo occur.

children and livestock. In summary, Guji has the tradition of water and forest conservation for the sake of cultural reasons. For sustainable conservation in NNP upgrading already existing indigenous knowledge of conservation is advisable. This new conception is the underlying precondition for the development of community based conservation. In spite of having the potential of indigenous conservation, there is no attempt by Guji to conserve wildlife in NNP and also no attempt by any institution or government body to initiate community based conservation. Therefore, given present ecological crisis, it is possible to conclude that despite indigenous knowledge, Guji has weak record of conservation and low level of awareness to that matter. In this case Guji elders blame the youth for abandoning cultural values of conserving wildlife and becoming antagonistic to wild animals.

### Challenges of implementing community based conservation in NNP

So far in different studies carried out the major challenges of NNP have been fire, poaching, illegal fishing, overgrazing, removal of wood for fuel and construction, cultivation, unlawful entry and ticks. These problems are still but adding more problems. For the purpose of this research, the main challenges NNP is facing to implement community based conservation are analyzed below.

#### Challenges of Range Management and Legal Status of NNP:

According to the ministry of Agriculture and other earlier sources indicate that the proposed size of NNP was around 700 km<sup>2</sup> [8]. Nowadays the official size of the park is 514 km<sup>2</sup> and even very smaller than official size as Guji community claim. According to this research, there is no consensus among Guji and Oromia region (where Guji ethnically belong) in one side and SNNP state and EWCA on the other regarding the exact size of the park. The African Park Network<sup>8</sup> provided temporary solution by demarcating the Dache area and the Haroresa Ridge as the boundary between the park and Guji until the political solution arrive from the centre (see NNP map for this). Guji has a documented evidence for this demarcation while the park has no copy of the agreement. To this end, all interviewed (40) informants claim that the exact boundary is what they signed with the African Park despite officials in SNNP call the agreement as “temporary”. To denote this demarcation one scout said “African park left its legacy and the problem not to be solved forever”, his idea is also strongly shared by EWCA and other officials’ apart from Oromia Region.

The other recent development related with the park size was, informal demarcation made by Ato Shiferawu Shigute and ex-president Abba Dulla Gamada (president of SNNP and Oromia Regiona respectively) in 2008. According to 2 EWCA experts, the presidents agreement was equally complicated the problem as African park’s offensive demarcation out of their mandate. Leaders of the two regional states approved the African park boundary with some modification and preconditions. All the park workers (8 in number) and EWCA agree that the presidents’ demarcation was political and has nothing to do with conservation and management of protected areas. As far as the present situation is observed, it is obvious that the boundary set by the presidents was not aimed at enhancing community based conservation or ecotourism rather to calm the expected crisis between the two regional states. To realize effective conservation scientifically, it is mandatory to predict the minimum size of habitat for species survival (i.e. Range). Therefore, understanding the behavior of different species is very essential because some species are more sensitive to habitat loses than others [53].

<sup>8</sup>African Park Network was Dutch private company administered NNP from 2004-2008.

Factors affecting minimum area requirements vary with species. These factors are depend on landscape factors such as the quality of non habitat portion of the landscape and the pattern or fragmentation of habitat destruction as well as species characteristics such as reproductive rate and rate of emigration( Fahrig cited, 2001 cited in Melissa, 2003). Studies show that reproductive rate has the most effect on the amount of habitat needed for population persistence, followed by the rate of emigration. The general principle of wildlife range reveals that species with low reproductive rates and species exposed to extinctions requires more habitats, than species with high reproductive rates. Based on this principle, one wildlife expert in NNP recommend the need of extending size of the park taking the rate of Swayne's Hartebeest's way to extinction and current reproductive rate is concerned. In addition, he justifies that any wildlife needs the breeding, reproductive and feeding sites to sustain. It mean that these three sites are occupied by domestic animals and human in NNP, thus the herbivores particularly the endemic Swaynees flee their site and face carnivores out of the reach of human intervention because of limited range size ( which mean herbivores and carnivores cannot sustain in the same range).

In contrary Bourn and Blench pointed out that since wildlife is fugitive and some species migrates outside the delimited areas of park boundary, the solution is only lie on involving community participation on wildlife management [54]. More than anything, wildlife and environmental conservation is not the concern of certain regional states rather global and trans-boundary. For case in point, Gambela National Park is conserving the endemic white eared Kob species but its range is both in Ethiopia and South Sudan. It is affirmed that white-eared Kob move between Gambella and the Sudan depends on seasonal variation [55]. In other word, the states need to look after jointly any actions against the very existence of this species in both countries. The NNP chief warden takes moderate position saying whatever the size of the park; the important thing is legally accepted body of the park based on the study of wildlife ecological monitoring experts and scientists as well as community experts. It is only after this type of scientific study the park can be divided along zones for human, livestock and wildlife and other services. All respondents' in NNP and Gamogofa Zone Tourism office agree that the main problem arise, because NNP has no legal status unlike Semien Mountains National park to carry out community and ecotourism developments. However, in Kenya three quarter of large mammals spent part of the year outside the protected area in spite of having gazetted parks [54]. Hence the solution still lies in awareness creation and participating communities in wildlife and other sector of natural resource management. Nevertheless, it is obvious that lack of legal status of NNP prevented the park administration to design management plan and community works.

**Human wildlife conflict:** Since livestock herding and agriculture is the main source of income and livelihood in developing countries, human-wildlife conflict is more experienced in the region for natural resource consumption which brought wildlife under serious threat [2]. Human wildlife contests begin when livestock try to win food and water against the will of wildlife in NNP. Deforestation for settlement and agricultural purposes together with hunting created serious obstacle for wildlife population and their habitat in NNP [56]. Though the cause is not yet clearly known, some wildlife species are declining in number. Since the objective of establishing NNP was primarily to conserve Swayne's Hartebeest, it has given due attention in the discussion.

**A. Dwindling of wildlife:** Even though NNP is primarily established to conserve the endemic Swayne's Hartebeest, it is this

species leading the way to extinction. Therefore Swayne's case is the main focus of this topic. In 1974, 90 individuals Swayne's Hartebeest were translocated to NNP [56]. However, there is no evidence of follow up for how the trans-located individuals were integrated to the original inhabitants. Key informant Abba Abire in Guji challenged that the trans-located were not more than 15 as he had observed while experts brought the Swayne's Hartebeest in 1974. He added that the number of Swayne's Hartebeest were more than Grant's gazelle before the arrival of new Swayne's in NNP. Three Guji informants believe that the trans-located Hartebeest brought with them diseases and left many original species to death. They also refer the four remnants are the original Hartebeest survived; Jan, 2013 census reduced the number of Swayne to 4 individuals. Majority of local respondents argue that the present deterioration of Swayne's Hartebeest population is the result of two main causes. First, the removal of Guji from the centre of the park, which mean before their removal Carnivores fear to reach the Nechsar plain since Guji protect their livestock.

As a result herbivores (Swayne's and others) live simultaneously with livestock without being hunted. But now a day, Guji left the plain and herbivores faced carnivores being defenseless. Unlike other herbivores, Swayne's hartebeest fear approaching human being to escape carnivores while others like Grants Gazelle and Zebra retreat to Guji settlement pasturing with livestock. The Second reason is the prevalence of tick in NNP where unlike other species Swayne's Hartebeest is not capable to resist tick infection (4 experts in the park also believe). Guji elders assume that "in dry season we used to set fire to control tick infection and to secure fresh grass in summer which is now labeled as illegal". The result is high prevalence of tick and dwindling of Swayne's Hartebeest. Guji Oromo informants defend that Grants Gazelle and Zebra are in good number because of their proximity to human being, or to Guji community. The conception in the park is different from what the community argues. Five interviewed members of the park examined issues associated with carnivores in a way that carnivores have existed in the park for long time but the very recent development is might be immigration from other areas due to deforestation and loss of forest cover in neighboring areas. However, still the argument of park experts is related with range size. They challenge that, Carnivores inhabit in forested areas of the park while herbivores prefer the grassland in Nechsar plain; mean the range of these two species is different. Since livestock and human being affect the Nechsar plain, herbivores particularly Swayne's Hartebeest leave the plain to forested areas to escape where carnivores inhabit. In addition, Swayne's Hartebeest cannot identify the safest place to its kids, because of this the Swayne's and their kids are venerable to carnivores attack. Their conclusion is that unlike earlier days the range of two species is now mixing; herbivores and carnivores. In case of mixing range, herbivores which fear to approach human being become in trouble to sustain. Morris (1967) cited in Ducworth et al.1992, observed more number of Swayne's hartebeests than Zebra, 104 and 96 respectively. But the January, 2013 wildlife census shows that only 4 individual hartebeest and 1032 Zebra exist in the park. Based on various sources the NNP revealed the status of Swayne's hartebeest from 1967-2013 in the following chart (Figure 3).

NNP has lost 43 out of 47 individuals of Swayne's Hartebeest since 2003. If Guji practices poaching as few park members say, there is no cultural or ritual significance of hunting Swayne's Hartebeest selectively as this research bare. But Guji has the tradition of hunting big game which had been vanished like Elephant. There might be some sort of ecological deformation or disease has been spread, actually this

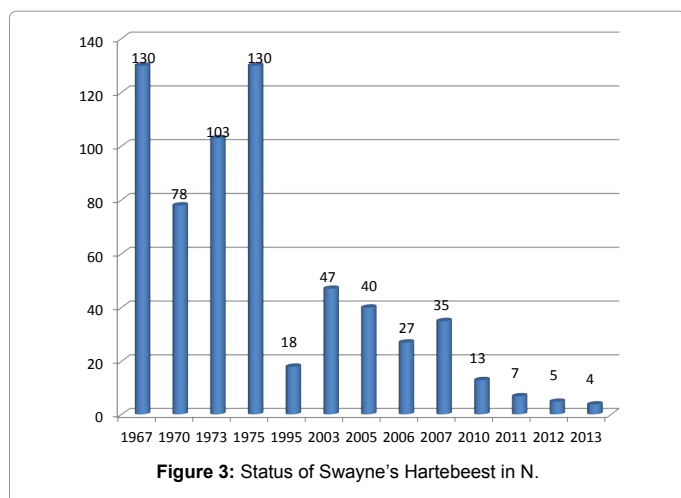


Figure 3: Status of Swayne's Hartebeest in N.

needs scientific investigation. If it is not contained soon, NNP is due to lose its very objective of foundation after few years later.

According to the park sources and observation, Crocodile and Hippopotamus are also waning. The breeding site of Crocodile is mainly confined to the confluence where Kulfu River joins Lake Chamo. Construction in Arbaminch airport and in other upper stream areas together with forest degradation, Kulfo river transports huge materials from upper course. Consequently, at the mouth of Kulfu river the confluence is filled with sand and soil like delta where crocodile used to reproduce. As a result the crocodile may have changed habitat to suitable place or dwindling. As compared to previous population, the number of Crocodile is few to see even in crocodile market<sup>9</sup>. The case of Hippopotamus is also related with man-made habitat destruction. The decline of Crocodile and Hippo has little or nothing to do with Guji community. It is reported that with the exception of recent development leopard is among diminishing species where as the remaining species are kept in good status.

**B. Disease transmission:** This topic is based on the view that disease and tick transmission from domestic animal to wildlife is one of the rationales of resettlement and wildlife decline in NNP. Whenever wildlife and domestic animals share the same space, there is a high risk of disease transmission one to another [54]. The problem facing both wildlife and domestic animal in NNP is tick infection where grazing of domestic animal in Nechisar plain is capable of transmitting disease to either side. There was an incidence of Rabies and Anthrax in NNP in 1988 and 1994 respectively. It is possible to control ticks on cattle through acaricides ( a substance that kills mites and ticks) where as wildlife maintain ticks which is difficult to control [57]. In NNP the case is more sever because even domestic animals are not well protected despite some intervention from Oromia region and NGOs.

Four Wildlife experts interviewed in NNP were not sure about the source of tick in the park. But see the presence of huge cattle population on the plain as the cause of widespread tick infestation. Experts' state, species like Burchelle Zebra and Grants Gazelle are resistance to tick infestation where as Swayne's Hartebeest mainly kids are very weak to sustain in park due to prevalence of tick. Nevertheless, studies carried out in Uganda reported no mortality in wildlife as effect of tick or tick-born disease. Transmission is not only confined to domestic animals, Wildlife also transmits disease to domestic animals like malignant

<sup>9</sup>Crocodile Market is a place where crocodiles being seen naturally. While Crocodile farm is for captive breeding.

catarrhal fever that is transmitted by wildebeest calves in the calving season [54]. In summary, Pastoralists minimize the disease effect through mobility escaping the seasonal nature of some infection like Guji does in NNP. Now Guji community is establishing permanent settlement avoiding mobility; thus it requires serious involvement to deter disease effect in either side. In permanent settlement, the relation between wildlife and domestic animal is permanent throughout the year, thus the transmission of disease and decline of wildlife species become inevitable. Human-wildlife conflict is evident in NNP which is costing wildlife and livestock and resulted in antagonistic perception towards the park. Therefore, to make conservation effective it is still advisable to engage communities in wildlife based economic gains in the form of CBET and conservation.

**Perception of Guji towards Wildlife:** The incidence of poaching has been reported in NNP even before the declaration of the region as national park. However, Guji informants believe that killing wildlife result in generational discontinuity as a penalty from their god. Conversely, the park still talks about the incidence of poaching but recognize its decline compared to previous records. This study agree that traditional belief of killing wildlife brings god's punishment and social prejudice in Guji still exist but restricted to only few species and circumstances. Guji tradition forbids killing warthog and pig, because it is believed that these two species owned by and carry evil spirit. The tradition also prohibits killing very special Kudu which is the blessed one. Its special feature is the presence of cup or grass on its head (not visible to anyone except for some Guji). The killer of this Kudu need an immediate repent in huge religious ceremony with animal scarifies unless the person could die. If the repent is accepted by god, this man would be blessed and act as a witch from then on. Conversely, the tradition used to appreciate hunting of big games like Elephant, lion and Rhino for cultural purpose and the hunter assume the honorary title called Midda. The vanishing of Elephant and Rhino from the park may be attributed to this culture. Elephant hunters used to acquire the title of Abba Guracha while Lion hunters to take Abba Dalacha. When these heroes passed away, the traditional funeral ceremony used to take five days to their honor. In contrary, the tradition had welcoming features for wildlife especially to Grants gazelle and Kudu. Domesticating Kudu has believed to be important to prevent cattle from disease infection and human being from disaster. Nonetheless, Guji elders say this tradition has been banned due to pressures related with the park.

Guji also acknowledge the presence of cattle in Nechisar plain or grassland is very important for wildlife, because cattle disperse tick from tall grasses in turn weak herbivores like Swayne's Hartebeest graze without serious difficulties of tick presence. As observed poaching is not serious problem in NNP rather overgrazing, expansion of settlement and agricultural land account the most. Despite Guji normally do not appreciate hunting most wild animals, youths sometimes abuse the tradition and there is also growing perception in community that wildlife is a cause for eviction and loss of their livelihoods.

**Livelihood Needs in Nechisar National Park:** Guji pastorals use lake Chamo and lake Abaya ( Abbayya Gurraattii and Abayya Diimtuu in Guji respectively) for watering their livestock. They believe Abayya Gurratti has medicinal value for livestock. Guji believes these lakes particularly Chamo has the power to clean infection because of its salty nature. Bolee, a white salty soil in Tabala around the hot spring is also supposed to have medicinal value for cattle. I have observed when Guji livestock compete to lick Bolee around Tabala despite the park against the move. Another watering site is the Sermale river especially

during summer season. Even in summer Guji water its livestock in Lake Chamo or Abaya at least once in month to prevent occurrence of disease as they perceive.

According to Guji informants and Abiyot(2009), almost all Guji own two houses, one in and around Nechsar plain for rainy summer called mana gannaa whilst shelter beyond Haroresa ridge and Sermale valley for dry winter season known as mana bonaa [40]. Accordingly, watering and grazing and pressure on wildlife in NNP vary with seasonal meandering. In another word, Guji stay away from the plains in dry season and return back in summer. That is why the park and officials in Gamogofa Zone asks what is the reason of returning back to the plain if they sustain in severe dry season away from the park? Guji answer that in dry season, Nechsar plain is full of tick and almost complete loss of grass in dry weather. Whereas, in summer, Sermale valley is under threat of malaria and tsetse fly besides water logging and flood.

In addition the park is a land for cultivation; honey production and other livelihood source. The problem is unchecked rate of growth in human and cattle population, as well as agriculture that make the future of NNP unstable. The incomplete census result in January, 2013 shows 730 household head and 1001 house wives have been counted. Guji is polygamous society having at least five children in single household connote at least 5000 population in Irigaansa, Guji village in NNP. In 2010 the total number of livestock in 9 villages of Gamo-Gofa Zone around NNP was 16,734, where as 21,320 only in single Irigaansa village [49]. NNP scouts estimate more than 50,000 livestock population but no documented data has been given in Telkie (seat of Guji village) for researcher. The estimation was by considering minimum of 50 to maximum of 1000 cattle (Abba Shana're in Gode has this number) per capita in Irigaansa. According to village administration source there are 27,500 cattle has taken injection offered by PATTEC, in January, 2013. In other word the main cattle reserve in "Gatira" area away from the village was not counted. It is difficult to predict good future unless some alternative economic means well-matched with protected areas seek out. The alternative should be community based conservation and development as far as this research is concerned (Tables 4 and 5). In summary:-

**Park-people relation:** NNP is probably one of the weakest park administrations in Ethiopia. Ministry of agriculture proposed a management plan for 700 km<sup>2</sup> sized Park in 1970s. Nowadays the park has no management plan for 514 Km<sup>2</sup> and not yet gazetted for 39 years of establishment. Park workers complain that "since the park has no legal status, it is difficult for us to take legal action against any misappropriation". In addition, the park is not well organized and has got stable administration yet except for some brief periods. There have been six chief wardens and one scout as chief warden served the park since 2005 alone. The present vast experienced chief warden Abraham

is only 2 months in NNP when this research was undergoing. The park has got only six experts (Bsc. graduates) categorized as one biologist, one tourism, two wildlife, and two community experts.

The surprise is that with all these problems, the park now has only 33 scouts because 35 scouts have been reduced after the evacuation of African parks. As a result Wildlife commentator stipulated that the public/private partnership agreement entered for takeover of NNP was a real breakthrough for persisted problems whilst the evacuation of African park was a serious blow to the wildlife and wildlife habitat in the country [58]. The relation between Guji and the park is something requires due consideration. Since the 1982 resettlement the tension heightened ill feeling towards the park. According to Guji informants the park and government officials do not care about the people rather they give over emphasis to wildlife. At the same time there is no single official from the park or government comes to the community to discuss issues related with the park. Government officials only came in time of conflict with neighboring ethnic group related with grazing or cultivation, apart from this instance no one remember where they are. They say, we conserve the wildlife and forests only because we need it to sustain for our cultural purpose. In contrary, one informant said "why do I care for wildlife if I cannot get any benefit from them, there is no infrastructure provided by the park, they always consider us alien and see wildlife more valuable than our people".

It is understood from communication with Guji, they feel the continuation of NNP as a Park in this condition mean a threat to community's livelihood and the very existence of Guji community in the region. Informants remember good days of relationship between park and the community for brief seasons. Despite the fact that African parks regime of park administration advocates resettlement, informants consider those days as period of good communication and relationship, for the reason that African park officials discuss issues overtly with the community in grass root level. For them the period between 1996 and 2004 considered to be the friendliest when Chemere Zewde led the park as chief warden. As fluent speaker their local language Affan Oromo, Chemere used to communicate daily with them and provide transportation service for sick individuals and pregnant women when Guji need to go to hospital in Arbaminch. The 2008 administration under Chief Warden Awol who had the same background with Chemere bear in mind as good time for park people relation. Beyond these episodes, Guji never want to remember what is park all about; hence the park people relations appear antagonistic in the case of NNP. Therefore, it is possible to summarize that the main obstacle and conflict in management were the lack of trust between the park administrators and Guji and bad relationship between the park and the community.

**Internationalization of Nechsar National Park dilemma:** The other striking problem of Nechsar National Park is the

S/N	Name of Kebeles	Household		Family		Total
		Male	Female	Male	Female	
1	Irigaansa	569	41	-	-	610

Source: Fekadu and Zeleke (2011).

**Table 4:** Total number of Human population in Irigaansa from woreda office, 2010.

S/N	Name of Kebeles	Household		Family		Total
		Male	Female	Male	Female	
1	Irigaansa	730	1001	-	-	1731

Source: Ongoing census from Agriculture extension office in Irigaansa Kebele (Jan, 18, 2013).

**Table 5:** Unfinished Census result obtained from Agriculture extension Worker.

internationalization of crisis in the park sometimes with over exaggeration. The critics blame internationalizes of the Nechsar crisis on “Oromo elites” that has access to international arena. According to informants in EWCA, in this case the government and conservation offices like Ethiopian Wildlife Authority (EWCA) are blamed for violation of indigenous right, forceful eviction, and dislocation and even to the extent of targeting the Guji Oromo ethnic identity. The pioneer to internationalize was Dr. Tadesse Barisso, Professor in Addis Ababa University and currently president of Bule Hora University in Hagere Mariam. The internationalization attracted Human Right organizations like Refuge International to put pressure on Ethiopian government and EWCA. According to EWCA official, it is out of the capability of their office to settle Nechsar problem and even federal government is not in position to solve soon, given international pressure by human right activists related with Guji.

Currently the resettlement is unthinkable as case in Gambella region’s ‘land grabbing’ draw attention of the so called international human right activities. Human right organizations had voiced concern that African Park’s plans to evict the tribes from their ancestral land of agriculture and grazing (<http://www.conservationrefugees.org/wushetafrican>). As Greer (1999) examined, Guji agreed to move out of the park in case appropriate substitute of land provided. While the Oromia regional council approved the need of resettling Guji and passed an order to Borena Zone and Borena Zone did the same to Abaya Woreda to proceed with resettlement bid (39). But with reason no one knows the Oromia regional government abrogated the agreement made between SNNP regional governments to resettle Guji communities in to its regional territory. There might be the growing international significance made Oromia regional state to relinquish the resettlement move and to stake with establishing permanent settlement in the park. The refuge international reported in November 2004, 463 of Guji houses were burned down, with all their possessions by Ethiopian park officials and local police while they received no compensation for loss of property (<http://conservationrefugees.org/NechSar>). The park administration, EWCA, and Gamogofa zone recognize the extent of internationalized nature of the crisis and its effect on implementation of conservation objectives and development of the park.

**Difficulty in accessibility and infrastructure:** The city of Arbaminch is accessible by road and air transport, which is about 32 km to Nechsar plain. The early management plan of NNP recommended improvement of 15 km road connecting the park to Arbaminch city, improvement of 64 km tracks within the park, improvement of 60 km track from Dilla to Lake Abaya, construction of 32 km of road from Kulfo river to Nechsar plains as well as marine transport along two lakes. Today in 2013 no single recommendation has been in place except already built Kulfo bridge connecting revrine forest on route to the plains. According to Park workers, tourists always complain on the subject of very difficult road to access in to Nechsar plains.

One of the reason Guji Oromo’s ghashtly attitudes towards the park can be the matter of infrastructure. Guji travel on foot to reach Arbaminch which requires full one day without sleep in the wilderness, if they do sleep it would take two days. Except agricultural products, Guji purchase everything from Arbaminch. However, Guji offended by health related matters to reach hospitals in Arbaminch city. Recently, boat with carrying capacity of 15 people is being used to reach Arbaminch on Abaya Lake, and also some park deriviers with their own good will informally assist Guji travelers. Guji sell their livestock mainly in Tore (capital of Galana Woreda), chaffe and Harro (villages in Gdeo Zone) via Amaro having travelled minimum of 2 to 3 days.

For effective community based conservation the community needs to be helped to bring their product to market. Most Guji use Sermale river as the only source of drinking water while some living near Nechsar plain use lake Abya but still both areas require at least an hour travel on foot setting aside the issue of electricity which is unthinkable. My informants in focus group pointed out that unfulfilled promises made by presidents of Oromia Region and SNNP in 2008. Their promises were, to construct road from Dilla connecting Guji villages, to introduce ferry service, to lay necessary ground for car transportation, and to construct health centre for Guji communities are to mention few. They further said that these all promises were mere wish intended only to set fire off. In any successful community based conservation, communities are encouraged to develop their own business, government and other stakeholders initiate infrastructural development which results in the sense of ownership of the community due to economic and political empowerment they gain (Tables 6 and 7).

**Inadequate coordination among stakeholders:** For this research the main stakeholders associated with NNP are; Guji community, Gamogofa Zone Administration, Oromia Region, SNNP government, EWCA, NGOs and Educational Institutions. The weight of different levels of government in SNNP and Oromia Regional State has been explained in various topics in brief above. As a result, here the status of other stockholders in the park is the concern of discussion. Both the park administration and Gamogofa zone officials confirmed that there are no NGOs working either in community development or conservation after evacuation of the African Parks. The Gamogoffa Zone Culture and Tourism in government communication office disclosed that there have been lots of NGOs come to work with zonal government and park administration but returned back having seen the presence of Guji in the park as difficult to maintain. The incidence of overgrazing, deforestation and poaching by Guji in NNP bring the feeling of waste of money and time among NGOs which could have been spent in other favorable places for conservation.

The best evidence for this reason is a European Union €4 million plan to set up Wildlife Training Centre in NNP which might have been one of the biggest centers of education for wildlife specialists in East Africa. According to the officials, the rationale for terminating the plan was the “encroachment” of Guji in NNP made the project unworkable. However, an official needs his identity covert said; the basis of ceasing the project was the reluctance of government to give autonomy to the European Union’s objective to accomplish their mission. It means European Union wants to work and donate money via their NGOs while government determined to take money directly in its own hand. This difference between government policy and European Union was the justification behind project failure. In field observation I have observed the NGO named PATTEC working under the supervision of African Union. This NGO was giving injection to Guji livestock in every village

No	Name of Kebeles	School Grade Level		Satellite
		1-5	1-8	
1	Irgaansa	1	No	2 (Hitu and Gode)

**Table 6:** Number of Schools in Irgaansa Kebele (Author survey, 2013).

No	Name of Kebeles	Public Health Extension	Private Health	Water Supply	Remark
1	Irgaansa	1	2 (in Telkie and Ardagudina)	No	In hut

NB: Health centers only exist in name operating in hut with nothing, so it is only not to say not exist.

**Table 7:** Number of Health Post in Irgaansa Kebele (Author Survey, 2013).

to prevent the spread of and cure already infected in trypanosomiasis. After all, there is no single NGO working to enhance community based conservation or any other conservation issues in NNP.

NNP is free of educational and research related influence working with the park to solve problems associated with Guji Oromo. For example Arbaminch University has a reputation of water related technology in the country. But it has nothing to do with NNP in water and environmental conservation as well as community development. The University community development directorate under community development vice president substantiates that “we have done nothing specific to Nechsar National Park and even we do not have any plan yet designed to work with the park”; but he described many university projects working in collaboration with Gamogofa zone setting aside the park. Arbaminch university research directorate has recognized the weakness of not engaging in park matters though both officials question the legal status of the park to engage in community issues especially related with Guji as long as the ongoing dilemma is concerned. Other stakeholders like travel agents are by far away from the community and some even know nothing about Guji, as a result they are not the concern of discussion. All travel agents understand the natural elements in the park and never think the cultural elements or attractions associated with Guji Oromo very adjacent to the Nechsar plain apart from seeing in the side of threat alone. EWCA as main stakeholder taking the responsibility of running NNP in 2008 seems unsuccessful to secure the objective of conservation. It believes that the issue concerning NNP is beyond their capacity and needs political solution.

NNP under EWCA management is running by few inexperienced human power, financial problem and problems stated in charts below made one of the weakest administration era of NNP. The SNNP government is offering very little assistance to maintain the park. According to the present chief warden who had served in Semein Mountains National park remember the Amhara regional state very differently in the same case. The Amhara Region subsidizes up to 10 million birr for Semeien Mountains National Park by which 18 post sites are operating due to state fund. In conclusion, an official from Gamogofa zone made clear that if things continue as it is on the ground, NNP would be no more than history given human “encroachment”, deforestation, overgrazing and expansion of agricultural land is concerned. This research is also strongly agrees on the point raised by official, and the immediate solution should be enhancing community based conservation.

## Conclusion and Recommendations

### Conclusion

Nechsar National park is a bone of contention between strict conservationist and the local community. The earlier perceive the existence of human in the park as threat to conservation and forward resettlement and dislocation of communities as the only solution. Whereas, locals feel that they have been marginalized from their home and pasture ground because of artificially created park. The strict conservation approach has been carried out with ill preparation and without gaining significant support from the community and other stakeholders. The conservationist is based on the idea that NNP is “wilderness and pristine” ecosystem to conserve biodiversity in its natural seating, while Guji claim NNP is a home and source of livelihood for century.

The main problem and solution lays on the hands of both Oromia and SNNP regional states that stand in opposing views to solve NNP

issues and conservation ideas. The root difference is that Oromia regional government give due emphasis to the Oromo speaking Guji people dwelling in the park where as the SNNP government in whose geographic realm the NNP exist seems more committed to biodiversity conservation and advocating more of resettlement. The contradictory attitudes are about the size of the park, the fate of the community, the legal status of the park boundary and the conservation scheme to implement put both states in difficult state to compromise and place the park in difficult situation to achieve conservation objectives. This research concludes that the notion of conservation so far has born no fruit apart from intensifying already existing problems.

Conservation without the consent and participation of communities affected by park establishment in NNP eroded sense of ownership and built negative perception towards any move by government to succeed in conservation effort. The failure to recognize potential of indigenous culture for conservation and sustainable tourism development resulted in diminishing of already known attractions and some of them are in critical situation to recover. Guji community feeling of marginalization, loss of source of livelihood and lack of concern from the park authorities make them senseless in case of biodiversity loss.

Participation of different stakeholders are important to succeed in any community based conservation. However, apart from centrally planned order from EWCA there is no meaningful contribution of NGOs, regional states, educational institution and donor agencies in NNP. Consequently, NNP is running without the required level of infrastructure, man power and legal status which made accomplishment of sustainable conservation mere wish. EWCA, the responsible body in charge of protected areas of Ethiopia proved to be powerless and unable to perform duties under its jurisdiction. EWCA handed over most cases in NNP to political authorities in the centre asserting cases are beyond its capacity. Those believed to be the owner of stated capacity lacks commitment or desire to stretch their hand in the issue. Hence, in NNP neither community based conservation consolidating community participation in natural resource management nor traditional conservation through “fine and fence” approach has been successful to rescue biodiversity or local livelihood loss. In addition to the stated problems, weak park administration and lack of trust between community and the park ended up in dwindling of wildlife, alarming rate increase of agricultural land and settlement, deforestation and overall ecological crisis in NNP.

### Recommendations

The following recommendations are put forward to minimize the problem assuming Guji is living within the park. It is based on the council of ministers regulation No.163/2008 under management of wildlife conservation areas which guarantees that persons who were inhabitants of wildlife reserve prior to the date of its establishment to continue living within the reserve [12]. It is also based on the principle of community based conservation for sustainable development.

Increasing the size of Nechsar national park is worth recommended to diversify function of the park. The increased park size may include part of the Amaro Mountain, increasing shares of Lake Chamo and Abya as well as extending towards the north up to Odoo Darba. To attain community development and conservation function, it is crucial to apply zoning in based on different objectives and use of national park. Zoning should be based on UNESCO’s Man and Biosphere program with some modification in order to fit with local conditions. The following Zones are recommended:-



Core Area: - which includes the whole Nechsar plains from Tsebel out post including hot spring in south up to Hitu in the north. These areas are the main ground for wildebeest and Zebra and need to be exclusive area of wildlife. However in time of severe drought and shortage of pasture, the right to grazing for the community has to be respected. Buffer Zone: - it is an area surrounding the core areas may include rehabilitation areas where ecological restoration may take place. Here restriction can be imposed based on rule and regulation with exception of special development activities undertaken to boost the conservation objectives. This area may include the whole Haroresa ridge and settlements very near to Nechsar plains. Finally the Pastoral Zone which may includes areas of Talkie and portion of agricultural land in Sermale valley, and territories between the foothills of Haroresa ridge and Amaro mountain as well as adding some territories of the newly proposed (from increased park size) in the north. In the pastoral Zone Guji could set up cultural camps, tents and lodges to host tourists. In any instance the right to watering their livestock has to be ensured in either of the two lakes exclusively (Lake Chamo or Lake Abaya based on studies). It means that conservation should equally consider both biodiversity conservation and local community livelihood.

The park and other concerned bodies should recognize potential of Guji culture for conservation in grass root level. To develop community based conservation, the local community has to participate in community based wildlife management, environmental protection and natural resource management. While, the community need to be consulted in planning and implementation of park related policies that requires the re-arrangement of administrative structure to include the community in board or other strata of administration. Moreover, an intensive awareness creation, capacity building and empowerment of the community politically and economically should be the primary concern. The empowerment calls for the contribution of all stakeholders in any level interested in conservation. Experts from various disciplines need to co-ordinate the integrated and feasible range management, disease control by giving required direction based on research. In addition improving level of park staffs in various training and capacity building has to be emphasized.

Designing alternative route is important to diversify income generation. The alternative routes are may be ferry transport from Dilla to NNP and road transport where the community involves in transportation and leisure travel on lakes. The income earned from tourism may discourage emerging agriculture as the main source of livelihood which is not friendly with protected area system. To make CBET full, anthropological study has to be carried out to include intangible culture as an important source of tourist attraction besides traditional potential of NNP. These recommendations only work if the park size increased in considerable scope to accommodate both human and wildlife sphere of influence. The new activities have to discourage agriculture and focus on tourism as the main source of livelihood of the Guji community. If the efforts don't work the integration of conservation and development recommends resettlement with effective substitution to the community as the preferred way reconciling the contending parties' concerning the park based on scientific investigation is necessary.

The last but not the least is the reintroduction of already vanished and new species to the park based on scientific study has to be considered. African Park had planned to re-introduce 14 species of wildlife including Rhino, elephant, and buffalo etc. Since wildlife is dwindling other wildlife species compatible with savanna grassland like Ostrich should be trans-located to restore the previous status of NNP.

## References

1. IUCN (1994) Protected Area Management Categories. Gland, Switzerland.
2. De Boer W, Baquete S (1998) Natural Resource Use, Crop Damage and Attitudes of Rural people in the vicinity of the Maputo Elephant Reserve, Mozambique. *Environmental Conservation*, 25(3): 208-218.
3. The FDREEPA (2011) GEF Portfolio Identification Document. Addis Ababa, Ethiopia.
4. Shibru T (1994) Conservation for Survival- Walia. *Ethiopian Wildlife and Natural History Society* 15: 13-16.
5. Gobena A (2008) Assessment of Ecotourism Potentials for Sustainable Natural Resources Management in and Around Abijata-Shala Lakes National Park in the Central Ethiopian Rift Valley. Unpublished, MSc Thesis: Addis Ababa University.
6. Fassil G (2009) Ecotourism Feasibility to Support Environmental Education. Unpublished MSc Dissertation: University of Kent, UK.
7. Ministry of Agriculture (1980) A Development Plan for Wildlife Conservation in Ethiopia. Addis Ababa. EWCA.
8. Simon MK (2011) Dissertations and scholarly research: Recipes for success. Lexington, KY: Dissertation Success.
9. Dey I (2005) Qualitative data Analysis. A user friendly guide for social scientists. London. Taylor and Francis Group.
10. O.A.U (1968) African Convention on the Conservation of Nature and Natural Resources. OAU.
11. EWCA (n.d) Ethiopian Wildlife Conservation Authority Policy and Strategy, Proclamation and Regulation. Addis Ababa. Master Printing press plc.
12. Shemwetta DT, Kideghesho JR (2000) Human-wildlife conflicts in Tanzania: What research and extension could offer to conflict resolution? In Proceedings of the 1<sup>st</sup> University Wide Conference 3: 569-577.
13. Debelo AR (2011) Contested Terrains: Conflicts between State and Local Communities Over the Management and Utilization of Nechsar National Park, Southern Ethiopia. In *Journal of Sustainable Development in Africa*. 13: 49-65.
14. De Boer W, Baquete S (1998) Natural Resource Use, Crop Damage and Attitudes of Rural people in the vicinity of the Maputo Elephant Reserve, Mozambique. In *Environmental Conservation* 25: 208-218.
15. Andrew-Essien E, Bisong F (2009) Conflicts, Conservation and Natural Resource use in Protected Area Systems: An Analysis of Recurrent Issues. In *European Journal of Scientific Research* 25: 118-129.
16. Norwegian Institute for Nature Research (2011) Wildlife-Human Interactions; From Conflict to Coexistence in Sustainable Landscapes. Joint Indo-Norwegian project 2007-2011. NINA Report 736. Trondheim, NINA.
17. Lamarque F, Anderson J, Fergusson R, Lagrange M, Osei-Owusu Y, Bakker L (2009) Human-wildlife conflict in Africa. Causes, consequences and management strategies.
18. Ontario Ministry of Natural Resource (2008) Strategy of Preventing and Managing Human-Wildlife Conflict in Ontario.
19. Nishizaki N (2004) Resisting imposed wildlife conservation: Arssi Oromo and the Senkelle Swayne's hartebeest sanctuary, Ethiopia. In *African Study Monographs* 25: 61-77.
20. Boyce W, Lysack C (2012) Community Participation: Uncovering it meanings in CBR.
21. Hulme D, Murphree M (1999) Communities, wildlife and the "new conservation" in Africa. In *Journal of International Development* 11: 277-285.
22. McGraw-Hill's Dictionary of American Idioms (2005) USA .McGraw-Hill Companies, Inc.
23. Stone L (1989) Cultural cross-roads of community participation in development: A case from Nepal. *Human Organization* 8: 206-213.
24. Okazaki E (2008) A Community-Based Tourism Model: Its Conception and Use. *Journal of Sustainable Tourism* 16: 511-529.
25. Andrade M (2008) Ecotourism: A Tool for Community Development Panacea or Mere Rhetoric? The case of Puerto Princesa, Palawan Island in the Philippines. Master Thesis: Lund University.

26. Yarrow G (2009) *Wildlife and Wildlife Management*.
27. World Bank (1992) *World development reports, 1992. Development and environment*. World Bank and Oxford University Press.
28. Pimbert MP, Pretty JN (1995) *Parks People and Professionals; Discussion Paper No.57*, February 1995, UNRISD, Geneva.
29. Brown K (2002) *Innovations for Conservation and Development*. The Geographical Journal 168: 6-17.
30. Kumar S, Mishra S, Rao KK (2011) *Creating space for community-based conservation initiatives (CBCLS) in conventional academics*. International Journal of Peace and Development Studies 2: xx-xxx.
31. FAO (2007) *Parks and Protected Areas for the twenty-first Century*. Unasylva 176: 1-7.
32. Lai PH, Nepal SK (2006) *Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan*. Tourism Management 27: 1117-1129.
33. Gilmour DA, Nguyen Van San N (1999) *Buffer Zone Management in Vietnam*.
34. Abbot J, Thomas D, Gardner A, Neba S, Khen M (2001) *Understanding the Links Between Conservation and Development in the Bamenda Highlands, Cameroon*. World Development, 29: 1115-1136.
35. Furze B, Lacy DE, Birckhead J (1996) *Culture, Conservation, and Biodiversity*. New York. John Wiley and Sons publisher, USA.
36. Weladji R, Moe S, Vedeld P (2003) *Stakeholder attitudes wildlife policy and Benoue Wildlife Conservation Area, North Cameroon*. Journal of Environmental Conservation 30: 4334-4343.
37. Eagles Paul FJ, Mccool Stephen F, Haynes Christopher DA (2002) *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*. IUCN Gland, Switzerland and Cambridge, UK.
38. Greer M (1999) *Evaluation of National Park Rehabilitation in Southern Ethiopia Project (1995-199) Final Report*, EWCA.
39. Abiyot NB (2009) *Resettlement and Local Livelihoods in Nechisar National Park, Southern Ethiopia*: unpublished MA Thesis; University of Tromsø: Norway.
40. Getachew G (2007) *"Do People and Their Culture Matter in the Conservation of Natural Resources? A Study of Impacts of Conservation Policies in Nech Sar National Park and Yayo Forest in Illubabor Bora Zone*. Unpublished MA Thesis, Addis Ababa University, Ethiopia.
41. Staford S, Telfor M (1992) *Other Human Pressure in Nechisar National Park*. In a Report arising from the Cambridge University Ethiopia Groindon Water Expedition 1990. EWCA.
42. Kirubel T (1985) *"Nachisar National Park Preliminary Report with Particular Reference to the Distribution of Large Herbivores and Major Threats to the Park Resource"*. EWCO: Addis Ababa.
43. Stafford RJ (1990) *Wood Collection in Arbaminch Forest, Nechisar National Park*. In a Report arising from the Cambridge University Ethiopia Groindon Water Expedition 1990. EWCA.
44. Tedla S (1995) *Protected Areas Management Crisis in Ethiopia*. *Walia* 16: 17-30.
45. Tadesse Berisso (2004) *Planning Resettlement in Ethiopia: The Experience of the Guji Oromo of Nechisar National Park*. In: Alula P, Francois P (eds.) *People, Space and the State: Migration, Resettlement and Displacement in Ethiopia*. Addis Ababa: Bole Printing Press.
46. Duckworth J, Evans M, Stafford R, Telfer M (1992) *Survey of Nechisar National Park*. Report of the Cambridge Ethiopia Ground Water Forest Expedition 1990-ICPB Study Report No.50. EWCO: Addis Ababa.
47. Clark DL (2010) *An introduction to the Natural History of Nechisar National Park*. Mengistu W (ed) *Ethiopian Wildlife Natural History Society*.
48. Fikadu D, Zeleke G (2011) *Ecological Assessment for the Re-demarcation of Nechisar National Park (survey report)* Report submitted to Wildlife Development and Protection Directorate and Parks and Wildlife Sanctuaries Directorate Director. EWCA.
49. Blower J (1971) *Ethiopia: Wildlife Conservation and National Parks*. In *Miscellanea*1. Institute of Ethiopian Studies: Addis Ababa.
50. Bourn D, Blench R (1999) *Can livestock and Wildlife coexist? An Interdisciplinary approach. Livestock, Wildlife and People in the Semi-Arid Rangelands of Eastern Africa*. (eds.) London. The Environmental Research Centre.
51. Kiringe J, Okello M (2007) *Threats and their Relative Severity Wildlife Protected areas of Kenya*. *Applied Ecology and Environmental Research* 5: 49-62.
52. Melissa D, Fahrig L, Flather C (2008) *Effect of Reproductive Rate on Minimum Habitat Requirements of Forest-Breeding Birds: USA*. *Ecological Society of America*.
53. Bourn D, Blench RM (1999) *Livestock, wildlife and people in the semi-arid rangelands of eastern Africa*. London: ODI and ERGO.
54. Duckworth JW (1973) *Gambela 1973 - A wildlife Report*. *The Journal of the Ethiopian Wildlife and History Society* 5: 9-11.
55. Workeneh A (2009) *Population Ecology and Habitat Assistance of Grant's Gazelle in the Plains of Nechisar National Park*. Unpublished Msc Thesis. Addis Ababa University.
56. Lealem Berhanu (1974) *Operation Swayne's hartebeest*. *Orix* 12: 556-558.
57. Grootenuis JG (1997) *Wildlife Utilization Study. Report 4; Veterinary*. Nairobi; Conservation of Biodiversity Resource Areas Project. Kenya wildlife service and African Wildlife foundation.
58. Flack P (2011) *The State of Hunting in Ethiopia - My Impressions*. In *African Indaba e-Newsletter* 9: 2-8.