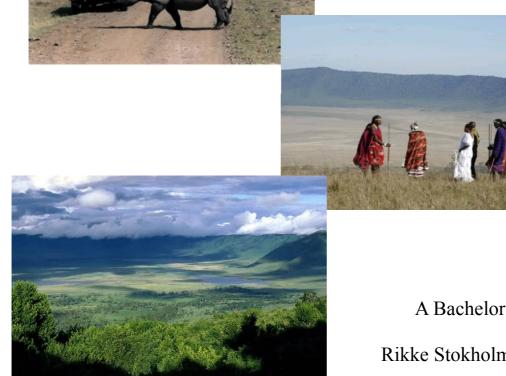
The Theory of Integrated Conservation and Development Projects Rhetoric or Reality?

The Case of Ngorongoro Conservation Area



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Rikke Stokholm Riemer &

Yonatan Kelder

Supervisor: Anita Veihe

Abstract

In this works we are looking into the conflicts between nature conservation and development of local communities in developing countries. We examine the weaknesses within the theory of Integrated Conservation and Development Project (ICDP) by analysing the reality of one of the world's first ICDPs, the Ngorongoro Conservation Area (NCA) in Tanzania, and its local indigenous population who belong to the pastoral Maasai. We have collected our empirical data from peer-reviewed articles and official reports by international and national governmental and non-governmental organizations. We analyse the data with respect to the writer's prescription of the reality in the NCA while being aware of our own pre-conceptions.

The problems we are discussing are: migration, invasive species, poaching, the increase pastoral human population and the issues of human rights and land tenure within the NCA. We identify the conflicts that led to these problems. Some of the conflicts are a result of poor implementation of the strategy, however, we trace two issues which have their roots in a weak link within the theoretic background of the project: the side effects to economic success, and the lack of long term self-sustainable strategy.

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1. Introduction

Nature conservation takes place within a field where conflicting interests meet. Nature provides resources, but the extraction, use and distributed of these resources, are the roots for various conflicts. Different people depend on and benefit form nature in different ways - ways which are often not compatible. Many of the conflicts are taking place within the developing world, where the indigenous people's need for land for their livelihood and economic development contradict with the national and international society's interests in conservation of biodiversity (Wilkie et al. 2006:247).

The perceptive of environmental problems is influenced by the specific time, place and events which shape peoples view on reality. Therefore also the concept of nature conservation is flexible and has changed over time and space. Colchester claims (Colchester 1997:97-100) that contemporary practices of nature conservation have developed from two parallel roots. One is rooted in the concepts of 'wilderness' versus 'human' and 'cultural'. The need of 'wild places' preserved untouched, lead to the development of the first national parks in the United States at the second half of the 19th century. The other stems from European colonialism, where colonialists, and local nobility in the colonies, wanted a hunting place. This lead to the creation of protected areas, areas where game animals were protected from the public and where only certain people were allowed to come in and hunt. These two views have spread later on, mainly through colonialist powers, to many other parts of the world (Colchester 1997:97-100; Chatty and Colchester 2002:5-6).

The early days of the nature conservation movement in Central Africa, South East Asia the US and Latin America, can therefore be traced back to colonial time. At that time the 'conservationist view' claiming that there is no place for permanent or long term existence of humans within the border of nature reservations was the ruling discourse. Indigenous people, who were seen as primitive with a need for development, were pressed to move, and when relocation could not happen willingly it was forced. In many cases the relocation had destructive consequences to the relocated communities both socially and economically (Chatty and Colchester 2002:5-6; Colchester 1997:100-9; Utting 1993:90-1).

This conception of conservation began to change through the 1940s and 1950s. Indigenous people were no longer seen as harmless and innocent, but as wild and dangerous instead. Independent post-colonial states had started to emerge and the indigenous people were now also looked at as an obstacle to the modernity of the state. Indigenous peoples' way of sustaining life, through pastoralism, hunting, gathering or swidden farming, was seen as primitive and their relocation was therefore reasoned by 'allowing modernity to get to all the layers of society'. As a consequence resettlements, in the name of modernization, lead to a denial of indigenous' land rights (Chatty and Colchester 2002:5-6).

Since the 1980s a wide agreement has been prevailing among researchers that the 'classical' conservationist approach towards management of protected areas has failed (Colchester 1997:109). For many it has become clear that without taking indigenous people into account, projects for conserving biodiversity cannot succeed. "Conservationists are now beginning to realize that the strategy of locking up biodiversity in small parks, while ignoring wider social and political realities, has been an ineffective strategy." (Colchester 1997:107). By realizing this, a connection between biodiversity loss and poverty was drawn (Browder 2002:750). One of the reasons for this is that resettlement of indigenous people has hardly been successful neither for the people nor for the environment and biodiversity of the parks (Schmidt-Soltau 2004:530-1,543-6).

During the 1980s and 1990s an alternative approach to biodiversity conservation emerged and has become the most popular and implemented practice since. This paradigm is focusing on Integrated Conservation and Development Projects (ICDPs) and goes under the terms of "best practice" for biodiversity conservation. Instead of taking only the preservation of biodiversity into consideration, this approach also pays attention to the welfare of indigenous people living within the protected area and its surroundings. This is seen as the key issue for reliving the stress imposed on natural resources through development of local societies (McShane and Wells 2004:3). ICDP is a broad term, used for over two decades now. It describes a wide range of theories which are the base for projects taking both biodiversity and development into account at different levels (Browder 2002:751; McShane and Wells 2004:3).

With ICDPs the conflict between conservation and development should, in theory, be a problem of the past, unfortunately this does not seem to be the case (McShane and Wells 2004:4; McCabe

2004:61). According to McShane and Wells (2004:4) the ICDPs have only showed disappointing results and examples of successful projects, where biodiversity are being protected and the indigenous development needs has been reached, are hard to find. Already in the beginning of the 1990s researchers from both the ecological and social 'camp' raised questions about the contribution of ICDPs to biodiversity conservation, however, this did not stop the actual implementation of the strategy. In addition, a discussion about whether biodiversity or human welfare is most important has emerged (Brandon 2005:221; McShane and Wells 2004:4). The critique on ICDPs has spread and now also people form the implementing organisations have begun to question whether sustainable development can be compatible with biodiversity conservation in practice (Browder 2002:750; McShane and Wells 2004:4).

One of the places where a project based on the principles of ICDP is facing problems is in the Ngorongoro Conservation Area (NCA) in Tanzania. NCA is the oldest example of an area with a multiple land use strategy implemented with the goal of conserving nature and the same time 'safeguard and promote' the interests of the local inhabitants, the Maasai. "The multiple land use philosophy in the area is to maintain the peaceful co-existence of human and wildlife in a natural and traditional setting" as it is phrased by the NCA authority (NCAA). In 1985 The Tanzanian government lunched the Ngorongoro Development and Conservation Project, an ICDP, as the strategy for maintaining the NCA (UNEP). Despite many years of experience as a multiple land use area, NCA is still facing a number of problems – problems which are related both to conservation and to the development and interests of the pastoral Maasai population (UNESCO 2007).

ICDPs can be said to be developed relatively resent, thus lessons learnt from failures and successes are limited (McCabe 2004:61). The disappointing results of ICDPs have raised question as for the reasons of its failure. Is it not possible *both* to maintain biodiversity and to allow sustainable development? Is the theory inadequate? With this lack of success, one might ask if what is needed is a new theoretic point of departure. If the problems that ICDPs are facing in practise are grounded in weaknesses of the theory, then obviously the theory needs to be changed or adjusted in order to solve the problems. The next step for researchers could therefore be to develop a theory that can give solutions to the problems met by the ICDPs. This is, however, not within the scope of this project, but for researchers to work out new theory, lessons learnt from ICDPs are required in order to locate the 'missing links'. Therefore we ask:

What are the conservation and development related conflicts of NCA and to what extend can they help us to identify possible weaknesses within the theory of ICDP?

As the research question shows, we have chosen to focus on problems at a specific place in the world, NCA in Tanzania. We have taken this decision on the background of the impossibility of making generalisations about problems that would fit all ICDPs in the world. ICDP is a fluid concept which has shown to be successful in some places while failing in others (cf. Introduction). The context of a project will always differ and always affect its outcome.

When we ask of 'potential weaknesses' in the theory of ICDP we assume that there are some problems within the theory of ICDP. This assumption has developed while reading critique raised by some researchers which aim their arrows towards the theoretical background of projects, and question the validity of the assumptions behind ICDPs. Therefore we take their claim and by researching the problems facing the ICDP in practice, we hope to be able to either verify or falsify it.

2. Method

The purpose of this chapter is to define the analytical methodology and thereby explain how the project is going to discuss and analyse our research question. First we will explain where this project is placed within the field of theory of science and what consequences this has for the research method applied in the analytical part of the project. The limitations of the data used will also be discussed.

2.1 Point of departure – theory of science

The perspectives behind different approaches of conserving nature are important to understand when conflicts surrounding the theoretical discussion and the implementation of strategies are studied. Different stakeholders as researchers, politicians, environmentalists and local people give different meaning to nature and to the value of biodiversity, therefore diverse views are contradicting in different ways. As mentioned in the introduction, the theory behind ICDPs is an attempt to overcome problems experienced in the field as product of such contradictions. The theory is trying to involve both society and the bio-physical world - such a tradition can be placed within the scientific field of geography (Hansen and Simonsen 2004:49). But, the thought that people and their surrounding environment should be studied as interrelated, rather than only the one influencing the other, is relatively new (Hansen and Simonsen 2004:161-2). In the following, we will explain where the present project is placed with relation to theory of science and the understanding of society and nature as interrelated.

2.1.1. Nature view

Different nature views have through time been dominating, affecting the and, affected by scientific understandings. Before the 1960s the dominating nature view was dualistic in the sense that nature was seen as a part of reality, but as separated from culture (Hansen and Simonsen 2004:157-8). This nature view was dominant until the 1960s despite changes within the discipline. Both nature- and human geographers were at this time seeing their fields as closed systems due to the logical positivist scientific ideal prevailing at this time. The relation to the nature was from the side of human geographers seen as something of secondary importance, while the nature geographies

looked at human utilization of nature as irrelevant (Hansen and Simonsen 2004:158). From the 1960s alternative views of nature have emerged looking at society and nature in different ways (Hansen and Simonsen 2004:159-60).

In the 1980s a variety of critiques of the earlier dualistic nature view emerged. The common view to these critiques was that they now viewed 'nature' as nature and culture interwoven and thereby as interrelated. "...human being is a part of nature and at the same time nature is a part of her/him. Thereby it is problematical to advocate a dualism where human being and nature are seen as autonomous entities." (Lidskog 1998:19). The society, from this point of view, is seen as both embedded within nature and at the same time as something changing nature. Lidskog (1998:29-30) argues that "... Our understanding and knowledge of environmental problems cannot be grounded in something that stands implacably outside language and history." Thereby the nature gets a cultural history and can be seen as a social construction which leads to the ontological view that nature and society cannot be separated (Hansen and Simonsen 161-2). According to Lidskog (1998:30) all knowledge is a product of a social context, which is why different social groups have different interests in and understandings of nature: "[I]t is not enough to state that environment matters, what is crucial is which and whose environment matters and what power relations are embedded in these particular discourses of environment." (Lidskog 1998:30). Still Lidskog (1998:20,29), sees it as necessary to make a division between 'nature as materiality' and 'nature as mechanisms.' To solely look at nature as a social construction, will be the same as denying the materiality of nature: "[T]he material surroundings (including physical nature) are constant elements in the social construction of reality." (Lidskog 1998:30). Though, according to Lidskog (1998:31) nature are not only material, it is also structures, processes and mechanisms: "Nature is here to be regarded as an extra-discursive reality which cannot be reduced to a social construction (...). Instead nature in this sense imposes limits upon what it is possible for human beings to be and do." The division of nature as mechanical and material means that we both need to examine environmental problems from a nature scientific point and form a social and societal point if we want to understand why and how ecological problems emerge and in what way they can be solved (Hansen and Simonsen 2004:162-3; Lidskog 1998:24,30).

The perspective of our project is lying within the comprehension, presented by Lidskog, of nature and society as interrelated. We relate ourselves to the conception claiming that human perceptions

and interpretations of nature need to be understood in order to comprehend the conflicts related to nature conservation. As Lidskog, we believe that the meaning given to, and the interpretation of nature, can be seen as a social construction. The reality, can to some extend, therefore be seen as a 'product' of the background for human perceiving of the world. This background is formed, among other things, by culture and personal experiences. Due to differences in societies, communities and peoples' background, people can interpret the same natural phenomenon very differently. "Nature is social constructed in the sense that it is shaped as powerfully by the human imagination as by any physical manipulation. Our relationships with nature are unavoidably filtered through the categories and conventions of human representation." (Whatmore 2005:14). Therefore peoples' representations of nature need to be understood on the basic of their perspective, and not from the point of a universal truth. The relationship between 'real' and imagined can not be distinguished as our experiences is always mediated (Whatmore 2005:11-3). The conflicts surrounding the ICDPs can therefore be understood as different interpretations and representations of the issue.

In spite of our understanding of nature as, to some degree, a social construction, we do not underestimate the existence or importance of nature as 'material' and 'mechanical'. The physical reality is the underlying reason for the relevance of this project. Without conflicting interests in the physical world, there would not be any reason for the theory of ICDP, trying to overcome such conflicts. The physical reality is thereby important, but it is on the basis of the social construction that we react.

2.1.2. Interpretation - inspired by philosophical hermeneutic

Our nature view as nature and culture interwoven influence and has certain consequences for our research method. To understand the conflict surrounding the ICDPs, we see it as necessary to examine the underlying perceptions and understandings of arguments and reactions. We can therefore say that we are somewhat inspired by the philosophical hermeneutic of Hans Georg Gadamer (1900-2002). The main thesis of this approach is that people constantly interpret their world and ascribe meaning to it (Højbjerg 2005:320). Therefore a scientist, and that mean us in the case of this project, has to interpret the interpretation of others when they want to gain insight to different understandings. To do so, it is necessary to understand the frame in which these meanings are interpreted, to understand the context which the discussion is taking place in. As every human being makes individual interpretations, the preconception of the researcher cannot be overlooked as

the researcher her- or himself also are interpreters of the world. Therefore it is not possible for us to make objective research (Højbjerg 2005:313). The research in this project is thus based on our preconceptions. We are both grown up in a western society, we study at a western university, have both watched 'nature' programs about the 'wild' Africa but have never ourselves been to the continent. All this and much more have shaped how we are, how we interpret the world and nature. We can not overcome this bias. Through reading of other perspectives and views of nature we have widen our horizon, however, we will never be able to interpret or have the exact same understanding of nature as for example a elder Maasai who's livelihood depend directly on nature. We have though obtained new insights which provide us with a broader, nuanced view on nature – a view that cannot be placed in a 'box' as 'biocentric' or 'antropocentric'. By being aware of our preunderstandings, we can position ourselves and thereby try to interpret the interpretation of others.

2.1.3. Reliability and validity

When believing in humans to be interpreting beings, it has consequences for the reliability and the validity of this project. One of the consequences is that a text or a field can never be interpreted definitely (Højbjerg 2005:332). This entail, that we do not live up to the demand of reliability if this demand means getting identical results by conducting the same research. This project should therefore not be seen as the only answer to how development and conservation related conflicts can be understood in relation to the theory of ICDP. It should rather be seen as a possible explanation, placed within the context of the theoretical perspectives we use, the data and our individual interpretations. Despite this, we do not believe that every explanation is equally valid because of personal interpretation and context dependency. Validity depends on what the truth is. We are not of the perceptive that objectivity is possible as for example positivists does (Hansen and Simonsen 2004:18-25), but we do believe that the research process can be valid depending on the methods used in the data collection and in the use of theory. In the following part we will describe how we have sought to achieve a valid project through our choices of analysis strategy, and through our choice of theory and empirical data. Before we draw a conclusion in the final part of the project, we will discuss how we have lived up to our own expectations of validity and what implications this have on our conclusion.

2.2 Research strategy

The purpose of the research conducted in this project is to gain an understanding of why ICDP has obtained only few successes when implemented. This has been accomplished through use of theoretical literature studies and analysis of empirical texts. The following will elaborate this approach and the reflections we have faced.

2.2.1 Use of theory

ICDP is an unclear term given different meanings by different people. This has raised the question of which theoretical view we should present? By reading a wide range of interpretations of ICDP we have chosen to present a broad and general understanding, one that includes variety of positions under it. However, we have tried to nuance the theoretical picture by involving perceptions of ICDP from different sides of the scientific spectrum. By extracting what we understand as common characteristics of the theory, we also choose not to give the full nuanced picture of the wide range of theories in the field. However, strategies implemented in reality do hardly ever implement a theory in detail. In order to understand how NCA is combining development and conservation and what problems they are facing, we have found it necessary to have general theoretic 'tools' that can help us understanding a wide range of situations.

2.2.2. Use of secondary data

All of our empirical data, quantitative as well as qualitative, is secondary data. Due to time and budget limitations it has not been possible for us to extract our own data from the NCA. According to our hermeneutic inspired understanding, this is a limitation of our project that implicate in different ways. First, using secondary qualitative data makes it harder for us to interpret the meaning that was first given to a text, than if we had collected the data ourselves. Second, the secondary data affect the validity of our project. We are depending on others' research and thereby also on their degree of validity. This specifies high demand for a critical selection of data. Third, we experience that the data available to us cannot provide us with all the answers to questions that come up during the research process. By the use of secondary data we depended on information collected for other purposes than ours. This fact leaves us with some loose ends and must be considered an important limitation for our conclusion.

To limit the drawbacks of secondary qualitative data, we have chosen primarily to use peer reviewed articles and books. Evaluation reports, official reports and quantitative data are primarily gained through UNESCO, International Union for Conservation of Nature (IUCN), the Government of Tanzania, NCA authority (NCAA) and Pastoralists indigenous Non-governmental organisations Forums (PINGO Forum). Those are sources we have to trust even though we cannot fully uncover their bias or determine to what degree they work according to their own agenda. An advantage of using secondary, quantitative data is that it exists already and a wide range of material is available. It has provided us with contextual information about Tanzania and NCA that we could not have gained ourselves. For example information about size, economy ect.

2.2.3. Analysis Strategy

In order to answer our research question, we need to identify the conservation and development related conflicts of NCA. However, to identify the conflicts we first need to determine what problems NCA is facing. This will be done in chapter 3, Ngorongoro Case Study, where we are 'setting the scene' by describing the history as well as the present context. By examine evaluation reports and official documents and by analysing scientific case studies carried out in the Ngorongoro, the problems of NCA will be extracted. The problems identified, will lead us to the next step in answering the research question, to analyse if the problems can be seen as conflicts between conservation and development interests. This step will be taken in chapter 5, where we will also answer the second part of the research question, asking if the problems can be related to weaknesses within the theory of ICDP. It is the core of the conflicts we will analyse and find out if they are caused by possible weaknesses or missing link within the theory.

The approach we are using is mainly inductive (see Jennings 2005:27-35). The first step we take, by identifying the problems of NCA and analysing if they are related to conflicts between conservation interests and the interests of the Maasai, is inductive in the way that it originates from the empirical data. This is therefore an open-ended step because it is the empirical data that is leading the research, contrary to if we had tested a hypothesis. Though, we do not continue this inductive path. The next step we take is to apply the theory of ICDP on the problems we have identified. That step can be seen as a way of 'testing' a hypothesis and therefore as a more deductive approach. By asking if the conflicts can be linked back to weaknesses in the theory, we to some extend assume that the problems might have something to do with the theory. By testing the theory of ICDP we are

not trying to elaborate a new theoretical position as the next step in an inductive method would be. Our conclusion will therefore not offer a new theoretic direction with solutions to all possible problems in connection to ICDP – this step must be taken in another project. What the conclusion does provide us with is an illustration of possible theoretic weaknesses that affect the success of ICDP in the case of NCA. From our case study we can of course not generalise and claim that the weaknesses are influencing all ICDPs in the world the same way. Many other factors are playing an important role too. However, we still anticipate that since these conflicts are to some degree grounded in the theory, it is likely that other ICDPs face similar problems and conflicts.

2.2.4 A comment about biodiversity

Throughout the report we mention and discuss different aspects of biodiversity and biodiversity loss. The limited scope of this work and our focus on conflicts between conservation and rural development do not allow us to go into many details around the concept of biodiversity. We give few examples of biodiversity loss (i.e. the Black Rhino) within the Ngorongoro Conservation Area. These examples were chosen for illustrating a simplified picture of the various causes of biodiversity loss. Our main interest is in the dispute between conservation policies and these of development. Thus the way we deal with biodiversity is a simplified illustration of a complex issue.

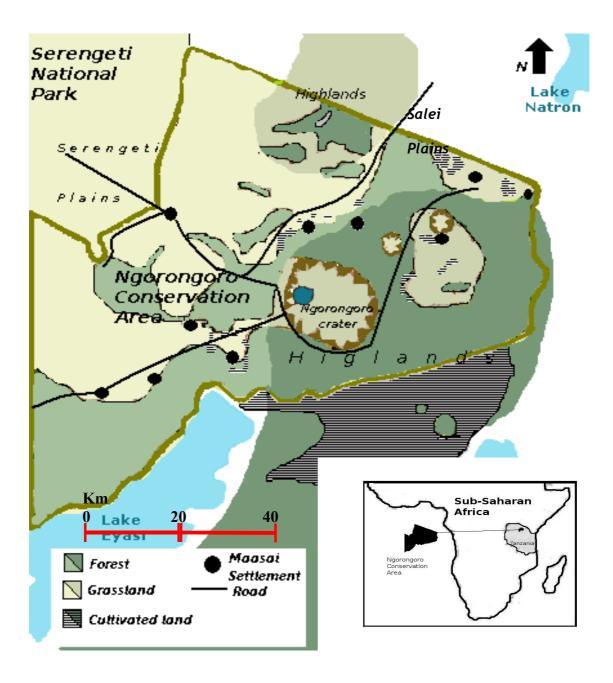
3. Ngorongoro case study

The Ngorongoro Conservation Area started as a Community Based Conservation project in the late 1950s, this makes it the first of its kind (Galvin et al. 2002:37). Even though the perception of human development and nature conservation have changed over the years this is also the earliest experiment in combining nature conservation with promoting human population living within the protected area. This made NCA the first prototype of ICDP. Other ICDPs started around 30 years later and at that period the NCA have also got its more modern ICDPish title as the Ngorongoro Conservation and Development Project. The NCA has almost 50 years of relatively successful activity in protecting wildlife behind it and it is a major tourist attraction. However not all sides are positive, the Maasai people living within the NCA claim for a long term depression in their economic and well being situation due to the restrictions on land use imposed by the NCA Authority. The Maasai blame the NCAA for underestimate their needs and prioritising nature conservation over them (Galvin et al. 2002:37). These unique long term experiences within the NCA and the interrelations between pastoralist people and nature conservation make it an interesting case study.

3.1 Description of the Ngorongoro Conservation Area

The NCA is located in the far north of Tanzania, south east to the Serengeti National Park. The total size of the NCA is 8300 km². The area is divided into two topographic cells, the highlands, which are made of several volcanic peaks of around 4000m' height, and the Salei and Serengeti Plains. The various land cells and climate zones create a diversity of habitats within the area of the NCA, these allow growth of variety of flora. The wildlife in the NCA includes large population ungulates as Zebras, Wildebeest, black rhinoceros, hippopotamus, eland and Grant's and Thomson's gazelles. Moreover the Ngorongoro crater has the densest lions, leopards and *African elephant* (UNEP). Precipitation's quantity is much higher in the highlands, with an annual rainfall of 800-1200 mm, than in the semiarid plains, with only 300-400 mm rain annually (McCabe 2002:66, UNEP). This difference in precipitation is the factor determining both wildlife and pastoralists movement patterns in the area. Both are dependent on water resources and grazing areas for survival during the dry season. Probably the most important wildlife migration through the NCA is this of the wildebeest returning south, from the Mara Reserve in Kenya, through the Salei Plains. This migration takes

place during the wet season, January to late April early May. Another important migration is of the Ngorongoro crater's wildebeest and zebra populations. About half of the wildebeest population and fifth of the Zebra population leave the crater heading towards the grass plains during the wet season (Estea et al. 2006:107; Potkanski 1994:56-63). The Maasai and their cattle's mobility patterns are more complex. These depend mainly on the wet-season location of the community, on the migration pattern of wildebeest and on the land that is left available for grazing (Potkanski 1994:56-63).



Map 3.1: Ngorongoro Conservation Area, a land use map. 19/05/2008, Sources: http://www.safarilands.org/maps/map_ngorongoro_np.html, NCAA and Boon et al. (2006:819)

3.2 The establishment of the NCA

The establishment of the Serengeti National Park, including the total areas of the present Serengeti National Park and of the NCA, took place in the 1940s. At that time pastoralist activity and cultivation, which are forbidden there today, were still allowed within the national parks (McCabe 2002:67). The NCA as it is today was first established more than a decade later in 1959, as a result of a dispute between the park's authorities and the Maasai over cultivation and the pastoral activity (Galvin 2002:37; McCabe 2002:67). The dispute resulted in the forced relocation of the Serengeti Maasai to the NCA area, and in the dividing of the Serengeti/Ngorongoro National Park into two: The Serengeti National Park, where truism and scientific research are the only human activities allowed, and the NCA as a multiple land use area inhabiting and promoting both human population, and wildlife conservation (Galvin 2002:37; McCabe 2002:69). The NCA was established with three main goals which were to "(a) conserve and develop the NCA's natural resources; (b) promote tourism; and (c) safeguard and promote the interests of the Maasai." (IUCN). The last of these might have been perceived in different ways by the Maasai and by the NCAA, this is discussed in depth later on (cf. 4.2.2 Conservation and development in post-colonial time) with relation to the general perception of nature conservation and indigenous people.

In 1984 a World Heritage Committee meeting was held in Buenos Aires. One of the items on the agenda was the continuing decline in the conservation status of NCA. With acceptance from the Tanzanian authorities, it was decided to inscribe NCA on the list of World Heritage in Danger (UNESCO 1984). The following the Ngorongoro Conservation and Development Project was launched by the Tanzanian Ministry of Natural Resources and Tourism and IUCN. The main objectives of the project were among others to "... formulate conservation and development policies to fulfil the needs of both local Maasai people and conservation priorities..." (UNEP). Though the area of NCA had been a multiple land use area since 1959 the initiative in 1985 was the first time development and conservation in earnest was put together into the NCA strategy. In 1989 as a result of improvement in the state of conservation and management the NCA was removed from the World Heritage in Danger list (UNESCO B). Today, according to UNESCO's Mission Report from 2007, the main threats to conservation in the NCA are (a) Increased human pastoral population; (b) immigration¹; (c) poaching; (d) spread of invasive species; (e) tourism pressure; (f) encroachment and cultivation (UNESCO 2007).

¹The population of illegal immigrants within the NCA is growing and was estimated to be around the 1725 in 2007

The Ngorongoro Conservation Area Authority (NCAA) is the managing body of the NCA, it has its own ten person board of directors and a conservationist who is responsible for the decision making around the Conservation Area. One of the members of this board is the Chairman of the Maasai Pastoral Council which should be representing the Maasai in the decision making concerning them (Charnley 2005:76; UNESCO 2007). The land tenure over the NCA is defined as governmental meaning that the overall responsibility of the area is in the hands of the Ministry of Natural Resources and Tourism (UNESCO 2007; UNESCO 1979).

Table 3.2 Important events in the history of NCA

1940	Establishment of the Serengeti National Park which includes the area of NCA.	
1959	The Serengeti National Park is divided into two, the Serengeti National Park and the	
	NCA as a multiple land use area.	
1974	Cultivation within the NCA is banned.	
1979	The NCA is declared by the UNESCO as a World Heritage.	
1984	NCA is given a status of World Heritage in Danger.	
1985	The establishment of the Ngorongoro Conservation and Development Project.	
1992	The ban on cultivation within the NCA is lifted.	
2002	The NCAA is acting towards gradual reinstating of the ban on cultivation ² .	

3.3 The Maasai people and their economy

The Maasai people have been probably living in the area known today as the NCA for more than 150 years. Archaeological excavations track back pastoralist human activity in the area starting about 2500 years ago (McCabe 2002:67). The population of the Maasai within the borders of the NCA was estimated to be around 16,800 people in 1978 just before the NCA got on the World Heritage list (UNESCO 1979). Today the Maasai population within the Conservation Area is estimated to be over 60,000 (UNESCO 2007), which is more than a three fold increase in 30 years. This is equal to about 3.6% annual population growth (Homewood et al. 2001:6). This growth rate

² The only indication to the reinstated ban on cultivation is in the 'Mission Report' (UNESCO 2007) and McCabe (2003:110) which are both unclear about the current status of this regulation. Despite the lack of other sources on that issue and the fact that it is not completely clear to us weather cultivation is already banned or if it is in its way to be banned, we handle it throughout the report as if the restriction on cultivation is already reinstated. There are, however, some indications of continuing illegal cultivation activity.

is relatively high compare to the total population growth rate in Tanzania in the years 1975-2005 which was 2.9% (UNDP). Further discussion of the reasons for this growth rate will be discussed in chapter 5 (Ngorongoro – From theory to practice)

The Maasai livelihoods have been based on pastoral activity for many years, complemented by some small scale agriculture and stock. The Maasai people are usually organized in a special social structure called *enkang*, which is formed out of three families or more who live together. During the dry season the Maasai are living in settlements which are used for a period of three to four years in a row and then moved away to a different place. The dry season's settlement is usually located near trees which are used for grazing by small stock during the dry season. However, during the wet season the Maasai are more mobile, living in temporary camps (McCabe 2002:67 Potkanski 1994:17). Despite the Maasai being mobile, a Maasai family is recognised as belong to, or as a resident of the area where their more permanent settlement is located. The pastoral land around the settlement is seen as a communal property managed by the *enkang* and the families of the *enkang* have a 'primary right' for using it. The open plains further away from the community are a public grazing area. However under stressing conditions (i.e. draughts) the land and its resources are becoming in principle a collective, public property. This system of ownership is managed by the elders in each locality (Potkanski 1994:16-26). 'The Maasai can graze anywhere they want within the Maasailand' is the common Maasai ideology.

The Maasai in the NCA have adaptive economy, as described by McCabe (2002; 2003) and Fratkin (2001), based not only on cattle growth but also upon small-stock and cultivation for grain for own consumption and for selling in the market of the neighbouring town Arusha. At the beginning of the NCA project, the Maasai were allowed to continue their pastoral, agricultural and household activities under following restrictions that were set by the authorities: No human settlements or cultivation were allowed in the Ngorongoro and Empakaai craters while pastoral activity was still allowed there (McCabe 2002:67). Later on, in 1974, cultivation within the NCA was prohibited altogether and pastoral activity was restricted in the craters and in the Forest Reserve in the southeast of the Ngorongoro crater (McCabe 2002:68-9; Potkanski 1994:67). In 1992 the ban of cultivation was lifted and small scale cultivation within the NCA was permitted. This resulted in increase in the Maasai's agricultural activity and in their dependency upon it. The increase in cultivated plots has alarmed conservationists which were worried about its impact on wildlife in the

area (McCabe 2002:73). Since the beginning of the 1990s, the Maasai have started to adopt monetary economy, this is a result of the restrictions mentioned above as well as their own will to develop, to get education and to diversify their nutrition (McCabe 2003:105).

3.4 The problems in the NCA

Here we briefly summarise the problems the NCA is facing at the present. These problems can be extract from the case description and include both problems seen from a conservationist point of view as well as from the Maasai point of view.

The most obvious problems the NCA is facing to its nature are the six threats presented earlier by the UNESCO Mission report. The Maasai in the NCA are facing economic problems due to the restriction on their land use (i.e. agriculture). Another aspect of these restrictions is the Maasai's right to their traditional land, namely the human right aspect which, some claim, is not respected (Olenasha 2006:157).

Next we will continue with presenting the theoretical background of ICDPs. This will allow us to analyse the problems above and to characterise if and how they are related to the theory of ICDPs.

4. Theory

4.1 Biodiversity loss – why is it a problem?

"It is simple truism that humans cannot exist without nature. We are all part of it and will forever depend on the natural environment for food, water, air and innumerable goods. Plant Earth's biosphere is essential to the survival of humanity, not the other way round." (Dr. Claude Martin Director General of the WWF in McShane and Wells 2004:vii)

Biodiversity is referring to the amount of species and to the specific weigh of a specie relative to others in an ecosystem (Krebs 2001:456). There are varieties of reasons which motivate different acts for protection of biodiversity. One is the protection of some species that of particular value to humans as they are source of food, medication or of scenic value. Other might be motivated by protecting the integrity of ecosystems. This is because healthy ecosystems are contributing to many aspects of human well-being by providing materials, food and securing water resources. And it is the diversity of species within an ecosystem which makes it less vulnerable to environmental changes (MEA 2005:2).

There are various threats to the diversity of different ecosystems, the most common of them are: overkill, when a specific specie is being hunted or fished usually for its economic value, until it is degraded to a critical mass beyond it the population cannot recover easily. This is a common problem of large organisms (i.e. the Black Rhino) and fisheries. Habitat destruction or fragmentation, usually due to human activities which totally destroy habitats or split them up into too small pieces, on which large populations cannot sustain themselves. Another threat is the impact of invasive fauna and flora species that might alter the habitat. Invasive plant species, for example, might out compete local plants and by that change the physical environment, sometimes making it impossible to live in for example due to lack of food or hiding place. These three causes for biodiversity loss might in the 'worse case scenario' cause a cascade effect where a loss of one specie leads to a loss of other species which dependent on it for their survival (Krebs 2001:360-73).

In the present world the influence of humanity on nature is larger than ever before, we have the technology to control, alter and manage many aspects in our natural environment (WWF 2006).

One of the outcomes of these capabilities is an all time record of natural resources extraction. According to the 'Living Planet report 2006' by the WWF, the extraction of natural resources by mankind, also called Ecological Footprint, has passed the world's biosphere productivity in the beginning of the 1980s and it is currently estimated to be 25% higher than Earth's productivity. This means that our biosphere needs 15 month to produce the amount of food and natural resources that we consume in a year (WWF 2006:2, 14). The same report states that ecosystems and biodiversity are suffering stress because of these excessive removals of resources from nature. As it is for our ecological footprint, also the rate of biodiversity loss is on all time record in human history (WWF 2006:2).

4.2 The development of conservation theories

Human development and biodiversity conservation, and the negative influence of the first on the other, serve as a leading motive in biodiversity conservation projects' strategies and implementations. Meaning that contemporary biodiversity conservation in developing countries cannot be separated from the need to develop and vice versa. Thus the challenge is – how to preserve biodiversity and sustain or increase socio-economic development at the same time, and within the same space? The conflicts and the related theories and solutions are mentioned in much of the modern literature concerning with biodiversity conservation, human development and the relations between them (Chatty and Colchester 2002:1; McShane and Wells 2004:vii; O'Riodan 2002:3).

The birth of the idea of nature conservation happen long before the 1980s or the 1970s, when the global foot print have caught up with the global productivity. Chatty and Colchester (2002:3-5) track the roots of contemporary nature conservation practices back to the second half of the 19th century when the first national parks and protected forests was established in the US and England. Many years have passed since then until the development of the present holistic understanding that human and nature should be seen as an integrated system. This evolution had affinity to developments within related scientific and social fields as we will show next.

4.2.1 Nature conservation – the beginning

At the beginning of nature preservation practice, since the 1870s, preserving biodiversity was not

the main interest behind the establishment of protected areas. It was primarily motivated by the need to manage and control natural resources (water and forests), and the will to preserve 'wilderness' and unique sceneries. The Yellowstone National Park was the first national park to be established, it was set up to prevent the destruction of the unusual hot springs and gazers scenery from exploitation. The control over the area was handed over to the army which carried out an evacuation of all indigenous people from inside the borders of the park (Ghimire and Pimbert 1997:6-7).

At the same period, the main interests in setting up the first protected areas in England and France and in their colonies were raised by foresters who promoted the protection of water resources and the protection of forests, due to their scenic value their help in creating a healthy nation, so they claimed (Chatty and Colchester 2002:3; Colchester 1997:99; Ghimire and Pimbert 1997:7).

The argument goes that these conservation philosophies have had great impact from the colonialist period in politics and to the positivist period in science, prevailing at the time. These can be seen through the following examples. First, the ideas leading to the mode of conservation – any human actions of extracting natural resources damage the nature, therefore it should be controlled by the central government and not by local people. Namely, the idea of indigenous people living within the reservation and exploiting natural resources in it was not acceptable. One of the leaders of this view was Bernard Grzimek who acted for the establishment of the Sarangenti Plains Nature Reservation in East Africa and for the exclusion of the local Maasai and their cattle herds (Colchester 1997:99). However, even though resettlement was the dominating strategy of the time, alternatives were tried. In South Africa, the 'natives' were incorporated into the reservation as a tourist attraction. They were allowed to stay within the borders of the reservation as long as they kept living their traditional life. This conservation philosophy is today called 'enforced primitivism' because it is preventing development from local people (Chatty and Colchester 2002:5; Colchester 1997:106).

Second, the positivist view of science, prevailing at the time, conceived the nature sciences as the only science existing while other disciplines like history or geography that have stronger relation to society and culture were hardly seen as scientific (Hansen and Simonsen 2004:24). Chatty and Colchester (2002:7) state that "... 'scientific' management of these areas [nature reservations] was assumed to require the removal of the indigenous people...". This citation summarises the nature

conservation view at the time, the first conservationists also prioritizing nature and science over local culture and society. A view that probably had some interrelations with the scientific perspective as explained by Hansen and Simonsen.

Third, the way the reservations strategy was implemented was top-down controlled by the colonialist powers. There was a difference between local communities in Europe which their rights for their land were respected and the indigenous people in Africa, Asia or Latin America. In these places, in the colonies, the local peoples' rights for the land they were living on were not respected, and they were evacuated by army or colonial police (Chatty and Colchester 2002:3-5, Colchester 1997: 99-101). This line of action might have roots in the cultural differences between the colonizing and the colonized. The colonialist point of view placed the indigenous people's culture which was seen as 'wild', 'primitive' and based on feelings, lower than to the 'advanced' European culture based on logic of the mind (Colchester 1997:100-7). Thus, indigenous people were looked down at also within the field of nature conservation.

The last relation to the colonialist time is the way these ideas were spread around the world. They were first introduced in the homelands of the colonialist powers at the time, England and France, and from there they were spread by European conservationists to the colonies (Adams and Mulligan 2003:2; Chatty and Colchester 2002:3-5).

4.2.2 Conservation and development in post-colonial time

A new era within conservation theories emerged at the late 1940s, early 1950s. This development can be related to chief shifts within global politic and within science. At that time most of the former British and French colonies got their independence and was established as national states (Colchester 2002:7). Adams and Mulligan (2003:5) and Wøien (2003:82) claim that in many cases the end of the direct colonialism did not bring a direct shift in the conservation practice, and the independent states have in many cases adopted the European view for nature protection. Chatty and Colchester (2002:5) argue that in this stage the romantic view of indigenous communities as 'harmless primitive people who live in the nature' gave place to a more unsentimental idea that these communities are holding back the modernization of society. The establishment of the NCA might be related to this shift in nature views and to the coming end of the British Mandate over Tanzania in 1961. In the colonialist view indigenous people were considered as part of nature, wild and

primitive and therefore they were allowed in some cases to continue their activity within the national parks. The postcolonial view of nature did not accept this and instead saw people as harming nature and therefore they had to be removed out of the national parks. As in the case of the Serengeti National Park where the Maasai were allowed to continue their pastoral activity until the dispute about this activity in 1959, led to the establishment of the NCA.

Within science, the predominant philosophy at the time is the logic positivism. Cultural and social disciplines were accepted as science as long as methods from 'nature science' were used in research. According to this view the researcher can be objective, and social and cultural process can be researched as an isolated phenomenon without relation to nature and vice versa (Chatty and Colchester 2002:7-9; Hansen and Simonsen 2004: 28-30,158). Despite the shift in the science and nature view, conservation practices seem not to have change too much.

An example to that can be the establishment of the Amboseli National Park in Kenya in the early 1970s. The park was created on lands previously used by the local Maasai for their cattle as a grazing land and for accessing water resources. This has limited the Maasai traditional pastoral activity to other areas out side of the park. In this case the lack of willingness to consider the needs of the Maasai from the parks authority's side have resulted in disputes and continuous violation of the park regulations by the Maasai (entering the park for grazing and accessing water resources). At the peek of these disputes the Maasai were killing wildlife in the park to show their resentment (Colchester 1997:116-7)

A different example from that part of the world which may be considered to sign a shift in the view of nature is the NCA. However in that context it is interesting to mention the third goal of the NCAA when establishing the NCA, namely to "...safeguard and promote the interests of the Maasai." (UNEP). The lack of available documentation from that time does not allow us to determine the exact meaning of this goal. The prevalent nature view at this period, as presented above, lead us to the understanding that 'the promotion of the interests of the Maasai' might have been viewed as a 'top-down enforced' kind of development by the authority.

Summarizing the above, we can see that the changes in conservation practices and policies are different from place to place and change over time. However we argue that a general pattern exists

in these changes. Moreover we claim that the differences between the colonial and post-colonial, and the classic positivism and logic positivism, were not felt by indigenous people. Despite the change in regimes, in scientific understandings, they were still suffering forced relocation and exclusion from their land, they were still not asked for their priorities and were still seen as primitive. Under the surface the reasons might have changed but on top of the surface things were still the same (Adams and Mulligan 2003:2). This have changed with the introduction of new concepts like empowerment, participation, community based conservation, sustainable development and integrated conservation development projects (ICDPs) in the 1980s.

4.2.3 A new discourse – the shift away from the 'classic' conservationist approach

The upcoming of the theory behind ICDP can be seen in relation to different events and shifts taking their departure in the late 1970s. A discourse saying that more protected areas were needed for the protection of global biodiversity was spreading at this time. This resulted in the establishment of more protected areas came forward. As the figure below shows, the expansion of protected areas worldwide, especially in developing countries, has raised dramatically from the late 1970s (Brandon et al. 2005:221-2, McCabe 2002:63). In Tanzania for example 25 % of the land is classified as 'protected', which make Tanzania one of the countries with the largest percentage of protected areas (McCabe 2004:64). An effect on the increase in protected areas is that "... millions of people have been and will be negatively impacted through their loss of their land and restrictions on their livelihood activities." (McCabe 2002:63). Then, the question was- how the 'goal' to conserve biodiversity through protected areas, should be accomplished? A question that since has been subject for various discussions.

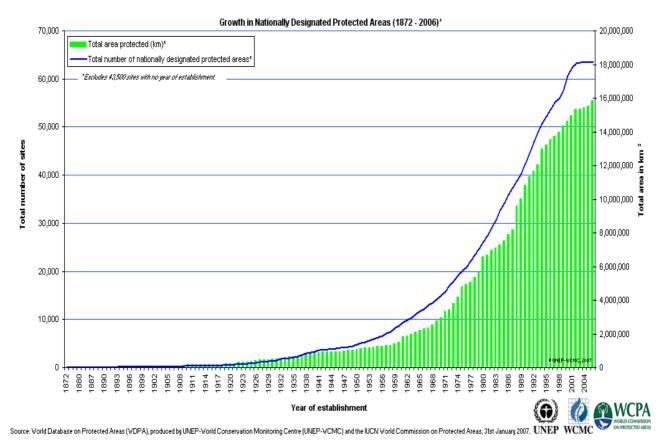


Figure 4.5: The development in the amount and area of nature conservation projects in the world. Source: http://sea.unep-wcmc.org/wdbpa/PA_growth_chart_2007.gif

In 1982 the World National Parks Congress, also called 'Parks for Development', was held in Bali. The focus of the congress was the role of protected areas in sustaining society (IUCN A). Here a global assembly of protected area specialists, managers and experts recommended that every country should turn 10 % of their land into protected areas (Brandon et al. 2005:222). What was maybe more important is that a shared understanding of the need to involve local communities living in and close to the areas, if the protected areas should last (Brandon et al. 2005:227). One of the conference's major concerns was that protected areas "... should be linked with sustainable development as nature conservation is not accomplished only by the setting aside of specially protected natural areas." (IUCN A). A decade later in 1992 the UN Conference on Environment and Development took place in Rio. Also here sustainable development and nature conservation were being linked. The delegates in Rio agreed that "... protected areas must be managed so that local communities, the nations involved, and the world community all benefit" (Brandon et al. 2005:228).

The essence of the two conferences marked a shift away form the earlier understanding of how and with what 'goal' protected areas should be established. Namely, from the earlier conservationist point of view in which social considerations were ignored and protection was gained through human exclusion, due to that time's nature view. Since the beginning of the 1980s a 'counter narrative' to the classical paradigm came forward (Adams and Hulme 2001:10) and from then, conservation was, to great extend, seen to be achieved through sustainable use of resources with the influenced stakeholders as potential beneficiaries. Different from before, the 'tasks' of protected areas are now more than preserving biodiversity, the human welfare has also to be taken into consideration.

This shift away from the 'classic' conservationist approach can be seen in relation to a change in the scientific perceptive of reality. According to Chatty and Colchester (2002:8) the understanding is shifting from the rational of 'one reality' (positivism) to a pluralistic way of viewing the world. A more holistic way of perceiving nature and surrounding societies is therefore being adopted. This can be seen in relation to the argument of sustainability which arose from the Brundtland Report (i.e. Our common future: The World Commission on Environment and Development) in 1987 and the UN Conference on Environment and Development in Rio in 1992 (Adams and Hulme 2001:15). It is difficult, if not impossible, to give a coherent definition of sustainability that is agreed on by all, however the underlying argument as formulated in the Brundtland Report is: "Humanity has the ability to make development sustainable to ensure that it meets of the present without compromising the ability of future generation to meet their own needs." (UN 1987:24). An understanding of the need to change the conservation strategy at the time became clear, and an understanding of the need for combining nature conservation with the development goals of meeting human needs came forward. According to McCabe (2002:63) "This issue cross-cuts disciplinary boundaries and is as important to social scientists as it is to natural scientists."

A shift in the dominant discourse of development theory had likewise an impact on the new 'counter narrative'. The used 'top-down' and 'technocratic' development approaches in the 1970s did not deliver the expected economic results and became highly criticized for it. As a reaction a new discourse gained acceptance, focusing on 'bottom-up' planning, decentralisation and participation. In the beginning of the 1990s this new participatory approach dominated aid donors and development planners (Adams and Hulme 2001:17). Adams and Hulme (2001:17) argue that

this had a spill-over effect on conservationists which also saw opportunities to gain access to development budgets by making their activities fit those funds.

At that period the view of nature was changing from the perception that saw humans and thereby local communities as a threat to ecological integrity (Browder 2002:752). Research within the field of biology showed that conservation goals often could not be accomplished within the boundaries of protected areas. In other words, researchers realised that biodiversity can not be locked up behind fences and therefore the surrounding areas must be involved: "The 'community' (...) are key stakeholders in conservation and must be recognized as such, even if they are remote from protected areas, because of the mobility of wildlife and the complex linkages between all elements of the biotic environment." (Adams and Hulme 2001:18). Thereby the division between human and nature fades out and the two are instead seen as supplemental.

4.3 What is ICDP?

Along with the new discourse integrating nature conservation with sustainable development, the theory of Integrated Conservation and Development (ICD) was elaborated. In the mid 1980s the World Bank began funding a programme named Integrated Conservation and Development projects where local people were incorporated into the projects and where their economical benefit was seen as an important part of the project (McCabe 2002:64). Since the mid 1990s this approach has become the most used conservation strategy supported by donors and implemented by environmental organisations (Browder 2002:751). With the ICDPs a different understanding of local communities in protected areas emerged and the discussion among researchers involved 'conservation with a human face' which meant participation, enforcement of human rights and social justice. Indigenous peoples rights and long-term conservation goals were therefore seen as synchronous (Chatty and Colchester 2002:8-9). Already in 1985 we see this change taking place in NCA with the launching of the Ngorongoro Conservation and Development project (cf. 'Ngorongoro case study'). The timing of this new project and the use of the concept 'priorities' for describing the goals of the project '...needs of both local Maasai people and conservation priorities..." (UNEP) suggest that a conceptual change was coupled to the change in name.

It is not possible to give a clear definition of the theory of ICDP. The term ICDP is used to describe a wide scope of different projects and programmes and there are therefore disagreements among

researchers about the goals and objectives of these projects. While some researchers see for example the aim as conserving natural resources for local people, other see it as a 'dual goal' of improving the management of natural resources and the life quality for the local people (Robinson and Redford 2004:14). Others again see the objective as, to "... reduce external threats to parks by promoting sustainable development in surrounding areas." (Terborgh 1999:164). According to Robinson and Redford (2004:14-5) the variations of goals and objectives can lead to confusion when examining ICDPs. Awareness to this is important because conservation and development goals are not always compatible and the outcome of a project is always influenced by the goals set to it (Robinson and Redford 2004:14-5).

Along with the different objectives and goals, obviously, a variety of diverse approaches follows. This creates a space which within a multiplicity of different conservation projects can take place. Examples of the one pole of such space can be the 'biocentric' project, mainly focusing on the conservation part and with only minor attend to local participation and development. The other pole would be the 'antropocentric' one, aimed specifically at the development of sustainable uses of natural resources where local people are given the tenure over the resources (Adams and Hulme 2001:14-5). The overall characteristics which are involved can be said to be the same, but the weighting and focusing of the different aspects is varying. Therefore a lot of different projects can be said to be ICDPs despite quite large differences both in objecting and approach.

4.4 Arguments for ICDP

The reason for the focus on multiple areas in the theory is the belief that without eliminating poverty, conservation of biodiversity will seldom succeed (Brandon et al. 2005:239; Chatty and Colchester 2002:10). But why is it necessary to consider local communities to gain success in biodiversity protection, as the new paradigm argues? According to Colchester (1997:108) the answer to this question would be that "without taking into account the needs, aspiration and rights of local peoples [this] may create ultimately insoluble social problems, threatening the long-term viability of the parks...". From this point of view, focusing on social issues is not only in the interests of social scientists and humanitarian organisations, natural scientists and environmentalists will 'benefit' as well. This is an understanding shared by many advocators (i.e. McCabe 2002:65) of the integration of conservation and development, as the following will show.

4.4.1 Participation of local communities

To outline the main points of ICDPs, the critique raised by social scientists against the previously dominating conservationist paradigm can be used. One of the critique points is of the external control of the management and the prohibiting resource extraction from the protected area (Ghimire and Pimbert 1997:35). Ghimire and Pimbert (1997:35) argue that in order to gain ecological, social and economic sustainability of a protected area, "... an approach which devolves more responsibility and decision-making power to local communities" is needed. Schmidt-Soltau (2003) claim that planners' failure to involve local communities in the decision-making process and their neglect of local stakeholders' livelihood results in negative consequences both for people and for biodiversity.

According to Ghimire and Pimbert (1997:37) a participatory process can provide knowledge about local peoples' interpretation of reality and understanding of their aspirations. Through dialogue, negotiations and conflict resolutions, an alternative planning and management agenda can be developed, involving local stakeholders as well. Such an approach can "... strengthen local peoples' initiatives to sustain their livelihoods and the environments on which they depend." (Ghimire and Pimbert 1997:37). From this perspective a participation process is necessary when resolving conflicts and reconciling conservation with local livelihoods (Ghimire and Pimbert 1997:37).

According to Chambers (2005:104), "Participation has no final meaning. It is not a rock. It is mobile and malleable, an amoeba, a sculptor's clay, a plasticine shaped as it passes from hand to hand." Furthermore Chambers argues that the term is used to describe many different processes which are varying in extend of locals participation (Chambers 2005:104). We will in this project not go deeper into a discussion of the definition of participation, but lean against Chambers 'broad' use of the term. The theory behind participation, according to Chambers (2005:156), does not only see the involvement of earlier excluded groups as important, it also incorporates the behaviour and attitude from researchers, scientists and development workers as of tremendous importance. What Chambers is 'promoting' is a change in 'professionalism' and participation approaches. It therefore differs from the earlier 'top-down' methods where planners were controlling from the 'outside'. However participation is not easily implemented and it is not an approach fancied by all. A critique of participation- and the bottom-up approach will follow later on (c.f. 4.5 ICDP – The critique, and

4.6 The pros and cons of ICDP).

The Mission Statement of NCAA states: "The NCAA will cooperate with NCA indigenous residents to professionally conserve the natural and historical resources..." (NCAA). The Statement also pronounce that in the strive for maintaining the status as a World Heritage Site, a partnership with local, regional and international stakeholders must be developed (NCAA). By this we can infer that participation of local stakeholders is a part of the strategy of NCAA, though, to what extend and how the process of participation is implemented is not clear form the data available to us. As mentioned earlier, one of the ways of involving the Maasai is through the membership of the president of the Pastoral Council in the NCAA's board. The UNESCO Mission Report 2007 is also indicating that the Maasai people are involved in the ICDP in other ways, but still it is unclear precisely how. First the Mission Report states that "The objective of management is to ensure effective involvement and engagement of the Maasai community with the Authority. (UNESCO 2007). Furthermore UNESCO recommends that problems should be solved "... in close consultation with the Maasai people and the Pastoral Council." (UNESCO 2007).

4.4.2 Indigenous peoples' rights for land tenure – a complicated issue

Another argument for ICDP is the protection of indigenous peoples rights, for example their right for land. According to the International Labour Organisation's (ILO) Convention 169 "[the] rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy shall be recognised. In addition, measures shall be taken in appropriate cases to safeguard the right of the peoples concerned to use lands not exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities. Particular attention shall be paid to the situation of nomadic peoples and shifting cultivators in this respect." (ILO). From this paragraph it can be derived that the use of forced resettlement of local communities contradicts with the ILO convention. Despite the change in paradigm toward 'conservation with a human face', forced resettlements of local communities are still a used strategy, especially in Africa (Schmidt-Soltau 2003:525; Colchester 1997:103). Colchester also states that conservationists have a long way to go before a respect of indigenous rights is incorporated into the conservation programmes. He further argues that one of the most important sections in the Convention 169 is the recognition of collective rights over traditional land (Colchester 1997:103). What is raised here is the question of land tenure. In the case of NCA we can see that the government and the Maasai are

looking of land tenure very differently (cf. 'Ngorongoro Case Study'). The Maasai have their own perception of land tenure and property rights grounded in a cultural notion of that 'all pastures belong to all Maasai' (Potkanski 1994:16-7). This 'informal' structure of ownership, based on ideological principle of land as a collective property, differ from the 'dominating' interpretation of ownership based on individual property right. The World Bank, for example, presumes that individual property right is in favour both for the environment and for the development. This is based on the belief that individual rights give the best utilization of resources (Wøien 2003:85).

The Oxford Dictionary defines land tenure as the legal right to use a piece of land. Discussing land tenure is though highly complicated in connection to nature conservation. When there are contradictions between indigenous peoples' land-use and the protection of biodiversity, what is then most important? Is it conserving nature or respect the legal right for land tenure, as pronounced by ILO? And, who should decide it? The 'classical' conservationists approach chose to prioritise nature before human rights, a prioritise still suggested by some, as we will show when we discuss the critique of ICDPs. With the emergence of ICDPs, advocators did not look at this question as an 'either – or' question. The sociologists Cernea and Schmidt-Soltau (2006) argue that "... the basic question (...) is not whether there should be an increase in biodiversity conservation, including a gradual increase in protected areas. There will be and there has to be. Nor is the question about whether people's livelihood and rights must be protected and enhanced: they have to be." (Cernea and Schmidt-Soltau 2006:1826). Cernea and Schmidt-Soltau believe that the two considerations are interconnected and that it is possible to create sustainability for both considerations (Cernea and Schmidt-Soltau 2006:1826). Therefore they strongly argue against the use of forced resettlements, or displacement as they call it.

Cernea and Schmidt-Soltau (2006:1810) promote a more varied definition of forced displacement which do not merely take the physical displacement of communities into account: "... in an economic and sociological sense displacement occurs (...) also when a particular development or conservation project introduces restricted access to cultivatable lands, fishing grounds and forests, even if the traditional users are not physically relocated but are administratively prohibited from using the natural resources." Since the establishment of NCA in 1959 forced physical displacement has not been used, but as we mentioned there have been and still are restrictions on the land use within NCA. This is a contradiction between the right for land tenure of the Maasai and the

protection of nature which is incorporated into the project. A wider discussion of this point will be presented later on in chapter 5.

4.4.3 Links between social and environmental problems

By ignoring indigenous peoples' legal right for their land and use the method of forced displacement in conservation projects will according to Cernea and Schmidt-Soltau (2006:1819) force the people into poverty. This will create a range of social risks which can turn out to have severe consequences for the biodiversity of the protected area (Schmidt-Soltau 2003:532; Cernea and Schmidt-Soltau 2006:1823). In the following we will take a closer look at aspects of the environmental risks which emerge.

One of the problems can be the illegal returning to the protected area due to the economic benefits which an exploitation of the resources of the area can provide. "The forest – whether protected or not – remains the main source for cash income..." as Schmidt-Soltau (2003:544) states. An over exploration can be caused by the fact that, if wildlife is no longer contributing to the welfare of the community, indigenous people will not be able to afford to preserve it (Schmidt-Soltau 2003:545). The reason for this change in the indigenous peoples resource use can be due to an often high population density outside the area, which causes a lack of available land (Cernea and Schmidt-Soltau 2006:1824). Schmidt-Soltau (2003:545) argue that in cases where local communities is involved in the conservation project instead of being displaced, the communities will see themselves as more 'effective rangers' and protect the area from 'threats' from the outside.

Another threat for the biodiversity can, according to Colchester (1997:107) and Schmidt-Soltau (2003:544), be the emergence of a hostile attitude towards the conservation authorities and thereby also towards the protected area: "Traditional balance between the locals and their environments are disrupted. The traditional social institutions and patterns of land management and tenure, which used to regulate access to resources, are undermined. Short-term problem-solving behaviours replace long-term planning." (Colshester 1997:106). Short-term problem-solving can for example be poaching, vandalism and land invasions (Schmidt-Soltau 2003:544, Colchester 1997:108).

To summarise this section (4.4), despite the variations of the theory of ICDP, we argue that it is possible to outline some shared characteristics of the theory based on the arguments presented in

this part of the chapter. Those can be the shared focus on both development and conservation (as the term itself imply) but also the focus on both human rights and participation. It could be argued that development is possible to implemented 'top-down' with no involvement of potential beneficiaries, but as described earlier, the paradigm behind the ICDP emanate from a discourse where decentralization and involvement is seen as important.

4.5 ICDP – The critique

As mentioned in the introduction, ICDPs have shown disappointing results and critique has been raised against the theory from different sides. In the following, critique from both a social and conservation point of view will be presented.

Redford's and Sterman's view of the human-nature relationship is different from the view shared by other scientists that advocate ICDP. Redford and Sterman (1993:252) argue that any human interference in ecosystems will cause a depletion of biodiversity. This nature-view can be said to be the same as the post-colonial one, but as we are going to show, the argument behind is substantiated very differently. One of the arguments is that "[e]ven in those cases where indigenous peoples overtly profess a concern for conserving biological diversity (...) they almost certainly do not ascribe the same meaning to this term as do biologists." (Redford and Sterman 1993:252). The biodiversity that conservationists are interested in conserving usually includes, according to Redford and Sterman, "...the full set of species, genetic variation within these species, the variety of ecosystems that contain the species, and the natural abundance in which these items occur." (Redford and Sterman 1993:252). By allowing low-level economic activities, which often is the case of ICDPs, the conservation of biodiversity as defined above is not possible. For indigenous people, on the other hand, the conservation of biodiversity means limiting the exploitation of natural resources, thus a much less nuanced and detailed view (Redford and Sterman 1993:253).

The fact that in the contemporary society indigenous people to a greater extend become members of the modern world (Redford and Sterman 1993:252; McCabe 2003:100), is an argument for the unrealistic combination of human activities with conservation. Expecting indigenous people to continue their traditional lives is neither reasonable nor fair. Redford and Sterman (1993:252) points out that indigenous people want to "... be able to choose what they will keep and what they will discard of their traditional ways of life." That they want to gain access to services that can improve

their quality of life, as for example material goods, is understandable, but traditional ways of resource use can often not support those growing needs and therefore traditions are changing. "To expect indigenous people to retain traditional, low-impact patterns of resource use is to deny them the right to grow and change in ways compatible with the rest of humanity." (Redford and Sterman 1993:252). Here Redford and Sterman, to some extend assert that the concept of ICDP is no different from the time of 'enforced primitivism' which was prevailing during colonialist period. They argue that if an ICDP is to be sustainable, indigenous people must conserve their low-impact, traditional livelihoods.

A comprehensive critique raised against the theory of ICDP comes from the biologist Terborgh (1999). First, in connection to the up come of ICDP, Terborgh claims (1999:164-5), that the concept only has gained such impact because of self-interests from the two 'sides' involved, the conservation organisations and the aid agencies. Because both the word 'conservation' and 'development' is incorporated into the title, according to Terborgh (1999:164-5), each side can make the objective of a project fit their own agenda. This can be supplemented by the argument from Adams and Hulme (2001:17), saying that the link between conservation and development provided access for conservationists to the 'development' budget.

Terborgh advocates the understanding that "... ICDPs represent little more than wishful thinking." (Terborgh 1999:165). Behind this statement lies the argument, that the objective of an ICDP often has little relevance to the protection of biodiversity. By strengthening the local economy of communities in the surroundings of protected areas, which is one of the declared goals of ICDP, the ICDP will attract newcomers. This will paradoxically increase the pressure on the protected area, a pressure that was meant to be eased not intensified. Another development initiative that can oppose the conservation of biodiversity by increasing the pressure of the area is the emphasis on intensification of land-use. This could for example be the providing of new crop varieties or better methods of household breeding. A recommendation from UNESCO (2007), to relive the pressure on the NCA, is among other things to introduce improved breeds of cattle. According to Terborgh (1999:166) such improvements will raise the rural standards of living and thereby also the population density – and with higher population density, higher pressure on the protected area. "Simply put, successful ICDPs are only likely to make population-related problems worse" as Terborgh puts it (Terborgh 1999:166).

Another critique point from Terborgh is that biodiversity cannot be protected through a bottom-up approach as in ICDP, a top-down approach is required instead (Terborgh 1999:170). This is due to different forces that are out of the reach of ICDPs to control. First the problem of land titling can be mentioned. When poor people cannot get access to land through legal land titling, an attitude of 'lawlessness' can emerge against the protected area. Landless immigrants may 'invade' the area, encroaching uncultivated land. According to Terborgh, land titling is beyond the scope of an often international assisted project as an ICDP (Terborgh 1999:166-8). In the NCA, the land tenure is described as 'governmental' this is in a way a combination of top-down control into the ICDP which might be reducing the named problem (the issue of immigration and encroachment in the NCA would be discussed later on in the report). The second critique raised by Terborg, ICDP is "... an inappropriate response to the external forces that threaten parks." (Terborgh 1999:168). The real threats to the protection of biodiversity are according to Terborgh (1999:168) not the local communities' small-scale agriculture or poaching, but instead large logging and mining companies. A typical ICDP is too weak to deal with these threats. Third, the assumption that the destiny of a protected area is in the hands of local people is misunderstood. ICDP theory overlooks the powerful force of political decisions taken by central governments. Such decisions could for example be road construction, availability of rural credit and tax incentives. Decisions that all affect the life of the rural population (Terborgh 1999:169).

What we can infer form both the critique of Redford and Sterman and from Terborgh is that they are questioning the 'hypotheses' of ICDP, saying that development of local communities will automatically lead to a change in resource use. In other words, they question the assumption that development and nature protection can or should be interlinked. By doing this, we are back to a discussion involving the different ways of looking at humans and nature.

The critique above does not only show some weak sides of ICDP, it also shows that individual researchers' take different points of view in criticising ICDPs. Redford and Sterman for example choose to focus on rural population's development as well as on nature conservation. Terborgh, on the other hand, looks on ICDPs from a conservation standpoint (1999:166) as can also be seen in the following example: "Instead of trying to promote economic growth around parks, it would be better to discourage people from settling in or near buffer zones, perhaps by persuading

governments not to build roads in these areas." (Terborgh 1999:169). By this suggestion Terborgh is ignoring the fact that people might already live within the surroundings of a protected area. As mentioned, those people might have, according to ILO Convention 169, the right to their traditional land, a right that often is overlooked according to Colchester (1997:103). Terborgh's suggestion could therefore seem like an attempt to practice what is called 'enforced primitivism' and 'fortress conservation' or as Redford and Sterman state to deny indigenous people the "... right to grow and change in ways compatible with the rest of humanity." (Redford and Sterman 1993:252).

4.6 The pros and cons of ICDP

The theory behind ICDP is, as presented above, a complex one. Problematic issues within the theory, which are pointed out, will always depend on the perspective of the observer. Thus what may be seen as a strength for an anthropologist may be interpret as a weakness by biologists. What the pros and cons of ICDP theory has made clear is, that the way one perceive nature is crucial along with the objectives one might have in mind. The following will, on this background, not present a clear divided list of pros and cons, but instead contain a discussion about these points.

The complexity of the theory can both be interpreted an advantage and a limitation. It is a weakness in the way that the concept behind ICDP can be said to be much diffused and therefore easily create confusion about the goals of a project, as argued by Robinson and Redford (2004:14). On the other hand, the fact that ICDP is not more clearly defined makes the concept flexible and thereby easier to adjust to a given context. The 'on-size-fits-all' model used by the 'classic' conservationists has not shown the expected results, and a more context dependent strategy is the alternative provided by ICDPs.

A participation-process, as Terborgh (1999:168) says, rely 100 percent of voluntary involvement. Due to different interpretations by involved 'actors' and thereby unpredictable understandings of a given situation, it is not possible to predict the precise outcome of a project. This can both be seen as a strength and disadvantage depending on the perspective. The concept of participation opens up new possibilities but at the same time it closes doors. Participation gives the possibility to engage local communities in the conservation process as argued earlier. On the other hand, bottom-up processes also cut of the possibility of making 'top-down' decisions which, Terborgh thinks, are necessary: "There is no substitute for enforcement. Without it, all is lost." (Terborgh 1999:170).

Summarising the discussion above, it seems impossible at the theoretic level to live up to all expectations. Especially when these are raised both by social advocators and by nature promoters – expectations that often contradict. However, this discussion has only been at a theoretical level and does therefore not answer the question about what conflicts an ICDP meet in the reality. Neither does it answer if such conflicts can be linked to weaknesses of the theory. To answer this we need to take our departure in the specific problems of NCA, as we will do in the following.

5. Ngorongoro - From theory to practice

In this part of the project we will look into the conflicts in the state of development and biodiversity conservation within the NCA. The purpose here is not to present a comprehensive evaluation of the NCA project, but to identify if and how these conflicts are related to weak links in the theory of ICDP. We take our point of departure in the problems we identify in chapter 3 (cf. 3.4 The problems in the NCA). The problems mainly with relation to conservation are: Increased human pastoral population; immigration; poaching; spread of invasive species; tourism pressure; encroachment and cultivation. Those of concern for development are the issues of economic problems of the Maasai, their human rights and the problem of land tenure. Since the problems are interrelated they cannot be discussed separately. To give a nuanced discussion we therefore need to analyse the problems with relation to each other.

5.1 Increasing in human pastoral population and incoming migration

UNESCO's Mission Report assumes that the current population exceed the carrying capacity of NCA (UNESCO 2007). This means that the increase in the population cause an increase in the stress imposed on the ecosystem and on the human society living within it. This is due to the fact that there are more people who necessarily need to share the same amount of available resources. The growing population pressure is therefore one of the reasons for changes in the Maasai' livelihoods (McCabe 2003:100). The increase in the populations within the NCA is an ongoing process which by exceeding the carrying capacity creates a problem for the biodiversity. What we see here is therefore a conflict of human activity and conservation. To find out if the problems with the population pressure can be seen in connection to ICDP theory, we first need to determine the causes of the population growth.

The sources available to us do not give an explanation to why the NCA has a higher population growth than the rest of Tanzania, therefore we try to interpret the reasons from indirect sources and possible theoretical explanations. According to Dietz et al. (2001:199-200) the population density of many pastoral regions in East Africa have increased because of natural growth rate, immigration and the mobility of other pastoralist groups from other areas. Earlier it was believed, that African pastoral societies had a lower rate of population growth than societies based on agriculture. This

was assumed to be due to a combination of high mortality and low fertility (Helland 2001:72-3). This understanding of African pastorals' population growth, does not describe what we see in NCA. The earlier assumption has, according to Helland (2001:72-3), however also been questioned, mainly because of a realisation of lack of knowledge about the demography of pastoral societies. If the assumption of low fertility is true, the population growth can be due to improved food security, better market access and better health services which can lower mortality rates (Helland 2001:72-3). The incoming migration in NCA might be related to the opportunities which opened in 1992 with the allowing of cultivation within NCA. Also the common Maasai ideology that 'The Maasai can graze anywhere they want within the Maasailand', can cause an increase in the pastoral population within the borders of NCA due to immigration.

Possible explanations for the population growth can also be found in the theory of ICDP. Terborgh (1999:165-6) states that by stimulating the local economy and improving rural standards of living the population will naturally grow. If we look at the economy of the population in the NCA, we do not get a clear picture whether there have been a positive or a negative economic development in resent years. If we use 'Tanzanian basic needs poverty line' as an indicator of the economic situation, the Ngorongoro District which include the NCA had in 2001 23% of its population under the poverty line. This is a relative low percentage as compared to the 39% and 36% of the total rural population and the total population in the country respectively (NBS 2001; R&AWG 2005). These data provide us with a picture of an economic situation of the Ngorongoro District which is better than that of the rest of the country. This could indicate that the NCAA in 2001, where the data were collected, was on the way to reach its goal of development. Using Terborgh's argument, this could explain the population growth.

On the other hand, if we take education as a measurement for development, the situation looks very different. The education level of the district is much lower than that of the general population in Tanzania; there are 72% of illiterate adults in the Ngorongoro District compared with 29% in the whole country (NBS 2001; R&AWG 2005). The lack of education within NCA can also attract immigrants. According to Charnley (2005:80) only few Maasai have job within the tourist sector due to lack of educational skills. Therefore the jobs must be occupied by others.

The empirical data used to explain the economic development and the educational level of NCA must however be considered carefully. First, as explained above the Ngorongoro District is not equivalent to the NCA. The area of the district is much larger and the total population is about 4 times as much as the population of the NCA. This means that from the data available to us, we cannot see how the wealth is distributed among the population. The Ngorongoro District has less people under the 'Tanzanian basic needs poverty line' than the Tanzanian average. However, the restrictions posed on the land use of NCA are limiting the Maasai's economic opportunities compared with the population outside NCA. This suggests that the district is not well of due to the Maasai of NCA. Secondly, the data presented was collected in the years 2000 and 2001, between this time and today, cultivation, which earlier gave the Maasai an economical relief (McCabe 2002:72), was banned again. This means that the economic situation of the Maasai population may have been worsened since and other sources suggest that this is the case. UNEP, for example, wrote in 2003 that "... the Maasai are growing poorer" due to a decline in livestock number (UNEP), and Charney wrote in 2005 that "Compared to their Maasai neighbours residing outside the NCA to the north, the NCA Maasai have higher malnutrition, smaller livestock holdings, and smaller crop acreage." (2005:80). Opposite the economic indicator above, those statements imply that there are other reasons for the population growth than an economic development success.

Both Terborgh (1999:166-7) and Schmidt-Soltau (2003:544-5) suggest that immigration might happen as a result of land scarcity outside a protected area. From the map (c.f. 3.1), we can see that south-east of NCA the area is highly cultivated, and the Serengeti National Park is stretching on the west. This might indicate that there is a shortage of available land left for pastoral or agricultural activity in the neighbouring area. Maasai and non-Maasai people might therefore immigrate to NCA where the land seems 'unoccupied'. In 2002 McCabe wrote that due to the legalisation of cultivation inside NCA in 1992, cultivators from outside moved into the area (McCabe 2002:73). There is reason to believe that this is an ongoing problem, as stated in the Mission Report (UNESCO 2007) encroachment and conservation is still considered a threat to the integrity of conservation. One of the ways NCAA is trying to lower the population pressure of NCA is by offering the immigrants a piece of land for cultivation outside NCA to those who agree to move out of the NCA voluntarily (UNESCO 2007). That initiative can also indicate that there is a shortage of available land outside NCA. The fact that 25% of the area of Tanzania is classified as 'protected', and that the country has a relatively high population growth rate may not leave much land free for

cultivation or pastoralism. Moreover, the political decision of offering immigrants a piece³ of land outside NCA, could possibly result in higher immigration and land encroachment within the NCA. Thus landless people who's aim is getting legal agricultural land from the authorities if they agree to move again. At April 2007 223 out of 1725 immigrants had chosen to move out of NCA willingly. Apparently it seems like only a low percentage of the immigrants have accepted the offer of agricultural land, however the Mission Report (UNESCO 2007) expect the resettlement to be finished in June 2008. The Mission Report notes that also pastorals have chosen to emigrate from the NCA.

As we can see, some of the potential reasons for the high population growth within NCA might be due to one of the wanted outcomes of the strategy of the ICDP of NCA, namely development of the local population. However, as the analysis above shows immigration is hardly due to the development of the Maasai population. It is more likely that the reason for immigration is partly due to the development of the area, providing more job opportunities. If, as we suggested above, the population growth is due to the scarcity of land outside NCA, the ICDP might have failed to involve the surrounding communities to the necessary extend. The Mission Report is however showing that the development of societies outside NCA also is on the agenda of NCAA by the providing of "... infrastructure outside of the conservation area (...), including the building of a school, dispensary, police station, and a road from the conservation area..." (UNESCO 2007). At first sight such initiatives does not seem to benefit the pastoral population to same degree as for example smallscale farmers. Though, McCabe (2003:106) notes that the Maasai is changing (cf. 3.3 The Maasai people and their economy) towards new livelihoods that require different needs fulfilled than earlier. Needs that include education, medical care and need for transportation. Especially education is according to McCabe (2003:106) regarded by the Maasai at all economic levels as very important. Following this, the way of developing societies outside NCA might also benefit the Maasai who decide to leave the NCA.

The discussion above gives us new insight in two points. First, development of local communities within an ICDP can enter a kind of 'catch 22'. Not succeeding in promoting development means a failure of the social part of the project, but succeeding in promoting the local community might attract newcomers which pose a threat to the conservation and to the existing population within the

³ The authorities offer these people who move willingly out of the NCA an agricultural land of around 8 hectare per. Individual (UNESCO 2007).

protected area. Secondly, it seems to us that one of the weak links in the theory is the lack of consideration of how to cope with population growth as a side effect of success.

5.2 Tourism – a two-sided threat?

Tourism is an important source for income both for Tanzania as a country and for NCAA. Tanzania gets approximately 30% of its national Gross Domestic Product (GDP) from tourism, and according to UNEP approximately 60% of the NCAAs budget is financed through visitor entrance fees (UNESCO 2007). The NCA receives more tourists than any other tourist attraction in Tanzania (Charnley 2005:76) and had 359,000 visitors in the year 2006. Both the amount of visitors and the revenue from them is rising from year to year (Fratkin and Mearns 2003:116; Olenasha 2006:158; UNESCO 2007). Figure 5.2 shows the dramatic development in tourism in NCA from 1962-2002. However it seems that the growth in tourism is not only positive when it comes to biodiversity conservation. An example from the NCA can be used to illustrate this point where tourism has negative consequences for nature conservation.

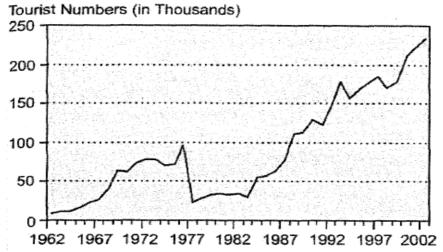


Fig. 5.2 Tourists Numbers in the NCA, by year, 1962-2002. Source: NCAA Tourist Office Statistic as presented in Charnley 2005:79

The Black Rhino has since 1986 been on the IUCN Red List of Threatened Species, currently under the category of 'critically endangered' (IUCN B). In Ngorongoro Crater the numbers of Black Rhinos has decreased over the years, in the 1960s the population was around 110 rhinos, this number was in 2003 reduced to a population of 16 (Mills et al. 2003:10). At the Ngorongoro Black Rhino Workshop in 2003, one of the greatest threats to the conservation of the Black Rhino was

identified as disturbance from humans (Mills et al. 2003:10). One of the ways human activities are disturbing is "... due to tourism pressures, which can delay cows returning to calves and agitate the inherently shy rhino." (Mills et al. 2003:10). The Mission Report from UNESCO 2007 also names the tourism pressure as a problem for nature conservation: "Current issues include (...) the proliferation of roads and tracks; vehicles moving off established roads, particularly to give tourists closer viewing opportunities for wildlife ..." (UNESCO 2007). Currently up to 300 vehicles per day are entering the crater (UNESCO 2007).

Another dimension can also be put into the tourism discussion, namely the implications of tourism on the Maasai. Even though tourism is financing the development part of the project, researchers (McCabe 2003; Charnley 2005) are questioning whether tourism has the potential to provide sustainable development for local communities. According to Charnley (2005:80) the Maasai believe that the "... NCAA is more interested in the welfare of wildlife than in their own welfare, putting conservation and tourism interests first...". This understanding is for example caused by the different kind of restrictions NCAA has put on the land use of the Maasai. Those restrictions can be seen as pro-conservation and in part driven by the desire to promote tourism (Charnley 2003:79). A Maasai elder quoted by Olenasha (2006:154) provides us with a deeper understanding of what the conflict between the Maasai and the NCAA is about:

"We conserve nature because we live in it, because it is our life, it is the life of our cattle. The conservation people do it because it gives them employment, because they get money from the white men [tourists]. For them, if the white man does not bring money, it is the end of the story. For us, even if the white man does not bring money we will still preserve the environment. We did it before the white men came. We do because it is our lives; it is the life of our ancestors and our unborn children."

As the quotation shows, the conflict is grounded in very different ways of looking at the need for conservation and thereby also the benefit from tourism. As the elder express it, if the Maasai could just be left alone and 'minding their own business', there would not be a need for a protected area in the first place, or for tourism to support it. The quotation thereby shows something about inherited unequal power-relations between the NCAA and the Maasai. Who have decided that there is a conservation problem in NCA? From the quotation of the Maasai elder, it seems that is not the

Maasai who have a need to protect Ngorongoro.

As we mention earlier, a large part of the budget of NCA comes from tourism revenues. 10 % of the annual budget of NCA is given to the Maasai Pastoral Council, which is spent on projects benefiting Maasai residents. However, the Pastoral Council is not satisfied with this share, and argues that the Council should receive 50% of the revenues instead (Charnley 2003:80). McCabe (2003:110), adds to that by questioning the whole concept of tourism as financial solution. To finance the livelihoods of local communities in this way will make them vulnerable to declining tourism. As for Ngorongoro the income from tourism is raising, however unexpected events as for example nature disasters or political changes can easily affect the tourism industry. McCabe (2003:110) gives the example of how the events in September 11, 2001 made tourism decline in East Africa. Figure 5.2 does not give us the picture that this event affected the visitor number of NCA. However, we can see a sharp decline in visitors in the years 1976-78. It is not clear what causes this decline, but an evaluation report of IUCN from 1984 leave us with the impression that it might be due to poor management. Lack of maintenance of roads, only little available material for visitors, lack of supervision and investments ect. The report states that the number of tourists in the period 1977-1983 declined with 75% (IUCN 1984). This decline must further be seen in relation to the economic and political situation at the time (i.e. the oil crises in the 1970s). The problems with the tourism seems to have been well overcome today, however, it still shows that a suddenly decrees in visitors can occur, also in NCA.

The discussions above show that financing the NCA by tourism to some extend have negative consequences both for the nature and for the Massai. Tourism is not a part of the theory of ICDP, but as in the case of Ngorongoro tourism it is a way to finance both the nature conservation and pastoral development initiatives as well as providing alternative income opportunities to the population (UNESCO 2007). However, as mentioned, the tourism sector is not providing the Massai many jobs. And, despite the fact that the Massai are supported into some extend by tourism, they are also limited by it. As for biodiversity, the example of the Black Rhino shows is a conflict between giving the tourists the best experience versus the protection of nature.

That tourism, in the case of Ngorongoro, is a necessity can be seen as a disadvantage of the theory behind ICDP. Even though tourism is not at part of the theory behind ICDP, the theory can be

criticised for its need for long-term financial support when implemented. Without tourism the project of NCA would not be able to be self-sustainable without depending on other forms of funds. This could be funds from international organisations or from the Tanzanian government. However, this is not a sustainable solution. According to the World Bank, Tanzania is one of the poorest countries in the world, even though the country has had a positive economic development the resent years (World Bank). NCA is the biggest tourist attraction in the country and is generating the greatest amount of foreign exchange within the tourism sector. We can only expect the government of Tanzania to have an economic interest in attracting and keeping foreign currency through tourism (Charnley 2005:76), and it therefore seems unrealistic to think that the government would have an interest in shutting down the greatest economic generator within the tourism sector. Moreover, to expect the government to provide the economic funds needed to replace tourism in NCA seems economically unrealistic. Therefore, to believe that an ICDP without tourism or other financial support can be self-sustaining does not seem realistic within the frames of opportunities provided today.

5.3 Spread of invasive species

Invasive flora and fauna species are considered a global threat to different ecosystems; one of the examples in the case of NCA is the change in habitats caused by alien plant species⁴. This change in environment can pose a threat to wildlife which is dependent on specific characteristics of their environment for survival, for example the Black Rhino (Mills et al. 2003:6,10). The data available to us does not provide us with much knowledge about how the spread of invasive species emerge or effect biodiversity in the case of the NCA. Though, the Mission Report notes that "... sourcing gravel and other road material from outside the conservation area can increase the likelihood of invasive species..." (UNESCO 2007). This means that seeds and shuts of plant species, which are not originally found in the NCA, might have been present in the gravel used for road construction. The case of invasive species is important when talking about biodiversity. When an invasive plant specie is being established in its new environment because it is a better competitor for resources than some of the local plants are, then the local species would be out-competed to different degrees. This might mean a change in the physical conditions of the environment. For wildlife this means an alteration of their habitat (Myers 2003:7-13). If a herbivore is dependent on the out competed plant

⁴ The mission report names "Mauritius thorn; black wattle, Azolla filiculoides (red water fern); eucalyptus species; Mexican poppy;" (UNESCO 2007)

as a source of food, this type of invasion might have detrimental consequences to it.

The core of the invasive species problem in the NCA can be linked to the discussion in the previous section. Tourism can be seen as a way of financing development which might create problems for the environment. To provide 'high quality tourism services' demands roads, as seen above roads material can increase the threats of invasive species. However, we do not claim that road construction within a protected area necessarily has something to do with the theory or strategy of ICDP. The problem with road construction is a potential problem all protected areas, even those where settlements are forbidden, might face when promoting tourism. On the background of the lightweight information from NCA, we do not believe that the problems with the spread of invasive species only can be understood as a conflict between development and conservation. Even if NCA was a national park without an ICDP strategy, we do believe the area would promote tourism, and therefore also need roads.

5.4 Poaching

Illegal hunters are, at first sight, a problem that has no direct relation to the character of the conservation project, illegal activities can take place and effect any conservation area. According to the Mission Report (UNESCO 2007) poaching is one of the threats to nature conservation in NCA. We are interested in finding out the reasons for poaching so we can determine if these are grounded in a conflict between conservation and development. If poaching is due to such conflict, it might be related to the type of project, the ICDP of NCA. However, finding sources supporting the statement of the Mission Report is hard. The Mission Report is mentioning poaching as a threat but is not going into any details about where, how or by whom the poaching is done. The little information we have in connection to poaching in the NCA is again about the Black Rhino. We must assume that other animals have been and still are poached, but more research needs to be done in this area before we can give a clearer picture.

We know that poaching in the 1970s was a problem for the Black Rhino, partly caused by the ban of cultivation (UNEP). This suggests that the poaching was done by those who were farming in NCA and who no longer could sustain their lives through cultivation. The Black Rhino Workshop 2003 (Mills et al. 2003:1) indicate that there still might be a threat for the Black Rhino form poaching, but it notes that the threat of poaching within Ngorongoro Crater has been much reduced since the

1990s due to improved security: "Effective and sustained monitoring of rhino has reduced the risk of poaching. The greatest threats to the long-term conservation of the rhino are now ecological change and disturbance from humans." (Mills et al. 2003:10). The last poaching incident of a Black Rhino was in 1995 (Mills et al. 2003:1).

The suggestion that poaching in the 1970s was due to the ban of cultivation could lead to the assumption that this might be the case now since cultivation again is forbidden. There are also theoretic arguments for that poaching could be caused by locals due to the land restrictions, the growing population density and impoverishing of the Maasai. Poaching could according to this be an alternative financial and subsistence 'short-term problem solving' option (Colchester 1997:107-8; Schmidt-Soltau 2003:544-5). Theoretically poaching could also be a way of the Maasai to show their resentment with the NCAA and the restrictions imposed on the land use (i.e. Colchester 1997:107). An example on this can be giving from Kenya where the Maasai in the early 1970s were spearing rhinos and other wildlife in protest against the Amboseli National Park (cf. 4.2.2 Conservation and development in post-colonial time). If the poaching in NCA is happening due to some of the explanation suggested, then poaching can be seen as a result of a conflict between the interests of the Maasai and conservation. This situation is paradoxical: a conservationinitiative ultimately ends up threatening biodiversity. However, we have no empirical evidence supporting that poaching in NCA today is grounded in a conflict between the interests of conservation and development. Therefore, we can not draw any conclusions about if the claim of poaching is related to the strategy of ICDP.

5.5 Human rights – land, development and deciding over one's own future

The establishment of NCA in 1959 as a multiple use area was an alternative to relocation of the area's rightful owners, the Maasai (Olenasha 2006:156). The Maasai was allowed to live and pursue customary land use activities within the NCA, though with different enforced restrictions (cf. Ngorongoro Case Study). Cernea and Schmidt-Soltau (2006:1826) argue that it is possible to combine nature conservation with the obeying of indigenous people's rights. In the following we will research how NCA in practice is living up to this theoretical statement.

Writers with social background as Charnley (2005:79) and Olenasha (2006:157) argue that the limitations set on the Maasai is violations of their basic human rights with wildlife protection as an

argument. Others like Estea and his associates (2006:144), who have ecological or conservationist background argue that the limitations on the Maasai activities are essential for the conservation of wildlife. The above shows that human rights and conservation continue to be argued upon with relation to the NCA.

In the following we will examine whether the indigenous Maasai's rights for land, development and future are compatible with the mode of promoting nature conservation within the NCA. We discuss these limitations with their reasons and their consequences in three different levels. First, the practical level discussing what the considerations behind the restrictions on livelihood strategies are, and the way they conflict with the development opportunities for the Maasai; second, the human rights level, discussing about the rights of the Maasai for their land and how these rights contradict conservation policies; third, participation – the process of consulting and considering the local communities in decisions made by the authorities. We start with discussing the question of limitations for the local communities.

5.5.1 The reality of limitations – agricultural activity

The Frankfurt Zoological Society (FZS) which is cooperating with the NCAA for the conservation of wildlife in the NCA is seeing pastoral activity but not agricultural cultivation as compatible with wildlife conservation (Frankfurt Zoological Society 1997 quoted in McCabe 2003: 103). We can only assume that this view of cultivation activity, as presented by FZS and supported by the recommendations of the Mission Report (UNESCO 2007) influence the NCAA policies. This is despite of results from integrated computer modelling which suggest that the level of cultivation that was going on in the NCA during the 1990s would have had a very slight effect, if at all, on ungulates population within the NCA (Boone et al. 2006:818-21). The same model suggest that the location of the cultivated lands have a higher importance to the wildlife population.

The restrictions on cultivation (cf. 3.3 The Maasai people and their economy) have serious economic consequences for the Maasai. As McCabe notes, the Massai were already dependent on small-scale agricultural activity when cultivation was banned in the mid 1970s. In order to compensate for their need for grain the Maasai had to sell more livestock for buying the needed grain. However, since the natural reproduction of livestock could not compensate for the ones being sold, the Maasai were becoming poorer and the number of people suffering from malnutrition

increased (McCabe 2002:71). When the ban of cultivation was lifted in the early 1990s small scale cultivation within the NCA was again permitted. More than 85% of the households adopted agricultural activity to some extant, using it to balance their nutritional need for grain. Less livestock were sold and living conditions improved. The increase in cultivated plots alarmed however conservationists who were worried about its impact on wildlife in the area (McCabe 2002:73). Today cultivation in the NCA is prohibited again. The Maasai are according to Homewood et al. (2006:4) looking for other economic refuges as working in paid jobs out of the NCA, selling handicrafts and by some forms of low level trading. We suggest that these new livelihood strategies which are partly dependent on tourism vehicle transportation within the NCA are far from being sustainable. The Mission Report (UNESCO 2007) is already looking for a way to decrease tourist vehicle transportation within the NCA due to its negative effect on wildlife; this would again set a restriction to the economy of the Maasai.

Restrictions of the use of fire – two faced policy

Charnley (2005:79) notes that the use of fire by Maasai pastorals has been prohibited within the borders of the NCA. Fire was traditionally used by the Maasai to control tick spread diseases and bush encroaching. No information was available to us about the impact of this restriction to the Maasai or to their cattle. The use of fire for conservation purposes is however not restricted. The NCAA use controlled burns for wiping out invasive plant species (UNESCO 2007), and the FZS is considered the use of fires to control tick population due to high rates of mortality in wildlife as a result of tick transmitted diseases (Trollope 2002:1).

In the matter of use of fire we spot a two folded problem to the character of the NCA as an ICDP. The first part of it is what looks as a discrimination of the Maasai's need for fire to protect themselves and their cattle from diseases, and the second is the initial restriction on a traditional practice used by the Maasai. A practice which is lately recognized as beneficial for wildlife as well.

Limitations on pastoral activity

Restriction on pastoral land have been following the Maasai in the north of Tanzania for almost a century now, starting with the establishment of the first game reserves in the area by the Brits in the 1920s. The establishment of the NCA was coupled with the closure of the Serengeti National Park for pastoral activity (Frantkin 2001:13; McCabe 2002:68). The Maasai that were exploiting the

Serengeti Plains for grazing in the wet season were facing a two folded problem. First, during the wet season the restrictions resulted in scarcity of grazing land free from wildebeest calves. These calves are carrying the 'malignant fever' disease which is fatal for the Maasai's domestic cattle. Thus the Maasai were strained to change their pastoral patterns to protect their livelihood. Second, during the dry season the Maasai had less grazing land which forced them to go with their cattle up to the craters and to the Highland Forest Reservation (McCabe 2002:69-70). The restrictions on cultivation enforced in 1974 were linked to restriction on the entrance of cattle to the craters and to the forest reservation as the NCAA and conservationists considered their activity in these areas as improper (McCabe 2002:68-9; Olenasha 2006:159). McCabe (2002:70-1) notes that this had severe results for many of the Maasai who were permanently or temporarily located there during the dry season and for many others that were dependent on these areas for grazing and water resources. However some of them continued to graze in the forest during the dry season, this activity was considered by the NCAA to be 'in the grey zone', and was usually tolerated by their staff (Potkanski 1994:67).

Over the years the amount of livestock within the NCA has been fluctuating around a mean while the human population has increased (McCabe 2003:105). This means that there is a continuous decline in the number of livestock per person within the NCA (McCabe 2003:105, UNEP). The different restrictions imposed on the land use might have an impact on the decreasing numbers of livestock which again affect the economy of the Maasai negatively. When the Maasai for example are no longer allowed to supply their livelihoods through agriculture they might have to sell their livestock in order to buy grain or services. If, as the situation was in the 70s and 80s, the reproduction of livestock cannot compensate for their sales, or no other sources of income are provided, the consequence is impoverishment of the population. The economic uncertainty and hardship described above results in a new pattern of outgoing migration mostly of single young Maasai men, looking for paid employment (Homewood et al. 2006:4). How large the emigration is, we cannot say, however, the NCA is having problems with a growing population, compared to this the emigration might not yet be very extensive.

One of the recent developments to overcome the issue of the decline in livestock per person is promoted by the Danish International Development Agency (DANIDA) in cooperation with the Massai Pastoral Council and NCAA. The aim of the project is to increase the number of cattle

owned by destitute families and thereby improve their economy. At the end of 2004 3.734 families had received animals from the project and the project is budgeted to continue until the end of 2008 (DANIDA). The Mission Report states that in 2006 there were approximately 360.000 cattle heads in NCA. We cannot say how many cattle heads have been provided to the families in total from the project supported by DANIDA, but compared to the total number it might only present a minor part. However Estea and his associates (Estea et al. 2006:114) argue that the impact of this increase in cattle would damage the environment much more than allowing small-scale cultivation. The ground for this claim is not clear to us, however this could be partly understood from the modelling results of Boone and his associates (2006:818-20) which show that increase in cultivation will not have adverse effect on wildlife as long as it is located away from migratory corridors and the Ngorongoro crater. However, with UNESCO and the FZS looking at agriculture and not pastoralism as posing a threat to the ecosystem, it seems that traditional livelihoods of the Maasai within the NCA are standing before a dead end. This unless trade-offs (i.e. small scale cultivation) and compromises are made.

5.5.2 Human rights – land tenure and participation

The questions of land tenure and participation within the NCA are interwoven in many of the conflicts between the Maasai and the NCAA mentioned along this work. From a humanistic and social point of view, ideally, the use of the Maasai in their lands should be respected following the ILO convention 169, which states in Article 7.1 that "The peoples concerned [indigenous] shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly." (ILO). It is very obvious from the description of limitations set on the Maasai activities and livelihoods as described by McCabe (2002:69-73; 2003:100) that the NCA case is far from the ideal in this issue.

Participation

One of the pros of ICDP theory is the considerable place which is given to indigenous people's right to protect their traditional way of living and to choose how much, in what phase and to which directions they would like to develop (cf. 4.4.2 Indigenous peoples right for land tenure - a complicated issue). As we demonstrate above, according to the ILO convention, any restrictions

should be enforced only after consultation with the local community and its' acceptance. According to the theory of ICDP, this form of participation is crucial for the success of this type of projects.

Potkanski (1994:16-26) shows that the Maasai have a land-use management system stemming from their traditional way of understanding land tenure which is encored in a set of regulations and common understanding. This suggest that a system of land use management, and a form of legal system in which the elders are the ones that set the agenda, was functioning within the Maasai society before the establishment of NCA. According to these principles of participation the Maasai's social and land management systems should have been respected and their elders should have been given decision making power during the process of decision making in the NCA. A Maasai elder quoted by Olenasha (2006) gives his point of view on the situation:

"Where are all the rhinos we used to have around? They have disappeared. Your Black government keeps telling us that they are the ones who know how to conserve. They have dismissed our traditional systems. I can only say the day will come when all of us will be forced out and nothing of the remaining rhinos will be left, not even their bones for one to see." (Olenasha 2006:154)

The sentence "they have dismissed our traditional systems" illustrates the lack of bottom-up consultations within the NCA decision making process according to that Maasai elder. Fratkin (2001:14) brings a quotation of a Maasai elder relating to the NCA conservation strategy: "We approve of absolutely nothing in this plan". This is also far from being a description of a well-functioning participation process, which seems to support the view which is presented above. The violation of the collective property right shows an unequal relation between the NCAA and the Maasai, a power-relation that the different stakeholders should overcome according to the theory of participation.

Functioning participation, however, is not only a question of the people who are directly influenced and influencing the NCA, it is also relevant to the people who have their livelihoods around the NCA. This can be illustrated by the Black Rhino Workshop which claims that one of the threats to the survival of the Black Rhino is "... an increase in the area under cultivation outside the Crater." (Mills et al. 2003:2). We know that cultivation within NCA is banned (UNESCO 2007) and from the map (c.f. 3.1) we can see that cultivation is taking part on the south-east side of the crater, an

area which is not included in the NCA. According to Colchester (1997:107) and others (Adams and Hulme 2001:18), there is a broad agreement about the impossibility of locking biodiversity up in small parks. By participation and development of local communities through ICDP, this problem should be possible to overcome (cf. chapter 4). In the case of Ngorongoro we can see that one of the reasons why the Black Rhino is endangered is due to human activity outside NCA. This can be analysed in different ways. First, it can indicate that involvement of nearby societies is important when trying to conserve biodiversity. Second, it can show that the ICDP of NCAA has not succeeded very well in involving local communities outside NCA. Third, it may indicate that human activity and nature conservation not is compatible as for example Terborgh (1999:161-70) argues.

Is the state of participation in the NCA as poor as illustrated by researchers in the discussion above? Oppositions could not be found, however, there are three arguments that can be used to claim that in the case of the Maasai in the NCA their system is being protected. This is despite the restrictions on their activities. First, agriculture can be argued not to be a Maasai tradition since it was first introduced to them by non-Maasai women who married Maasai men about a century ago (McCabe 2003:103). Then the ban on cultivation is not a contradiction to the Maasai traditional way of life. Secondly, there is no evidence or a claim that the Maasai rules, land management system and social system are in any way not functioning within the areas that are not restricted. Meaning for example that the Maasai still hold their 'primary' and 'secondary' rights for land within the areas that are not forbidden for pastoral activity. Third, participation of the local communities in the project is achieved by the role of the Pastoral Council in the board of directors of the NCAA.

To us, however, it seems that small-scale cultivation has become an integral part of the Maasai's livelihood strategies and thereby a part of their traditions. Moreover we argue that the Maasai elders, which are quoted along this work, have the feeling that their reality is not being understood. This is supported by Charnley (2005:84) who notes that "the Maasai continue to feel they have no real voice in management decisions within the NCA." (Charnley 2005:84). This suggests that NCAA does not live up to the expectation of the theory of ICDP, that there is lack of respect for the Maasai needs and traditions.

Land tenure

The ILO promotes protection of traditional rules and systems of land and community management. The Maasai's traditional system of land tenure is one of free access to all pastoral land in the area of the 'Maasailand' (Potkanski 1994:16. See Potkanski 1994:16-27 for detailed explanation). The following will give an understanding, to some extend, of the traditional land management system used by the Maasai: Cattle from a settlement have 'primary right' to access to the land close to the enkang, however the land is considered as collective property and in case of shortage all have equal access right to pasture regardless of location. In normal situations the Maasai have known and planed migratory routes during the dry season. These routes go beyond their primary right lands, a herd can gain a 'secondary access right' to a land', if it is visiting there regularly. This makes it unnecessary to ask permission to graze there after the first time the herd is accessing the area. The first time access to a land should be a subject to consulting the local community. However the existence of planed and stable migration routes makes this practice relatively rare. When a person want to build a permanent or seasonal settlement in a new locality, the residents of the new locality cannot prevent him from doing that, since the land belong to all. The newcomer would have to consult the local elders about the location of his settlement and his pastoral activity. A quotation of a Maasai elder brought by Fratkin (2001:14), illustrates the Maasai's point of view in the question of land tenure:

"We have died not just by violence, but by ignorance (...). This is the trend that is threatening us. We approve of absolutely nothing in this plan. This land is our land. The maps used to say 'Maasailand,' not United Nations land. No one can be disinherited from the soil and the trees of his birth ..."

The Maasai elder is providing us with a description of a whole other reality than the one perused by the ILO convention and by the theory of ICDP. First, in the quotation the Maasai elder holds the opinion that the Maasai' legal right to their land is being violated: "This land is our land." Second, it gives us information about another way of understanding land tenure: "No one can be disinherited from the soil and the trees of his birth." As presented in chapter 3, this sentence demonstrate the ideology of ownership which differs from the general, western understanding of private property as inherited in the market economy. The Maasai ideology of collective property is according to the quotation, not being accepted.

We can not take the opinion of this specific Maasai elder as an adequate picture of the prevailing understanding of all Maasai. However, we choose to let the quotation be an indicator of a problem supported by other sources (i.e. Charnley 2006:154) as a quotation brought by Olenasha (2006:154) "...I can only say the day will come when all of us will be forced out...".

As we argued before, the Maasai traditional land-use management system is made cripple by the limitations set to their traditional activities. Potkanski (1994.16) believes that the changes in land tenure and the limitation set for the Maasai have a negative consequence to the ecosystem. Potkanski relates the reasoning in the base of the traditional land-use management system of the Maasai to, what he calls, "a common ecologically based wisdom", and he is arguing that limiting the Maasai's access to their traditional land would eventually come to have an environmental consequence, "fencing of pastures and limits on livestock movement both undermine the flexibility of arrangements, and act against the logic of sustainable pastoral production in a dryland zone". A quotation of a Maasai elder brought by Olenasha (2006:154) could indicate that this Maasai agree with Potkaniski:

"Where are all the rhinos we used to have around? They have disappeared. Your Black government keeps telling us that they are the ones who know how to conserve. They have dismissed our traditional systems. I can only say the day will come when all of us will be forced out and nothing of the remaining rhinos will be left, not even their bones for one to see."

Summing up the discussion above (section 5.5), a critique about the state of participation and human rights in the NCA is brought up by social writers like Charnley (2005), McCabe (2002) and Olenasha (2006). They claim that the different restrictions on land use within the NCA can be seen as a violation of the Maasai human rights. Carnea and Scmidt-Soltau (2006:1810) take a step further to claim that restriction on local population is a form for displacement, since local people cannot exploit the natural resources available to them in their land. According to this view, this type of 'forced relocation' in the name of nature conservation is still a common practice within the NCA. Thus, we claim, in the land tenure issue and the human rights related to it, that NCAA seems to run into an unsolved problem of violation of human rights in the name of nature conservation. There are some arguments to suggest otherwise, however, it seems that if that is the case the ICDP-policy has

not reached the local communities, who still feel that they are being discriminated and not consulted. This suggests that some of the contradictions between local societies and conservation efforts might be a result of differences in the perception of nature conservation and development needs, a problem that in the theory can be minimised by participation. Participation is a strength in the theory, but a strength that in the case of NCA is not implemented. Cernea and Schmidt-Soltau argue (2006:1826) that the combination of nature conservation and the protection of local communities' human rights is possible. The discussion above indicates that the case of NCA can hardly be considered as supporting this claim.

6. Conclusion

In this chapter, we will draw our overall conclusion from the different parts of the project, which shall provide us with an understanding of possible weaknesses of the theory behind the concept of ICDP. At last we will discuss other perspectives on the project. However, before we conclude the project, we set the context for our conclusion by discussing on what background the conclusion is given and what consequences this has for its validity.

6.1 The limitation of the conclusion

Through the project we have experienced different limitations that all to some extend affect our conclusion. The largest obstacle for us has been the data available to us. Parts of the project are having loose ends due to the lack of information and research carried out in those fields. For example it has not been possible for us to provide a clear picture of to what extend the implementation of the ICDP in NCA is living up to the theoretical point of departure. The data has simply not been available to us. In the cases where there has been a lack of data, it has been necessary for us to take the 'indirect' way and using information and data from researches that were carried out to very different purposes. In some cases not even this has been possible for us. This fact is affecting the validity of our conclusion in the way that we have not been able to follow all relevant 'tracks' we have met in the research. As mentioned, (cf. 2. Method) we belong to the understanding that it is necessary to try to put yourself it the place of others in order to understand why they act as they do. This part we have found very difficult when using solely secondary data. The limitations mentioned could have been overcome if we had collected our data ourselves. If we had done that, we would likely to have come to other conclusions than the ones we will present next. However, with these limitations in mind, the following conclusion can provide useful insight in the complexity of combining development initiatives with nature conservation - in theory and in practice. Moreover it gives us further understanding as for the location of the weak links in the theory.

6.2 Weaknesses of the Theory of ICDP

Both the critique of the theory and the conflicts in NCA related to development and conservation can be related to the overall question; Are development and conservation compatible? The ICDP theory suggests that they are, however the case of NCA with its conflicts does not seem to be supportive of that. Some conflicts are due to the implementation of the ICDP – a process which we

have not examined in depth. Though, the case is showing that the NCAA is not succeeding in implementing a participation process that can diminish the unequal power relations between the authority and the Maasai. A relation that at the time must be said to be strained. The policy of participation seems here more like a show-off than reality. We cannot say how the project would have benefited if this part of the theory was fulfilled and what conflicts it might have been able to solve. However, from our analysis we can relate problems in the issues of land tenure, human rights and possibly poaching as well, to the poor implementation of participatory policy. Neither have we found any clear relation between the problems of invasive species to the theoretical settings of the NCA. However some of the conflicts we have found in NCA can be traced back to inherited weaknesses from the theory of ICDP.

First, we argue that the theory does not provide any suggestions to how an ICDP can be self-sustainable. A problem that in the case of NCA turns out to create a tourism pressure that has negative consequences both for the nature conservation and for the Maasai. The notion from NCAA is that the conservation of nature cannot succeed without restrictions on the Maasai's livelihoods. Therefore the Maasai must be provided with other opportunities to sustain their lives. But what can such alternatives be if they still have to happen inside the borders of NCA where the Maasai have legal right to be? Tourism can for example provide jobs, but tourism also creates problems. Alternative sustainable solutions must be set on the table.

Second, economic development is one of the goals of the ICDP of NCA. Achieving this goal might have consequences in form of population-related problems that the theory of ICDP does not take into consideration. We cannot say for sure if the growing population pressure is due to the ICDP implemented by the NCAA, but many circumstances are pointing in this direction. Most of the sources we came by through the work on this project share the view that the Maasai have grown poorer over the years. Theoretically this would not attract newcomers. However, NCA as an area is providing a lot of economic possibilities related to the tourism industry, and as argued, pastoralists in East Africa are now depending more on the monetary economy than earlier. Therefore the NCA might still be attractive for immigrants in this sense. The lack of qualified men for the tourism industry within the local Maasai might be considered as an accelerator for this migration of more qualified people.

The two points mentioned provide us with the insight that the strategy of ICPD in NCA is running into problems partly because of a theory behind them. The theory is weak in the way that it is only providing a 'starting point'. Despite its attempt to promote sustainable solutions, it is not considering long-term consequences as for example success of the economic side of the project. Therefore, the theory can be said to provide only short-sighted solutions, because the question 'what next?' eventually must be asked in the case of NCA. Does the Maasai' interests have to stay in the shadow of the conservation interests? Advocates of ICDP might claim that the theory is a starting point for sustainability and that the non-sustainable reality in the NCA is a problem of implementation. We argue here that sustainability, like biodiversity, cannot be locked behind fences, thus if the society around an ICDP is not sustainable than the project would have a very hard time to keep itself sustainable due to influences from the outside.

Despite the fact that much critique is raised towards the theory of ICDP, it seem to us, that this is still the most efficient way to answer the needs both of local communities and of nature conservation. We like to believe that critique, and that includes our concussion, is being used to improve the theory and the projects which are already running.

6.3 Perspectives

As pointed out earlier it has not been our intention to evaluate the ICDP of NCA, but instead to research weather conflicts could be led back to weaknesses inherited from the theory. However, through the project we have experienced, that when researching such a complex and heterogeneous field as ICDP, new questions and paths to follow continue to arise. The field of ICDP cannot be looked as something isolated – it is touching, combining and influencing different research fields which is also why the argument 'it depends' continue to come up. The research process can therefore be continued and would ideally not stop here. The project we have been caring out can be seen as a 'first-step' covering a very broad field of problems and conflicts. In further projects it might be interesting to look into and try to connect the loose ends that come up in our research, this in order to understand their impact on the conclusion. This would of course require a fieldtrip to Tanzania with different kind of research carried out.

Other steps needed to be taken include moving to different scales and study the power-relations in the NCA. One possibility could be to investigate in what way power-relations on the national and

international level affect the implementation of an ICDP. We have only touched this subject superficially. We have indicated that the nature view from donors might influence the policy of NCAA, and that there are financial interests form the government that most likely influence the extend to which the interest of the Maasai are respected. To move to the local scale could answer many of our unanswered questions as for example: how the Maasai is participating in the process of ICDP and to what extend their 'reality count'? How and why the Maasai livelihoods have changed and to what extend and why emigration of young men is happening? If poaching can be linked to a lack of influence? ect.

The project could furthermore be expanded in the way of adding other theoretical perspectives to supplement the one of ICDP. As mentioned tourism is not a part of the theory of ICDP but theory of eco-tourism could raise a discussion if it is possible to combine a strategy based on tourism with nature conservation.

Literature list

Adams, W. & Hulme, D. (2001). Conservation and Community. Changing Narratives, Policies and Practices in African Conservation. In D. Hulme & M. Murphree (eds.), *African Wildlife & Livelihoods. The Promise and Performance of Community Cultivation*. James Currey Ltd, Oxford.

Adams, W. M. & Mulligan M. (2003). Introduction, in Adams, W. M. *Decolonizing Nature: Strategies for Conservation in a Postcolonial Era*. Earthscan Publications Limited, UK.

Boone, R. B., Galvin, K. A., Thornton P. K., Swift, D. M., & Coughenour M. B. (2006) *Cultivation and Conservation in Ngorongoro Conservation Area, Tanzania.* Hum. Ecol. 34(6):809–828.

Brandon, K., Holland, M. B. & Naughton-Treves, L. (2005). The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods. *Annual Review of Environment and Resources*, 30, pp. 219-252.

Browder, J. (2002). Conservation and Development Projects in the Brazilian Amazon: Lessons from the Community Initiative Program in Rondônia. *Environmental Management*. 29(6), pp. 750–762.

Cernea, M. & Schmidt-Soltau, K. Poverty Risks and National Parks: Policy Issues in Conservation and Resettlement. *World Development*, 34(10), pp. 1808–1830.

Chambers, R. (2005). *Ideas for development*. Earthscan Publications Limited, UK.

Charnley, S. (2005). From Nature Tourism to Ecotourism? The case of the Ngorongoro Conservation Area, Tanzania. *Human Organization* 64(1), pp. 75-88.

Chatty, D. & Colchester, M. (2002). Introduction Conservation and Mobile Indigenous People. In D. Chatty & M. Colchester (eds.), *Conservation and Mobile Indigenous People*. Berghahn Books, UK.

Colchester, M. (1997). Salvaging Nature: Indigenous Peoples and Protected areas. In K. Ghimire & M. Pimbert (eds.), *Social Change and Conservation*. Earthscan Publications Limited, UK.

DANIDA (Danish International Development Agency) http://www.netpublikationer.dk/um/6556/kap72.htm#72.12 (16.05.08)

Dietz, T., Nunow, A., Roba, A. & zaal, F. (2001). Pastoral Commercialisation: On Caloric Terms of Trade and Related Issues. In M. Salih, T. Dietz and A. Ahmed (eds.), *African Pastoralism: Conflict, Institutions and Government.* Pluto Press, London.

Estesa, R. D., Atwoodb, J. L., Estesc, A. B. (2006) Downward trends in Ngorongoro Crater ungulate populations 1986–2005: Conservation concerns and the need for ecological research. *Bio. Cons.* 131, pp. 106 – 120.

Fratkin, E. (2001). East African Pastoralism in Transition: Maasai, Boran, and Rendille Cases. *African Studies Review*, 44(3), pp. 1-25.

Fratkin, E. and Mearns, R. (2003). Sustainability and Pastoral Livelihoods: Lessons from East African Maasai and Mongolia. *Human Organization*, 62(2), pp 112-122.

Galvin, A. K., Ellis, J., Boone, R. B., Magennis, A. L., Smith, N. M., Lynn, S. J. & Thornton, P. (2002) Compatibility of Pastoralism and Conservation? In D. Chatty & M. Colchester (eds.), *Conservation and Mobile Indigenous People*. Berghahn Books. UK

Ghimire, K. B. & Pimbert, M. P. (1997). Social Change and Conservation: an Overview of Issues and Concepts. In K. Ghimire & M. Pimbert (eds.), *Social Change and Conservation*. Earthscan Publications Limited, UK.

Hansen, F. and Simonsen, K. (2004). *Geografiens Videnskabsteori*. Roskilde Universitetsforlag, Frederiksberg.

Helland, J. (2001). Participation and Governance in the Development of Borana: Southern Ethiopia. In M. Salih, T. Dietz and A. Ahmed (eds.), *African Pastoralism: Conflict, Institutions and Government*. Pluto Press, London.

Homewood, K., Lambin E. F., Coast, E., Kariuki, A., Kikula, J., Said, M., Serneels, S. & Tompson M (2001), Long Term Changes in African Savana Wildlife and Landcover: Pastoralists or Policies. LSE research online London

Højbjerg, H. (2005). Hermeneutik. In L. Fuglsang & P. Olsen (eds.), *Videnskabsteori i samfundsvidenskaberne. På tværs af fagkulturer og paradigmer*. Frederiksberg: Roskilde Universitetsforlag.

ILO (International Labour Organisation) http://www.ilo.org/ilolex/cgi-lex/convde.pl?C169. (28.05.08).

IUCN (1984). Summery of conservation status. Property: Ngorongoro Conservation Area (NCA). IUCN.

IUCN A (The International Union for Conservation of Nature (The World Conservation Union)) http://www.iucn.org/themes/wcpa/wpc2003/english/about/intro.htm. (25.04.08).

IUCN B (The International Union for Conservation of Nature (The World Conservation Union)) http://www.iucnredlist.org/search/search-basic. (05.05.08)

Jennings, M. (2005).Little white pebbles: getting the research question right and getting the data right. In J. Holland & J. Campbell (eds.), *Methods in Development Research: Combining Qualitative and Quantitative Approaches*. Intermediate Technology Publications Ltd, UK.

Krebs, C., J. (2001). *Ecology: the experimental analysis of distribution and abundance*. 5th ed. Benjamin Cummings, San Francisco, U.S.

Levine, R. (1999). The history of Brazil. Greenwood Press, London.

Lidskog, R. (1998). Society, Space and Environment. Towards a Sociological Re-conceptualisation of Nature. *Scandinavian Housing & planning Research* 15, pp. 19-35.

MEA (Millennium Ecosystem Assessment), (2005). *Ecosystems and Human Well-being: Biodiversity Synthesis*. World Resources Institute, Washington, DC.

McCabe, J. T. (2002). Giving Conservation a Human Face. In D. Chatty & M. Colchester (eds.), *Conservation and Mobile Indigenous People*. Berghahn Books, UK.

McCabe, J. T. (2003) Sustainability and Livelihood Diversification among the Maasai of Northern Tanzania. *Human Organization* 62:(2), pp. 100-111.

McShane, T. & Wells, M. (2004). Integrated Conservation and Development? In T. McShane and M. Wells (eds.), *Getting Biodiversity Projects to Work*. Colombia University Press, New York.

Mills, A., Morkel, P., Runyoro, V., Amiyo, A., Muruthi, P., Binamungu, T., Borner, M. and Thirgood, S. (2003). *Management of Black Rhino in the Ngorongoro Crater*. African Wildlife Foundation, Frankfurt Zoological Society and Ngorongoro Conservation Area Authority.

Myers, J. H. (2003) *Ecology and Control of Introduced Plants*. Cambridge University Press, West Nyack, New York, USA.

NBS (The National Bureau of Statistics). (2001) *The Largest Household Survey in Tanzania*. NBS Tanzania.

NCAA (Ngorongoro Conservation Area Authority) http://www.ngorongorocrater.org/index.html (08.05.08)

Olenasha. W. (2006). *Parks Without People: A Case Study of the Ngorongoro Conservation Area, Tanzania*. International Alliance of Indigenous and Tribal People of Tropical Forests.

O'Riordan, T. (2002). Protecting beyond the protected. In T. O'Riordan & S. Stoll-Kleemann (eds.), *Biodiversity, Sustainability and Human Communities: Protecting beyond the protected.* Cambridge University Press, UK.

Potkanski, T. (1994). Property Concept, Herding Patterns and Management of Natural resources among the Ngorongoro and Salei Maasai of TanzaniaPastoral Land Tenure Ser. No. 6. IIED, London.

R&AWG (The Research and Analysis Working Group). (2005). *Poverty and Human Development Report 2005*. Mkuki na Nyota Publishers. Dar es Salaam, Tanzania.

Redford, K. & Sterman, A. (1993). Forest-Dwelling Native Amazonians and the Conservation of Biodiversity: Interests in Common or in Collision? *Conservation Biology*, 7(2), pp. 248-255.

Robinson, J. & Redford, K. (2004). Jack of All Trades, Masters of None: Inherent Contradictions Among ICDP Approaches. In T. McShane and M. Wells (eds.), *Getting Biodiversity Projects to Work*. Colombia University Press, New York.

Schmidt-Soltau, K. (2003). Conservation-related Resettlement in Central Africa: Environmental and Social Risks. *Development and Change*, 34(3), pp. 525-551.

Terborgh, J. (1999). Requiem for Nature. Island Press. Washington, D.C.

Trollope, W.S.W., Trollope, L.A. & Morkel, P. (2002) Report on prescribed burning as a means of controlling the incidence of ticks, the current condition of the lerai forest and the infestation of forbs in the ngorongoro crater in tanzania - september, 2002, Department Livestock & Pasture Science Isebe Lemfuyo Namadlelo, South Africa.

UN (1987). Report of the World Commission on Environment and Development. "Our Common Future". United Nation.

UNDP (Human Development Report),

http://hdrstats.undp.org/countries/data_sheets/cty_ds_TZA.html, (09.05.08).

UNEP (United Nation Environmental Program), http://sea.unep-wcmc.org/sites/wh/ngorongo.html (09.05.08).

UNESCO (1979). Summery of conservation status NCA.

UNESCO (1984). Convention Concerning the Protection of the World Cultural and Natural Heritage. UNESCO, Buenos Aires.

UNESCO (2007). *Ngorongoro Conservation Area (United Republic of Tanzania) Report of the Reactive Monitoring Mission 29 April to 5 May 2007*. UNESCO, Paris.

UNESCO A (United Nations Educational, Scientific and Cultural Organization) http://whc.unesco.org/en/criteria/, (02.05.08).

UNESCO B (United Nations Educational, Scientific and Cultural Organization) http://whc.unesco.org/en/107, (09.05.08).

Utting, P. (1993). Trees, People and Power. Earthscan Pub's LTD, London.

Whatmore, S. (2005). Culture-nature. In P. Cloke, P. Crang & M. Goodwin (eds.), *Introducing Human Geographies*. Hodder Arnold, London.

Wilkie, D., Morelli, G., Demmer, J., Starkey, M., Telfer, P. and Steil, M. (2006). Parks and People: Assessing the Human Welfare Effects of Establishing Protected Areas for Biodiversity Conservation. *Conservation Biology*, 20(1), pp. 247–249.

World Bank, http://web.worldbank.org/tanzania.html, (15.05.08).

WWF (2006), Living Planet Report 2006, WWF International Switzerland.

Wøien, H. (2003). Naturvern og lokalbefolkning. In T. Benjaminsen & H. Svarstad (eds.), *Samfunnsperspektiver på miljø og utvikling*. Universitetsforlaget, Oslo.