# Co-existing with wildlife in Namibia's conservancies

A case study on the relationship between human-wildlife conflict and attitudes of local communities and the influence of communal conservancies on this relationship



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A respondent when talking about her opinion on wildlife:

Translator: She is giving a bit of an example, maybe you will be able to laugh or to. It is almost like having a boyfriend and he is beating me every day. But I still love him and do not want him to leave me. That is the same with wild animals. They do damage, but I do not want them gone.



Figure 1: interviewer and respondent after an interview. Own material.

#### <u>Colophon</u>

Title: Co-existing with wildlife in Namibia's conservancies

Subtitle: A case study on the relationship between human-wildlife conflict and attitudes of local communities and the influence of Community-based Natural Resource Management on this relationship

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Photo on cover:

Marienfluss valley in the Marienfluss conservancy. Source: NACSO/WWF in Namibia Tourists on a photo safari in the Torra conservancy. Source NACSO/WWF in Namibia

## I Summary

One of the greatest threats to African nature conservation are conflicts between humans and wildlife. Human-wildlife conflict (HWC) occurs when people and wildlife are competing for (natural) resources and/or living space. The attitudes of local people towards wildlife is critical for communal nature conservation (Mufune, 2015). HWC can deteriorate this attitude, as wildlife can have a negative influence on people's livelihoods (Nyhus et al. 2005).

Since the 1980s academic literature acknowledges important role of the local community in nature conservation policy. Resulting in Common Resource Management (CRM). This is the collective name of these schemes and is characterized by three processes:

- A devolution of control over natural resources;
- A participation of the community;
- A positive contribution to local livelihoods and the natural environment.

In Namibia CRM-policy is called Community-Based Natural Resource Management (CBNRM) (Jones and Weaver, 2009). Local communities can create legal entities, communal conservancies, which receive certain rights over natural resources and economic development on the base of those resources (Corbett and Daniels, 1996). Conservancies are obliged to manage their natural resources sustainably.

The goal of this research is to explore how HWC influence the attitudes of local communities and how CRM-institutions play a role in this negative relationship. The main question is:

What is the effect of CRM-institutions on the negative relationship between HWC and attitudes of local communities towards wildlife in Namibia?

To answer this question a qualitative case study is employed utilising semi-structured interviews in two conservancy in the arid North-West of Namibia. To assert the role of CRM-institutions four key concepts are used: benefit distribution, participation, mitigation and compensation of HWC. These key concepts are used in the theory of social representations of Buijs (2008). The theory of social representations makes it possible to describe how social representations (attitudes towards wildlife) are formed by the communities in the conservancies. The social representations are formed by three processes: practices, frames and experiencing nature. Practices are conceptualized through the key concepts outlined above. Frames are to be discerned through the interviews with farmers in the conservancies. Experiencing nature is conceptualized as experiencing HWC.

38 interviews have been conducted in two conservancies: #Khoadi-//Hôas and Ehi Rovipuka. There is 1 substantial difference between the conservancies and that is the income that they generate. #Khoadi-//Hôas generated 2,757,470 Namibian dollar in 2014, while Ehi Rovipuka received 314,000 Namibian Dollar in the same year. The source of income also differs: #Khoadi-//Hôas earns most income through tourism and Ehi Rovipuka through trophy hunting.

Influence of the distribution of benefits on the way people view nature depends on the individual impact that those benefits have on people. The individual impact depends on the amount of benefits, more benefits means a more positive view on (damaging) wildlife. When interviewees were employed in the conservancy or related jobs, they relied on those natural resources to provide them with benefits: this is a very strong incentive to protect nature. It makes the ownership over the natural resources stronger, intensifying the stable core of the social representations.

Compensation and mitigation also fit into the more flexible periphery of social representations. However, the problem with these practices is that compensation does not promote a sustainable solution: the amount of compensation is too low to be viewed as a real compensation and it does not make the HWC go away (Nyhus et al, 2005). The findings seems to accord what Nyhus et al. (2005) state on fully compensating HWC: these authors claim that fully compensating HWC does not provide an incentive for the protection of wildlife. However the findings show that paying too little compensation does not add to the acceptance of (damaging) wildlife either. Moreover, the respondents claimed that only fully compensating HWC is an incentive for protection of damaging wildlife.

All the practices and frames attribute to the formation of the periphery of the social representations. However they do not necessarily contribute equally to the social representations. This depends on the conservancy, but also the individual. To come back to the main question: there is an effect of CRM-institution on the negative relationship between HWC and attitudes of local communities. The effect is determined by the resources that the institution has to its disposal. This research added that it is also important to not only focus on practices that need a lot of resources (compensation and mitigation) but also on practices that focus less on resources. A good example of such a practice is the participation, which creates a sense of ownership of the wildlife and also over the conservancy itself.

## II Prologue

Dear reader,

This thesis presents the work that I have done in the last year: it has been long and tough but in the end it is satisfactory to present it. My initial interest was nature conservation in Africa and was sparked by the events surrounding Cecile the lion. This was a world-famous lion from Zimbabwe that was killed by a trophy hunting dentist from America. This sparked a global debate on trophy hunting and the place it had in nature conservation.

Namibia has proven the added value that trophy hunting has in nature conservation: well managed and regulated it provides financial benefits for nature conservation in difficult areas. Trophy hunting, together with tourism, provides economic development in Namibia's rural areas. This economic development does not make nature conservation more difficult, but they enable each other. The reason why the subject of the thesis is about human-wildlife conflict is that it is one of the biggest challenges to nature conservation in rural areas in Namibia (and many other places). It does not only serve an academic purpose, but solutions are also needed by NGOs and local communities working together to preserve nature.

I am honoured to have worked with a lot of experienced people in Namibia. They did not only help me develop my research, but also myself. After three months they made me feel at home in this place far away from home. I did my internship at NACSO and they enabled me to present this thesis. I will never forget that and with the risk of leaving out people I want to thank the following people. Maxi Louis who is the director of NACSO; Richard Diggle who helped me develop the thesis in Namibia; Anna and Annastasia, the other interns at NACSO; Angus Middleton from NNF. And of course the leaders of the conservancies that I visited: Lorna Dax (#Khoadi-//Hôas) and Asser Ujaha (Ehi Rovipuka).

Before I could fly to Namibia and perform the research and internship I had to know what I was going to do. Coming up with a topic was easy: nature conservation in Africa. Transforming this topic into a good research proposal is much more difficult. I have produced around ten different proposals, but eventually it was satisfied with it. My supervisor, Duncan Liefferink, was the supervisor that I needed. Because my study is not necessarily familiar with the subject of nature conservation he gave me the room that I needed to come up with my own approach. In devising this research Mr Liefferink has given me the guidance but also the freedom to do this; of which I am very grateful towards him.

Instead of the four years that my bachelor and master should entail I have managed to push this to almost seven years. This is not necessarily a big accomplishment, but looking back on those years I am still happy about almost all the choices that I have made. My family has been very supportive to me in those years, of which I am very grateful. The biggest supporter and also challenger has been and will be for hopefully a long time my girlfriend Charlotte.

There is a small group of people that have taken the opportunity to fully read my thesis. My little brother Floris-Willem and my friend Boudewijn Maat have helped me with the language of this thesis.

Please enjoy reading this thesis, kind regards Roderick Enzerink

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## 1. Introduction

#### 1.1 Introducing the research

One of the greatest threats to African nature conservation are conflicts between humans and wildlife. Human-wildlife conflict (HWC) occurs when people and wildlife are competing for (natural) resources and/or living space. The attitudes of local people towards wildlife is critical for communal nature conservation (Mufune, 2015; Perfecto and Vandermeer, 2008; NACSO, 2016; Thakadu, 2005). HWC can deteriorate this attitude, as wildlife can have a negative influence on people's livelihoods (Nyhus et al. 2005; Browne-Nuñez, 2010, P. 132).

Since the 1980s academic literature acknowledges the important role of the local community in nature conservation policy. As a result, various schemes that incorporate the community in managing natural resources have emerged (Ostrom, 2015; Ostrom and Agrawal, 2001). Common Resource Management (CRM) is the collective name of these schemes and is characterized by three processes:

- A devolution of control over natural resources;
- A participation of the community;
- A positive contribution to local livelihoods and the natural environment.

An example of a country dedicated to creating the right conditions for CRM is Namibia (Van der Duim et al., 2014, p. 19.) Under South African Apartheid rule there were two types of nature reserves in Namibia: private/freehold farms and state land (Jones and Weaver, 2009). During the Apartheid, large portions of land were taken from (indigenous) inhabitants and sold to white 'boeren'. After gaining independence in 1991 the local communities wanted the same rights over land and wildlife as the 'boeren'. In 1996 Namibia made this possible by creating 'communal conservancies<sup>1</sup>'. In Namibia CRM-policy is called Community-Based Natural Resource Management<sup>2</sup> (CBNRM) (Jones and Weaver, 2009). Fortress vs. Communal conservation

Fortress conservation means that local communities are excluded from nature parks. Communal conservation tries to include local communities into nature conservation. Because they: 1. depend on natural resources; 2. involvement creates legitimacy for policies and local communities have knowledge eon the natural resources they live with. (Ramutsindela, 2005; Brockington, Duffy and Igoe, 2008)

Local communities can create legal entities, communal conservancies, which receive certain rights over natural resources and economic development on the

base of those resources (Corbett and Daniels, 1996). Conservancies are obliged to manage their natural resources sustainably. To enable this, they are allowed to employ economic activities like tourism or trophy hunting. The monetary returns are used to appoint game guards and sustain the organization needed for wildlife management, but many conservancies are also able to let (financial) benefit flow to the community (NACSO, 2016; Naidoo et al., 2016).

CBNRM, through conservancies, can contribute to the attitudes of local communities towards wildlife (Nyphus et al., 2005; Jones and Barnes, 2006). The challenge for conservancies is to protect the wildlife in the conservancy, even if it does damage to the properties of members or attack humans. Nyhus et al. (2005) suggests two strategies: compensating for the damages and/or mitigating the conflicts. Mitigation is about preventing or minimizing HWC and compensation is about paying back damage to property (Gusset et al. 2009). These strategies are part of the 2009 policy on HWC in Namibia (MET, 2009).

<sup>&</sup>lt;sup>1</sup> As opposed to freehold conservancies: groups of freehold farms that pool their financial and natural resources together to create greater potential for their land.

<sup>&</sup>lt;sup>2</sup> CRM refers in this thesis to the global (academic) discussion on Common Resource Management, CBNRM refers specific to the Namibian context.

To also keep Africa's biodiversity flourishing outside of (national) parks, it is imperative to integrate local communities in nature conservation (Sallu et al., 2009; Ramutsindela, 2005). For they are the people that have to live with the animals. In a time where humans and wildlife are increasingly using the same spaces and competing for the same resources, HWC is ever-increasing.

To be able to integrate local communities in nature conservation it is important to get a good understanding of local people's attitude towards animals. Attitudes are conceptualized in this thesis as social representations: "group-specific views on nature that are developed through communication and consists of interrelated definitions, beliefs, values, and value orientation." (Buijs, 2008, p. 78). Through experiencing nature, communication with others, framing and (social) practices of e.g. institutions or groups of people create an attitude towards wildlife.

Literature suggests that compensation and mitigation are important to counter the negative influence of HWC on the way local communities view wildlife. The 'social representations' theory shows us that not only these practices, but also other practices and framing have an impact on the way people experience nature. This study wants to delve deeper into the contextual factors that play a role in the formation of attitudes of local communities on problematic but highly valued (and endangered) wildlife. The complex relationship between people and wildlife in Namibia forms the object of study central to this research.

#### 1.2 Relevance of the research

The introduction was used to outline the landscape of CRM, CBNRM and HWC. The next paragraphs will divert more attention to why this research can be valuable. First of all, the position of this research is discussed in a wider extent of attitude research in Africa and Namibia. Secondly, it will discuss the social relevance, what does society gain with the research? As this research delves deeper into the relationship between society and nature conclusions should not only benefit society, but also nature. More precisely: their relationship should benefit from it.

#### 1.3.1 Scientific relevance

Research on attitudes towards nature and more specific wildlife is not new in Africa (Lindsey, Du Toit and Mills, 2005). Namibia is known for its CBNRM-program and its successes (NACSO, 2016), but there are also challenges. One of the biggest challenges is Human-Wildlife conflict (Browne-Nuñez, 2010, P. 132

CRM-institutions are intended to provide local communities incentives to protect their natural resources. In the light of this goal of conservancies, it is interesting to study how CRM is involved in HWC and explore the negative relationship between HWC and attitudes of local communities. It is the combination of the working of CRM-institutions, HWC and the attitudes of local communities in its coherence that has not been studied yet. Namibia, with its CBNRM-program, provides excellent cases to study CRM, HWC and attitudes of local communities.

Research in Namibia has focused mainly on surveys on attitudes, but surveys do not permit a deep understanding of how attitudes are formed and influenced by (external) factors. This connects to the goal of this study: looking further into the role of CRM-institutions for attitudes towards nature. This thesis will use multiple CRM theories and concepts combined with the theory of 'social representations' of Buijs (2008) which helps to close a theoretical gap: the role of CRM-institutions in the negative influence of HWC on views on wildlife of local communities in Namibia.

#### 1.3.2 Social relevance

Retaliatory killings of problematic animals are a major threat for carnivores and elephants in Namibia (Jones and Barnes, 2006). To promote sustainable development, as well for people as for wildlife in Namibia, it is essential to gain more in-depth knowledge on how HWC works. HWC is one of the biggest challenges for the CBNRM program in Namibia, especially in the last few years where continuous drought has created more competition between people and wildlife for natural resources (NACSO, 2016).

Retaliatory killings of wildlife by local communities, after wildlife damages property of local communities, can deteriorate the sustainable development on communal lands. To ensure that people and wildlife can co-exist in the harsh and arid environment of Namibia, more in-depth knowledge is needed on attitudes of local communities, and how they are created. Helping to understand the relationship between society and nature should improve both worlds. Improving the relationship should benefit the natural world as well as the societal world. This research will add to the goals of the CBNRM program in Namibia and will help challenge the problem of HWC. The ultimate goal of everyone involved in CBNRM in Namibia is to help people and wildlife co-exist in the communal areas.

#### 1.3 Goal and research question

Every research has a goal and a research question, these are used to steer the research in its desired outcome. In this research the desired outcomes have been stated above, but to clarify this the following paragraphs will contain a goal, hypothesis and research questions.

#### 1.4.1. Goal

The goal of this research is to explore how HWC influence the attitudes of local communities and how CRM-institutions play a role in this negative relationship. Changing the way local communities view natural resources is an implicit aim of CRM. The more explicit aims are improving local livelihoods and protecting/enhancing the natural environment. These two goals can be measured relative easily: livelihoods (e.g. Ashley 2000a/b) and improvements in biodiversity (NACSO, 2016). The link between the natural and the social world, how the local community treats its natural environment, is much less tangible.

CRM is about a sustainable use of the natural environment. The focus on communities came from the thought that: "Communities down the millennia have developed elaborate rituals and practices to limit off take levels, restrict access to critical resources, and distribute harvests." (Agrawal and Gibson, 1999, p. 631). But in the present day, human activities (like agriculture and industries) are competing with nature for space.

The conservancies that have been visited are located in the Kunene region. This region is known for iconic species that have adapted to the desert environment like the desert Lion and desert Elephant. Especially in such regions where human settlement is already difficult it is imperative to look at how the social and the natural world can co-exist, i.e. how humans and wildlife can co-exist. Therefore, it is important to look further into the local attitudes towards natural resources (Mufune, 2015; Perfecto and Vandermeer, 2008; NACSO, 2016; Thakadu, 2005).

#### 1.4.3. Conceptual model



Figure 2: conceptual model picturing the main concepts and its relations. Own material.

Three concepts can be distilled from this introduction: CRM-institutions, HWC and attitudes. These three concepts make out the conceptual model of this thesis and it is time to make clear how they constitute it before the questions can be prepared. CRM-institutions are institutions that create Common Resource Management. Internationally they are found under different names but in Namibia they are called communal conservancies. The communal conservancies have different activities to manage HWC. HWC are the conflicts between wildlife (elephants, lions etc.) and humans. Attitudes of local people (who live in the conservancies) towards wildlife are negatively affected by HWC. The activities of CRM-institutions are meant to address the negative influence of HWC on attitudes. This can be done by compensating for damage that is inflicted or mitigating future damages.

Figure 2 shows the concepts and their relationship. As the influence of CRM-institutions on the negative influence of HWC on attitudes is uncertain, it is exactly the arrow that flows from CRM-institutions (brown arrow) towards the other arrow that is the focus of this research. As the brown arrow is positive the approach of this research is that it has the potential of minimizing (not necessarily eliminating) the negative influence of HWC on attitudes of local people.

#### 1.4.3. Questions

To be able to accomplish the goal of this research the attention is directed to formulating the questions that will guide this research. The goal of this research is to examine how Namibian communities look at nature. From literature we know that the way local communities view nature and especially wildlife is affected by HWC. The general thought is that it has a negative impact. In protecting wildlife, CRM-policies and institutions in Namibia have claimed that they have been successful in changing how local communities view wildlife in the context of HWC: rather than seeing wildlife as a negative impact on their livelihoods, wildlife could complement their livelihoods via conservancies.

The main question of this research is:

What is the effect of CRM-institutions on the negative relationship between HWC and attitudes of local communities towards wildlife in Namibia?

To answer this question the research will dive deep into one or more case studies. The particular methods of the study will be elaborated on later. The main question has to be divided into

multiple sub questions in order to be able to formulate a comprehensive answer to this research (Creswell, 2007).

#### Sub-questions:

- What is Common Resource Management in Namibia?

To be able to say something sensible about Namibian CRM, a description of CBNRM has to be established. The first step of this research constitutes an exploration of the historical background of Namibian CRM, as well as the development and content of the subsequent policies for HWC and CBNRM.

- How do CRM-institutions mitigate HWC in Namibia? What kind of actions do conservancies take to mitigate HWC? What are the possible actions in general and what is done in the case studies? Also the problems and possibilities for mitigation are important, e.g. natural boundaries that keep problem animals away.

- How do CRM-institutions compensate HWC in Namibia? It is not only a question of how much damage is being compensated, but mainly whether it is enough (does it cover the costs) and how these costs are calculated.

- What role does mitigation and compensation play in the attitudes of local people living in conservancies towards wildlife?

Communities' attitudes towards wildlife are determined by different factors, from literature on HWC it is established that compensation and mitigation are regarded important to contest HWC.

- How do mitigation and compensation of HWC relate to other conservancy activities? Conservancies do more than just compensating and mitigation that has the ability of changing people's attitudes. They have meetings where community members can participate in the decision-making of the conservancy and when it is financially possible they try to distribute benefits among the members. To be able to answer the main question a holistic view on the activities of conservancy is needed, including all the activities that potentially change people's attitudes.

The next chapter presents the theoretical lens that is used in the analysis of this research. It present the theories and concepts needed and establishes conceptual model. In chapter three the methods of this study are outlined. Chapter four entails a socio-political historical background of Namibian CRM, as well as the development and content of the subsequent policies. The findings of this study are presented in chapter five together with a first analysis of the data that has been collected. Chapter 6 will conclude on the findings and the above questions. Following the conclusions there will be some recommendations, academic and social.

## 2. Theoretical lens

To be able to 'delve deeper' into HWC, CRM-institutions and attitudes of local communities we need to create a theoretical lens. The collected data will be able to provide us with answers, but we need to enable ourselves to see it. The theories and concepts outlined will help with the analysis of the data that will be collected. The collective action theory will be described first, as it lays the foundation for the CRM-theory and concepts. In section 2.2 the theories and concepts that will be used in the analysis are developed: devolution, participation and benefits. In section 2.3 the 'social representations' theory of Buijs (2008) is elaborated on and combined with the concepts from section 2.2.

#### 2.1 Collective action theory

"Picture a pasture open to all (...)" reminds many to the essay of Hardins (1968, p. 1244). In the essay 'Tragedy of the commons' Hardins describes the inherent dangers of overpopulation by the example of an open-to-all resource: the common. This agricultural piece of land is accessible by multiple herders who decide for themselves how many sheep they herd. This implicates that the herders have a personal incentive to maximize the amount of sheep they herd on the commons, in order to maximize their profits. As for each sheep each herder adds, the costs of deterioration and depletion of the common will be divided among all the herders, while the profits end up with the individual herder.

The idea of the commons as a resource open to all can be applied on many environmental topics: fishery, forestry and agriculture. It sparked much debate: Hardin made the reader choose between a coercive government and privatization of the commons. A government could enforce a set of rules, enabling the equal division of the commons. Privatization of the commons means that each herder will bear the costs of further depletion of his pasture. (Robbins et al., 2011)

However Hardins' pasture was a theoretical example, not a case study. In the decades after his epochal essay, research began to mount which disapproved his hypothesis. There were cases where commons have been managed sustainably. Ostrom (2015) has devoted much time and words on this subject. She stated in her book:

What one can observe in the world, however, is that neither the state nor the market is uniformly successful in enabling individuals to sustain long-term, productive use of natural resource systems. Further, communities of individuals have relied on institutions resembling neither the state nor the market to govern some resource systems with reasonable degrees of success over long periods of time. (Ostrom, 2015, p. 1)

She, and others with her, pointed towards the proper functioning of some communities on managing their resources. But more importantly neo-institutionalists focused on how institutions could create effective resource management strategies (Robbins et al., 2011; Ostrom, 2015; Duim et al., 2015). Neo-institutionalists focus on the contextual factors determining institutions, as opposed to a more rational economical view on institutions and society (DiMaggio and Powell, 1983). Robbins et al. (2011) define institutions as 'systems of recognized constraints on individual behaviour, including formal laws, but also unofficial rules or even strong social norms' (Robbins et al., 2011, p. 52).

Neo-institutionalism made clear that it was important to devote attention to how institutions shape the way communities use the environment. Where there are no rules, (un)official and/or (un)written, a 'tragedy of the commons' can develop. Overfishing, deforestation and deteriorating biodiversity made clear that some form of action was required. Institutions are

needed to guide human action regarding natural resources towards a sustainable equilibrium (March and Olson, 1989; Agrawal and Ostrom, 2001).

CRM-institutions revolve around managing the commons and involving the local community in it to make sure that they do not over use it. However there is an important question to ask. Carter and Olinto ask in their paper: "getting the institutions right for whom?" (2003). They studied the effect of property right reforms (devolution) on agricultural investments. Their findings are that wealthier (based on credit and liquidity) producers profit more from property right reforms then more credit-constrained producers. Institutions do not necessarily benefit the local communities. Dressler et al. (2010) criticize the one-size-fits-all approach of some cases, as well as the CRM as a neo-liberal policy instrument. They warn for institutions of CRM that mainly profit large corporations or central government, while the local community should profit from it. For this research it is important to find out whether the institutions are working accordingly to their goal: enabling community members to co-exist with wildlife, even when that wildlife is damaging to the local community. And what part of the CRM-

This chapter hands the theoretical tools to answer the main and sub-questions of this research. CRM-literature hands three processes that are necessary for CRM-institutions to function properly:

- A devolution of control over natural resources;
- A participation of the community;
- A positive contribution to local livelihoods and the natural environment.

But these processes are vague and cannot be used in the analysis of this research. There are some more steps to be taken. This chapter will conceptualize the above processes and place into a theory that allows for a holistic approach to attitudes of local communities. First we should be able to analyse they specific way in which institutions of CRM can operate, important in such an analysis is how certain rights are devolved from the central government (Dressler et al. (2010)).

Second we should be able to analyse the way the institutions involve local communities in their policies, for which the ladder of participation of Arnstein (1968) allows us to describe the relation between the local community and institutions. Participation of the local community does not only benefit for policy creation, it also creates involvement from the local community. This could contribute to the way local communities view wildlife.

Contributing positively to the livelihoods of local communities can be done in various ways. Section 2.2.3 conceptualizes the benefits for local communities coming from communal conservancies and what role benefits play in the formation of attitudes of local communities. But most importantly, we should be able to analyse local attitudes towards wildlife. In this light, the theory of social representations (Buijs, 2008) allows us to study how attitudes are formed and what role the individual, the natural and the social environment have on these representations of nature. The concepts derived from theory will be used to fill in the social representations theory.

#### 2.2 CRM

Before we turn towards a better conceptualization of human wildlife conflicts, we first need to clarify what CRM means. It is important to remember that it is not a one-size-fits-all solution; every part of the environment is different, as are the people that live in it. The literature on CRM

is vast and a review of it shows a few commonalities. Devolution of certain rights is the centre point of every CRM-project, but how this happens varies as to what some communities ask and what governments are willing to devolve (Schlager and Ostrom, 1992; Shackleton and Campbell, 2001; Agrawal and Ostrom, 2001). At the same time there should be some form of participation by the local community, but the conception of a single 'community' is problematic (Agrawal and Gibson, 1999) as there are usually multiple social groups in a community (cf. Pellis, 2010; Pellis et al. 2015).

Important in these two processes is that devolution and participation are not an isomorphic processes (Ribot, Lund and Treue, 2010, p. 40). For both concepts the discussion will contain a certain degree of devolution and participation, derived from the bundles of rights of Agrawal and Ostrom (2001) and the ladder of participation of Arnstein (1968). Complementary to the devolution of rights is the writing on access of Ribot and Peluso (2003), which extends usage of resources beyond the legal boundary of rights.

#### 2.2.1 Devolution

Devolution is important for CRM as it enables local communities to manage natural resources, as shown by Nelson and Agrawal (2008). Schlager and Ostrom (1992) use "bundles of rights" for their analysis of what kind of devolution is needed for CRM. It is important to know that Schlager and Ostrom (1992) only pay attention to formal legal rights, which are ensured by some kind of authority. They distinguish five types of property rights:

- Access to natural resources;
- Withdrawal is the right to enter a defined physical area and obtain resource units;
- Management is the right to regulate internal use patterns and transform the resource by making improvements;
- Exclusion is the right to determine who will have right of withdrawal and how that right may be transferred;
- Alienation is the right to sell or lease the above rights. (Schlager and Ostrom; Agrawal and Ostrom, 2001, p. 489)

As we progress the local community gains more rights as we can say that when they gain the rights of alienation they have the full rights over a natural resource (i.e. private property). This graduated scale is important in describing a case of CRM, as it tells us something about the level of devolution. Agrawal and Ostrom (2001) combine these rights with a classification of rights holders, as will be clear from figure 3.

	Owner	Proprietor	Authorized Claimant	Authorized User
Withdrawal	×	×	×	×
Management	×	×	×	
Exclusion	×	×		
Alienation	×			

#### Figure 3: conceptualization of rights holders. Source Agrawal and Ostrom, 2001, p. 491

An authorized user has to comply with rules decided on in collective choice processes, in which an authorized claimant has a right in, as well as the right to use. The role of devolution becomes visible, as local users are able to devise sets of rules through collective choice processes to fit the local circumstances (idem, 490). Most CRM actors are 'proprietors' as they have the power to use, devise rules for the usage of and define who has access to natural resources. In that case, usually the central state remains the official owner of the land, as is also the case for CRM in Namibia (Corbett and Daniels, 1996).

#### 2.2.2. Participation

When we want to study how the local community is affected by CRM, it is important to look how the local community can participate in the institutions to which these rights are directed (devolution). Arnstein (1968) devised the 'ladder of participation' to analyse cases of citizen participation in city development. The ladder (figure 4) consists of eight rungs "each corresponding to the extent of citizens' power in determining the end product" (Arnstein, 1968, p. 217). The eight rungs are grouped together as non-participation, degrees of tokenism and degrees of citizen power.



#### Figure 4: Ladder of participation (Arnstein, 1968)

Non-participation means that institutions do not listen to people; their mere objective is to change peoples' ideas into the ideas of the institutions. They want to educate (manipulation) or 'cure' (therapy) people, people have no right to speak or even change the status quo. In the 'degrees of tokenism' people are allowed to speak, but there is no guarantee that somebody will listen. Only the 'degrees of citizen power' allow people to change the status quo. (Arnstein, 1968)

The 'ladder of participation' allows us to analyse the institutions that affect local communities, it complements the above table of Agrawal and Ostrom. This analysis is found in the article of Nelson and Agrawal (2008) who acknowledge that for CRM-cases to be successful a part of the answer is genuine participation of the local community. They see two different possibilities: patronage of participation. Patronage coincides with the rungs of Arnstein where there is little power of citizens to change the status quo. Shackleton et al. (2002) see genuine participation where the incentive for central governments to remain in control is low. They argue that this incentive for governments is created by the potential of creating income for the government. So the cases where there is little revenue created with natural resources.

Shackleton et al. (2002) acknowledges that there is only a possibility of change in the local community when central governments genuinely devolve power and rights to local communities. They conclude from Namibian cases that local communities were liked the increasing wildlife numbers, but it led to more HWC. Shackleton et al: "The lack of authority to make decisions locally to deal with raiding wildlife was a major area of discontent". Whether this 'discontent' leads to an exclusive attitude of local community towards wildlife is the question of this study. The participation ladder helps us to describe the relationship between CRM-institutions and the local community. Participation as a tool for institutions to involve the local community is an important process in CRM.

#### 2.2.3 Benefits

Nature conservation costs money: usually a government will put in a lot of money for it. In Namibia this is different: conservancies can generate enough income from natural resources to cover their management costs (Naidoo, 2016; NACSO, 2016). Management costs include housing and conservancy staff. The conservancy can earn their money in roughly three ways: tourism, trophy hunting or selling natural resources (e.g. thatching grass or crafts). The money that is not spent on management costs can be allocated as the conservancy pleases, as long as it is in line with good financial practices and accorded through plans by the Ministry of Environment and Tourism.

Conservancies can create benefits for their members, Naidoo et al. (2016) creates a distinction between benefits: financial and non-financial benefits (like meat) to members. The research of Naidoo and his colleagues research was focused on benefit flow between economic activities, conservancy and the community as a whole. Ashley (2000a/b) investigated the impact of benefits on the individual level in Namibia (among other countries). She created two categories: direct benefits and indirect benefits. Direct benefits came from individual actions like employment and indirect benefits were non-financial benefits like empowerment or the improvement of roads.

For this research it is important to know how benefit creation works on the individual level: in this research it is assumed that when someone receives more benefits, he or she is more willing to accept the negative consequences of living with dangerous wildlife. Therefore benefits are conceptualised as follows:

- Direct benefits: income from employment that is created by the conservancy (or another organization working for the conservancy or its goals), or by economic activities in the conservancy (e.g. lodge).
- Indirect benefits: all the other benefits that arise from being a member (distribution of meat or diesel) or living in the conservancy (improved infrastructure).

Benefit creation is viewed as one of the strong points of CBNRM in Namibia (and other example of CRM around the world). The conservancy does not only prove to be of value for the management of wildlife, but also provides (economic) improvements for the people living in the conservancies. This creates incentives for people to accept damaging wildlife in their area and even accept damage from wildlife to their properties. However there is also critique on this neoliberal practice of nature conservation.

Brockington, Duffy and Igoe (2008) state that the idea of creating protected areas were the consequences of neo-liberalist thinking: helping countries develop through an improved economic production by creating human-free nature parks. They argue that fortress conservation arrangements distribute wealth unfairly and unequally with in society, so does community conservation. This critique on 'fortress conversation' does not directly apply to the conservancies in Namibia, these are in the core about the co-existence of humans and nature. Dressler and Büsscher (2008) took their critique on the perverse consequences of economic development further: they distinguished between hybrid neoliberal CBNRM and genuine CBNRM.

In their view the first encompassed a situation where big economic players or governments profit from the economic development in these area and the latter points towards a contribution to the resource based livelihoods of local communities through five sorts of capital:

- Social capital
- Natural capital
- Non-timber forest products
- Physical capital
- Financial capital

These categories also come back in the earlier made distinction between direct and indirect benefits. Direct benefits, coming from employment, links to financial capital and to some extent to social capital through empowerment (Taye, 2006). Indirect benefits can consist of all the capital: financial capital in the form of cash distribution and physical capital through infrastructure improvements.

Dressler et al. (2010) point towards the same neoliberal critique in their review of 6 cases of CBNRM. While CBNRM emerged with promise and hope, it often ended in less than ideal outcomes when institutionalized and reconfigured in design and practice. There are two additional arguments made by Dressler et al. (2010): first the institutionalization of CBNRM proves to be problematic, this can be compared to Carter and Olinto's question: 'getting the institutions right for whom? (Carter and Olinto, 2003).

The second argument that Dressler et al. (2010) made is that the economical approach to nature conservation can create the wrong incentives for local communities. Instead of appreciating nature for its intrinsic value, they will appreciate it for their monetary value. This can be problematic for species that do not provide many benefits for conservancies but do cause much damage for local communities (like the Hyena/Jackal).

#### 2.3 Attitudes towards wildlife

CRM is basically policy that is aimed at integrating local communities with nature conservation: development and management on the natural level and social level. It promotes co-existence of people and nature, on the basis of some of the basic requirements (participation, devolution etc.). Gusset et al (2008) state that the positive contributions of CRM to the local community are challenged by HWC. On the one hand benefits from natural resources are growing, together with the increase in wildlife in Namibia. On the other hand this means that damaging wildlife is also increasing, and sometimes re-introduced in conservancies.

The costs of living with an increasing amount of wildlife are for individuals of the local community. Compensating and mitigation are the to-go strategies of institutions to limit HWC. Gusset et al. (2008) suggest that merely compensating for damage that is done is not enough, institutions should think on what really changes people' attitudes. For policy makers and the people that execute the policy it is important to know how people form their view upon nature (Buijs, 2008).

The way people view nature is not the same in every context people are in. This thesis does not concern with the question what the concept nature exactly is; but how experiencing HWC (a very specific form of experiencing nature) creates views upon wildlife and how policy intervenes in that relationship. As CRM promotes co-existence this question on attitudes towards the wildlife that local communities should live with is essential.

#### 2.3.1. Social representation theory

Attitudes towards nature are not static: they can be changed and can be different between groups of people. The 'changeability' of attitudes towards nature is implicit in CRM-theory but essential to its argument: creating (financial) incentives for local communities to protect nature. These incentives are what turns poachers into nature conservers (Owen-Smith, 2010). Research on attitudes that uses this dynamic approach to attitudes has been undertaken through 'social representations' theory.

Social constructivism is at the core of this theory. Social constructivism argues that the meaning of an object is derived from its context (Creswell, 2007). And that meaning that we adhere to an object can change as the context in which we experience an object changes. The influence of the context in which someone experiences nature is reflected by social representations (Buijs, et al. 2012). "As in most current approaches to knowledge and meaning, social representations are considered as dynamic entities, developed and altered within the frame of social and natural processes to which social groups relate (Moscovici 2000, in Buijs et al., 2012). The use of frames and framing, accompanied by (social) practices in this research will be further explained in the next paragraphs.

Arjen Buijs (2008) has used the social representations theory in his research on attitudes towards nature. He defines social representations as follows: "group-specific views on nature that are developed through communication and consists of interrelated definitions, beliefs, values, and value orientation." (p. 78). Individuals create cognitions, not mere descriptions, of nature. Buijs writes: "social representations of nature are the meanings we attribute to the *object 'nature'* (2008, p. 74, italics and brackets in original). In figure 5 this depicted as the 'I' which interacts with the physical object nature. An individual creates cognitions through mental and bodily activities: e.g. walking in a nature park or seeing wildlife. This research sees the HWC a person experiences as the primal focus in how those cognitions are formed.



Figure 5: social representations of nature in social practices (Buijs, 2008, p. 83)

People develop a knowledge set through which they first see nature and second are able to communicate about nature. As meaning is attributed through experience but also through communication with others, we can describe social cognitions of nature. In figure 5 this is depicted as the 'other' which also creates cognitions about nature. In this research the 'other' are for example other members of the conservancy.

The people that experience HWC are also affected by social practices which creates the social context in which HWC is experienced. In figure 5 this depicted as the grey area in which the 'I' and the 'other' are situated. The activities of the conservancy like participation and benefit-creation are understood as these social practices that work on the individual cognitions of conservancy members. Framing is used in the communication between individuals and the conservancy within this research to communicate about nature and their cognitions on nature. As figure 5 shows all these forces together shape the social representations of groups of people: members of the conservancy.

#### 2.3.2. CRM and attitudes towards wildlife

This theory is useful in order to understand how individual attitudes towards wildlife relates to institutions of CRM, e.g. conservancies. The way they communicate about their nature management affects the attitudes of social groups that interact with the institutions and the physical nature. If we apply that to CRM, the discourse of conservancies is that of sustainable usage of natural resources in which both environment and the local society improves. The management practices are a form of social practices that will affect the way local people see nature, following Buijs (2008).

Between the natural environment that we can experience and the social representations of nature are a few important processes. An important process is the way people experience nature. In CRM HWC is of a large importance how people view wildlife. If there is an abundance of elephants that inflict a lot of damage, a negative view can be the result. But it is not only how people experience it, but also the actions that they do in e.g. the usage of natural resources. A farmer that tries to mitigate HWC (and thus has less damage), will have a different attitude towards wildlife then a farmer that does nothing (and has more damage). These views are also affected by social practices, e.g. the conservancies that try to convey an image of wildlife being an opportunity and not a threat to their livelihoods. Where the individual cognitions overlap and are communicated, a 'system of knowledge and understanding' can be found (Buijs, 2008).

The theories and concepts coming from CRM are inserted in the theory of social practices to give an answer to the main question of this research. Conservancies create the context in which members experience the object nature, through participation, benefit-creation, and compensation/mitigation. These are the social practices that the conservancy employs in creating that social context. In communication frames are used by people in that social context: the frame of co-existence with (damaging) wildlife could be an important one in this research. Figure 6 shows how experiencing the object nature (bottom) leads through the social context of social practices, experiencing HWC (as individual) and framing to social representations of nature. Experiencing HWC is purposefully not include in the bottom notion of the object nature because HWC is also one of those contextual factors in determining the social representations



#### Figure 6: conceptual model for the formation of social representations. Adjusted from Buijs, 2008, p. 94. Original on the right.

(attitudes towards wildlife). As is explained in chapter 1: HWC negatively influences the social representations of nature and the social practices and frames of the conservancy and other people should be positive towards those social representations of nature.

This theory helps us to bridge the gap between the institutions on the one side and local community on the other side. To be able to answer the main question, we have to look at how peoples image of nature are being construed by themselves, their interactions with nature and with other people and institutions. On the other hand we can check whether the expectations of the institutions are reflected on the individual level: by mitigating and compensating HWC, the attitude towards wildlife will be inclusive. The first step is to establish a history of CRM policies and place it in the context of wider developments of Namibia. When we take a closer look at CRM-policies we can analyse how it is meant to influence local communities. This analysis can be checked and backed by expert-interviews with experts in the field. The last step is to take the research to local communities. The next chapter will elaborate further on the methods of this study.

## 3. Methods

In chapter 2 the theoretical foundation of this research has been laid out and developed. The theoretical lens resulting from the last chapter is intended to properly help us understand what is happening in the Namibian conservancies that will be analysed. To guide this process of understanding HWC, CRM-institution and attitudes there are certain steps to be taken. This chapter explains the methodological groundwork of this research.

As Hendrik Wagenaar wrote: "By opening ourselves up to the infinite richness of the world, we force ourselves to reassess our assumptions, to reframe our experience, and to broaden our understanding. " (Wagenaar, 2011, p. 243). This research is intended to engage in the 'infinite richness' of HWC and attitudes towards wildlife in Namibia. It challenges the focus on strategies of compensation and mitigation in its capability of altering attitudes of local people. This chapter will devote attention to the methods of the research to try and 'broaden our understanding' about attitudes of local communities in Namibia towards wildlife.

In section 3.1 the general research approach will be discussed, in which choosing between the qualitative and quantitative methods of research is the first step. The section will also deal with the research methods to answer the questions posed in the first chapter. Section 3.2 will clarify which conservancies will be visited and why. Furthermore, it will provide background information on both conservancies. Section 3.3 will elaborate further on the collection of data that will be used in the analysis of this thesis. It answers questions like what kind of data has to be collected, how is it collected and why is the data needed? This should all be aimed at addressing the questions of this thesis.

#### 3.1 Research approach

In CRM research is Namibia there has been a strong focus on the quantitative side, in checking whether CRM-projects would deliver the benefits that it promised. Quantitative research has been important in Namibia, mainly in using the livelihoods approach (Ashley, 2000a/b; Lapeyre 2011). These researches were not only interested in how much revenue would end up at the community, but also how they experienced these revenue flows (Ashley, 2000a/b) and how this was combined with empowerment experience (Lapeyre, 2011). This research would like focus more on the experiences of individuals and groups of HWC and how these are formed. Instead of how much damage has been done in terms of Namibian dollars lost. In line with earlier mentioned literature, a qualitative approach will be used to answer the questions of this research.

A case study is ideal for getting in-depth knowledge of a particular issue in a bounded context (Creswell, 2007). Creswell (2007) defines case study research as follows: "Case study research is a qualitative approach in which the investigator explores a bounded system (*a case*) (...) over time, through detailed, in-depth data collection involving *multiple sources of information* (...) and reports a case *description* and case-based themes" (p. 73, italics in original). The case study approach allows the research an issue like HWC to be explored through one or more within a bounded system. To argue why this approach fits this research best, it will be compared to the phenomenology and narrative approaches of qualitative research.

Phenomenology as research method focuses on the 'lived experience of a phenomenon' for several individuals (Creswell, 2007). It describes the meaning of a phenomenon for several individuals and produces a "description of the universal essence" (idem). HWC could be seen as a phenomenon and a phenomenology could thus be useful in researching HWC. However as Buijs (2008) made clear: in social representations theory attitudes are not only created by our lived experience of a phenomenon and our communication about that phenomenon. It drew the

attention to a wider social context in which attitudes towards nature are formed. Not only the influence of language, but also the practices of people and institutions play a role in the generation of attitudes towards nature. So phenomenology is not used because of the focus on individuals instead of social groups, which is the aim of this research.

Narrative research focuses just as phenomenology on the 'lived experience of a phenomenon' (Creswell, 2007). Creswell (2007) presents the narrative research as primarily focused on the individual level. There are also narrative approaches that focus on groups of people: e.g. the discursive methods (e.g. Hajer's discourse analysis). A discourse is defined by Hajer "as an ensemble of ideas, concepts and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices." (Hajer, 2006, P. 175).

Both of the approaches are linguistic in nature as Wagenaar writes: "in hermeneutic policy interpretation the world is mediated by language, while in discursive [narrative] approaches it is produced by it." (Wagenaar, 2011, p. 107). <u>Because narrative and Phenomenological approaches both describe experience through the meaning we adhere to it, i.e. through language and discourses, it would not provide a proper answer to our question. It does not regard compensation as the social practice it is: giving people money for damage they endured. <u>The focus on language and its usage is troubling for this research for another reason: people in conservancies do not always speak English.</u> This makes it necessary to use an interpreter and that makes analysing the use of language difficult.</u>

Although it also puts the focus on a phenomenon, described by Creswell as an "issue" (2007, p. 73) the method of case study puts less emphasis on the role of language. The theoretical lens incorporates the use of communication and frames with social practices. So the case study, the approach to study a case within certain boundaries (Creswell, 2007), will be used in this research. Yin (2003) creates a framework to help with the establishment of what case to be selected. The case selection is very important as it will determine the outcomes of the analysis, as well as its validity (internal and external) (Yin, 2003). The selection of the cases in described in section 3.2.



Figure 7: 2x2 diagram of case study design. (Yin, 2003)

Yin's framework of case study designs (Yin, 2003, p. 39) consisted of single/multiple and embedded/holistic case studies, based on a 2x2 diagram. Single and multiple case study design refers to the context in which a case is located: a single context or multiple contexts. The cases of this research are embedded in the same context: CBNRM in Namibia. Their physical environment does not differ too much, they are even in the same region

and the policy context is also the same. Embedded or holistic case study designs refer the units of analysis: "a unitary or multiple units of analysis" (ibidem) in the case.

The case in this research, to follow Yin (2003), are the conservancies that have been visited. Within the cases there is only one unit of analysis, as will be explained later. The case study design will be a <u>multiple case (holistic) design</u>. Yin (2003) advises that if possible, a multiple case study is advised. The selection of a case should be related to existing theory and literature on the subject. The case selection and description will be further elaborated on in the section 3.2.

The theory of Buijs (2008) on social representations teaches us about how social groups' attitudes towards nature are formed. It is in short a play with three characters: our physical environment, our own cognitions and the social arena in which the local community exists. One important warning from Buijs (2008) regarding social groups is that they are fuzzy, people can belong to multiple social groups at once, which in turn can also overlap. A member of the conservancy can be a farmer and an employee of a lodge at the same time. This remark is supported by a paper of Agrawal and Gibson (1999) in which he challenges the presumption of many authors. Much of this literature sees communities in three ways: as a spatial unit, as a social structure, and as a set of shared norms. (Idem, p. 633). He concludes that communities groups vary according to "size, composition, norms and resource dependence" (idem, 639; cf. Pellis et al., 2015).

Because of the diverse groups within conservancy it is difficult to draw conclusion about the 'community as a whole'. This research is about HWC, its negative influence on attitudes of local people and the impact of conservancies on that relationship. To be able to answer the questions of this research it is important to speak to that part of the community that is most affected by HWC: people that participate in farming. Farmers in conservancies, to follow Agrawal and Gibson (1999) and Buijs (2008), will likely vary in how they are affected by practices from the conservancy.

Differences in attitudes will not be explained because they are 'part' of a social group. Relating to for example benefits it is to be expected that those who receive more (direct) benefits have a more positive attitude towards (damaging) wildlife then those that receive less or no benefits. The severance of HWC and the individual differences in participation, benefit-distribution and compensation/mitigation explains the different attitudes towards wildlife, not being part of a social group. Social groups, on the other hand, could explain differences in participation, benefit-

distribution or compensation/mitigation. Pellis et al. (2015) describe the role of different families in decision-making in the conservancy.

For the cases that are presented in this research this means that the explanatory factor in this research is not the social context where a person resides in. The differences in social groups, as used by Pellis (2010, 2015), will not explain the differences in attitudes in this study. The differences between attitudes of people within a conservancy are explained by the social practices and frames that constitute the social context of the conservancy (Buijs, 2008).

#### 3.2 Case selection

There are 82 communal conservancies in Namibia (NACSO, 2016). This research does not consider freehold conservancies as they are not affected by CBNRM. The theoretical lens provided for in chapter 2 gives some criteria for selecting conservancies:

- Participation: there should be, formally, an intention to have participation. This is covered by CBNRM policy: every conservancy is obligated to have a constitution and regular meetings.
- Benefit-distribution: this is not applicable to every conservancy. When a conservancy cannot cover their management costs from income they earn, there is little possibility to distribute benefits. Naidoo et al. (2016) established that in 2012 there were 77 conservancies that did not generate benefits.
- Compensation and mitigation: The conservancies should be involved in compensating and mitigating HWC. This is also an obligation through standing policy: the HWC policy of 2009.
- Last but not least the members of the conservancy should have conflicts between humans and wildlife. There are two regions in Namibia that are known for high levels of HWC: The Zambezi region in the north-west and the Kunene-region in the north-west.

For methodological reasons I wanted to visit two conservancies: it is better to have multiple cases as it improve the validity of the research. It also adds a level of comparison: the conservancies that have been chosen differentiate on how much and how they earn their money. As is clear, the time that could be spent during field work was limited: approximately two weeks. The two regions previously mentioned are in different corners of the country. The Kunene would be a day driving and the Zambezi would be two days.

To give a good answer to the questions posed by this research there were some additional criteria: for reasons of comparison they needed to be about the same biodiversity and population size. Differences in biodiversity, especially regarding animals that cause HWC could influence results. Different population sizes could complicate conclusions on participation and the other concepts. To be able to discern some difference in benefits and to give attention to the neo-liberal criticism of Dressler et al (2010) among others, it would be interesting to compare two conservancies with different sources of income. One with high income from tourism and one from hunting.

Discussing the limitations and criteria with NACSO we came up with two conservancies in the Kunene-region: #Khoadi-//Hôas and Ehi Rovipuka. There were additional reasons for choosing these conservancies: the possibility to meet the conservancy leader upfront and discussing the research beforehand. The conservancies are located at 170 kilometres from each other which makes it easier to travel between them.

#Khoadi-//Hôas (est. 1998) is a conservancy that is situated between Palmwag and Kamanjab, one of the first four communal conservancies in Namibia. It is a good example of how conservancies generate income from tourism: in 2014 it derived 90% of its income from tourism (the rest being: 9% trophy hunting and 1% from interests). It is known for having the first lodge fully operated by the local community (Taye, 2006). Between 2011 and 2015 the number of HWC's were between 110 and 150 (as reported to the conservancy). It has regular meetings, compensates and mitigates HWC through the HWC policy and has a benefit distribution plan in place. (NACSO, 2015a)

Ehi Rovipuka (est. 2001) is a conservancy on the border of Etosha national park, on the road from Kamanjab to Ruacana. The conservancy derives its income mainly from trophy hunting: in 2014 it made up 78%. 11% of their income comes from tourism, 1 % from 'veld returns' (e.g. thatching grass and selling it) and 9% from interests. It organizes regular meetings and it has a benefit distribution plan in place. It also adheres to the HWC policy by compensating and mitigating HWC. (NACSO, 2015b)

Both have similar biodiversity being in the same region, especially regarding HWC creating animals: Elephants and predators are in both conservancies. Their member size is equivalent: #Khoadi-//Hôas has 2000 members in 2014, comparing to 2000 in the same year for Ehi Rovipuka. In chapter four there is a more elaborate description of both areas and its history.

#### 3.3 Data collection

#### 3.3.1 Discussion research instruments

To answer the questions of this research the case study will be used as research method. This part of the chapter will be devoted to explaining how the necessary data will be collected. Within case study research there are different ways to gather data, depending on the questions and goal of the research. There are methodological reasons to choose certain instruments for data collection, but also practical arguments for choices.

Yin (2003) states that data collection for a case study can be done with six instruments. He advises to use as much of the instruments as possible to provide the case study with a clear picture. This research will follow this advice, taking into its account the limited resources. The six instruments are:

- Documentation: ranging from personal written accounts to administrative documents;
- Archival records: computer files and written records;
- Interviews: (semi) guided conversation with persons affected by the 'issue' in the case;
- Direct observation: observing the phenomenon of study as it happens;
- Participant observations: participate in the phenomenon of study as it happens; and
- Physical artefacts: obtaining and researching physical objects of the phenomenon in study.

By selecting the data collection instruments we have to assume their level of appropriateness for the research but also the practicalities of doing research (Yin, 2003). One of the practical limitations is the fact that the research is conducted by a single person in a limited time frame. The limited time and resources have to be used most effectively for this research. The primacy of this research is to establish how the attitudes of individuals and how, through framing and social practices, social representations are formed.

This research focuses on semi/structured interviews as the core instrument for data collection. To be able to answer the question how HWC impacts on the local community, interviews give the opportunity to hear from the personal experiences of local communities. Buijs (2008) used individual in-depth interviews with experts and civilians and focus group sessions to establish social representations of nature in his dissertation. His focus was on incongruence between

visions on nature of civilians and experts. As this research does not try to compare different groups with each other, the interview will be done with farmers in both conservancies.

The selection of the interviewees had 2 criteria:

- They had to be involved in farming, as farming is the most prominent precondition for HWC;
- The respondents had to be scattered evenly in the area of the conservancy. This was done to make sure that respondents differed in their composition. Also different areas of the conservancy could provide different problems (e.g. elephants causing problems in one area while lions cause problems in the other).

The translator/guide had the task of selecting the interviewees on the basis of the above criteria. Theoretically there was no reason to assume that there should be differences between gender, age and other factors. Such factors did not play a role in the selection of interviewees. There is also a pragmatic argument therein: in the time available it was necessary to speak as much people as possible.

Triangulation is a common process in which a researcher uses multiple sources of information to base their conclusion on (Yin, 2003, p. 98). The next paragraph will focus on additional sources of information. Documentation, archival records and direct observation will also be used in the collection of data for this research. Yin (2003) puts forwards that documentation can be used to 'corroborate and augment information from other sources' (p. 87). Documents like the CBNRM and HWC policy can be used to fact-check the comments from interviews. Archival records help to establish a view on the impact of HWC; numbers of incidents and what kind of incidents have happened. It is used in this research not for the primary analysis, which focuses on the interviews. Direct observations are difficult in the sense that it is nearly impossible to see the wildlife doing damage and this form of data collection is time consuming (idem, P. 92). What can be observed is the damage that has been done and how mitigation efforts are being implemented. For this research it offers some context for comments of interviewes.

Participant observations and physical artefacts are not used in this research. Doing participant observations requires a lot of time and resources to integrate into the local communities. There is a big difference between the background of the researcher and that of the local communities; preparing participant observations would require major time investment (Yin, 2003, p. 95). Collecting physical artefacts is deemed of least importance for case study research by Yin (idem, p. 96), a part from the obvious ethical and hygienic objections for collecting artefacts of HWC, it does not tell us anything on how local communities experience HWC and how conservancies changes anything about it.

#### 3.3.2 Practicalities of this research

The researcher was, during the time of the research, involved in an internship at the Namibian association of CBNRM organization (NACSO). This institute has been established to combine the knowledge and action of multiple NGOs working on CRM in Namibia: e.g. the University of Namibia (UNAM) and the Ministry of Environment and Tourism (MET). NACSO coordinates national and international efforts to help community conservancies in their work, as so it has direct access the cases relevant for this research. NACSO could be seen as the gatekeeper (Creswell, 2007) for this research. Through them this research had access to the conservancies to do interviews and observations.

The interviews have been conducted accompanied by a guide and a translator. They were staff from the conservancy that I have visited: they have the best knowledge on terrain and population. Translation is needed because the people in the conservancies that were visited

spoke Otjiherero and Damara. Because of the ruggedness of the terrain and the lack of roads and maps portraying routes to individual farmers, a guide is also necessary.

Before setting out for the interviews the guide/translator were instructed on the research. It is important to explain why the research has to be done and how. It is also important to try and avoid any disturbance in communication between the interviewer and interviewee. The guide/translator was told to try and translate everything one-on-one and without adding his own opinion etc. We agreed to discuss things that annoyed him/her or what they wanted to complement after the interview, in the car to the next interview. This was done to avoid that these irritations would be reflected in the interviews and could be misinterpreted.

Following Yin (2003) the theories that are used to explain certain events under study in a case study should be clearly linked to choices in cases (as showed above) and should be used in the collection and analysis of the data that is used in the case study. For this research the CRM-theories and concepts, combined with HWC as the 'issue' of this research provide this structure. To perform the interviews a guide (see Annex I) was used to provide some steering in the interviews. It has been structured using the earlier mentioned theory of chapter 2, making sure that each of the subjects was covered. The guide made sure that each subject was dealt with.

For each subject the relevant documents of the conservancy gave a background to the questions: following the HWC policy it was known that there were certain rules and processes for reporting and compensating damages. The ladder of participation of Arnstein (1968) made clear that it was not enough to just ask whether people were involved in participation, but that it is important to establish in what way they were involved. An example of a standard follow-up question was asking for examples of decision-making power when discussing the influence they have on decision-making.

## Chapter 4: socio-political history of Namibia and policy description

#### 4.1 Introduction

This chapter will devote attention to the political history of Namibia which has been very important for the emergence of CBNRM. The political history can be roughly divided in three phases: Germany's colonial rule, the South-African mandate and the post-independence period. These phases will be roughly described, especially where developments have been important for the CBNRM policy. This chapter is not meant as a full description of Namibia's history, but merely meant to describe the broader context of present-day CBNRM policy<sup>3</sup>.

A description of present-day Namibia will conclude the description of its history, including information and data on the status of its CBNRM program. Section 4.5 and 4.6 will introduce the two most important policies. They will be described in detail in relation to the broader history depicted in other paragraphs: the CBNRM policy (1996) and the HWC policy (2009). This description of the broader policy and political context of CBNRM will enable the following data and data-analysis to be put in the broader context of CBNRM in Namibia. Section 4.7 gives a description of the two conservancies that have been visited. Section 4.8 lastly presents a revision of the research question. The research question have to incorporate what has been put forward in this the last chapters and have to be updated.

### 4.2 Germany's colonial rule

Germany joined the world-stage of colonization rather late, leaving them with some of the least attractive lands in Africa. In the 'scramble for Africa' Germany claimed present-day Namibia, which was confirmed during the conference of Berlin. Officially the rule of Germany began on august 7, 1884. The Germans tried to apply European laws of property in the country, applying the status of 'protectorate' to present-day coastal lines of Namibia. (Dierks, 2000) In the early 20<sup>th</sup> century they discovered that these coastal areas contained many diamonds. The creation of national parks, as will be discussed later, had more to do with politics than with 'biodiversity interests' (Ramutsindela, 2004).

Jones and Weaver (2009) make clear that inequality of land distribution began under the German rule. This inequality of land distribution would later form one of the major drivers for the CBNRM policy. Many of the lands in the centre of the country were bought by white settlers from the indigenous people, forcing them to move to other areas. This affected the Namibian communities, in two ways: 'traditional social structures were demolished in order to subject Namibian people to colonial regime, and Namibians were being employed by force on white farms.' (Pellis, 2010, 51). The area north of the Red Line<sup>4</sup> was not of interest to the German colonizers, they started to create the first reserves for the indigenous people that were moved from other areas. During the first decade of the 20<sup>th</sup> century the indigenous community started to resist the Germans, resulting in multiple armed conflicts. In what is called the first genocide of the 20<sup>th</sup> century, the Germans killed approximately 75-80 % of the Herero's and 50 % of the Nama's (Gewald, 1999, 2003 in: Pellis, 2010, p. 51). After



Figure 8: ChristusKirche, built by Germany after the conflicts (1907). Own material.

 <sup>&</sup>lt;sup>3</sup> For a more complete history see e.g.: 'Chronology of Namibian history, Klaus Dierks (2000)'
<sup>4</sup> This is a line drawn on the map, enforced on the ground with fences, to limit the movement of animals in order to restrict the spread of animal diseases (e.g. foot-and-mouth disease)

the conflicts the German rule in their colony became even stricter: "a total expropriation of land, a ban on cattle raise and on traditional forms of organization was demanded by German settlers." (Katjavivi, 1988, p. 10, in: Pellis, 2010, p. 51)

The way Germany ruled their colony, especially because of the genocides, still causes disputes between the indigenous groups and Germany until this day. During the First World War, 1915, Germany's colony was taken over by Allied forces, i.e. Great Britain and South Africa. The newly established League of Nations placed the land under South African mandate. (Jones and Weaver, 2009; Dierks, 2000).

#### 4.3 South Africa's mandate over Namibia

The South African government was appointed to govern the former German colony, but they did not want to let go of it, i.e. they took over as colonizer. They re-named the country to South West Africa, essentially becoming the fifth province of South Africa at the time. The processes that were meant to improve the positions of white people that had been started by Germany would be continued and expanded by the South African government. (Jones and Weaver, 2009)

South Africa was infamous for its 'apartheid' ideology and the accompanying policies to segregate the whites and the non-whites. In rural areas this meant the creation of 'homelands', the concentration of certain (ethnic) communities in some areas (Duim et al., 2015). In Namibia this meant e.g. the removal of Ovambo people from the Etosha national park in the 1970s by the 'Odendaal commission' (Ramutsindela, 2004). This commission was put up to create a development plan for South West Africa; they intended to create 'native nations where traditional authority would receive certain rights on behalf of the state.' (Corbett and Daniels, 1996). These homelands were typically situated in the least farmable areas of the country (Jones and Weaver, 2009).

The Red Line mentioned earlier was pushed north even further during South African rule. This meant that more land could be taken by white settlers where many indigenous people lived or were already moved (Pellis, 2010). This meant that by Namibia's independence '40.8% of the land had been allocated to the black homelands as communal land, which supported a population of about 1.2 million, while 43% had been allocated under freehold title<sup>5</sup> to white commercial farmers.' (Jones and Barnes, 2006). Whites could even request a 'Permission to Occupy' where all the profits would flow back to them and the local community could only acquire menial jobs (Duim et al, 2015).

The bantu-policies, which were meant to arrange education for the poorer black communities, also created a disadvantage for the rural communities. Because the quality of the education was very low, it was difficult for the local communities to break away from the 'cycle of poverty'. This was further limited by the inequality in land distribution and other 'apartheid' policies (like restricting access to public facilities). The black inhabitants could then be used as cheap labour on white farms. (Pellis, 2010)

In 1975 the legislation for nature conservation changed in South West Africa. Important for this research is the possibility for owners of land, mostly white farmers, to better exploit the natural resources that were available on their land. This meant that they could 'farm' wildlife on their land and use them consumptive (hunting) or non-consumptive (tourists safari's). This meant that the owners had economic incentives to keep wildlife on their land. (Samuelson and Stage, 2007)

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<sup>&</sup>lt;sup>5</sup> Private ownership of land

Freehold farmers even started to work together to pool their resources and create larger wildlife areas.

During the 1980s Namibia was hit by a series of droughts that lead to a huge decline of wildlife populations. These droughts were accompanied by poaching, done by local communities and state officials. (Owen-Smith, 2010) During that time there were people who recognized that nature conservation could not be done in South West Africa without the support of local communities. These community-based approaches had potential for wildlife and local communities to co-exist, especially when local communities could receive financial benefits from their natural resources (Duim et al., 2015).

These developments, the start of community-based approaches in nature conservation and the positive consequences of the changes in nature legislation would later prove invaluable for the creation of the CBNRM policy.

#### 4.4 Independence in Namibia

Between the 1940s and 1966 there have been different groups in South West Africa that tried to get the international community to help make South West Africa independent. These attempts proved not to be sufficient, although numerous resolutions aimed at independence were brought into the general assembly of the UN. One of the most influential groups in South West Africa was the South West Africa People's Organization (SWAPO). Disappointed in the incapability of the international community to act they started its first armed liberation struggle in 1966. (Pellis, 2010)

Because of mounting pressure from the international community and because of the escalating armed struggles with different liberation groups South Africa initiated the so-called 'turnhalle'<sup>6</sup> talks. (Pellis, 2010). The result of the talks was the creation of a national assembly of elected representatives of each ethnic group. SWAPO

 Ninipode
 Outgoing

 Outgoing
 Outgoing<

Figure 9: map of Namibia (Google maps)

was not satisfied with this proposal and they continued their armed struggles until the independence of Namibia in 1990. Elections for the new Namibia have been held in 1989, in which SWAPO came out as the biggest party. In 1990 the independence was complete, a new era could begin in Namibia.

Since independence Namibia transformed from white minority apartheid rule to a parliamentary democracy (unitary semi-presidential republic<sup>7</sup>). With the creation of a new constitution Namibia was the first country in the world that incorporated environmental protection in their constitution. Some 14% of the country has been declared protected nature, including the entire Namib Desert coastal strip. This was already done by the Germans to protect the precious diamonds that were found there. The country has a population of 2.4 million people on 824,292 km<sup>2</sup>, where 47,2% is used for agricultural. (CIA, 2017)

<sup>&</sup>lt;sup>6</sup> 'Turnhalle' is the German word for sports hall. The venue of the talks still bore its German name.

<sup>&</sup>lt;sup>7</sup> A government system where an elected president functions alongside a prime minister with a cabinet

To address the effect of a long history of discriminatory policies Namibia wanted to create the same possibilities for black and coloured Namibians as white Namibians had. A range of measures were implemented as part of the Black Economic Empowerment (BEE) plans. (Duim et al., 2015; Nelson and Agrawal, 2008) The implementation of CBNRM can be seen as part of BEE on the subject of nature conservation. CBNRM is about contributing to local communities' livelihoods and essentially promote economic empowerment among black communities that have been disadvantaged by Germany and South African rule.

#### 4.5 CBNRM-policy (1996)

There are three sources from which the CBNRM as we now know it in Namibia has been formed. Firstly, there was the experience of pioneering conservationists that were working together with local communities to conserve nature. This started when the wildlife numbers were going down hard in the 1980s because of severe droughts in Namibia and an upsurge of poaching (Suich, 2010; Nelson and Agrawal, 2008). The network of experts already involved in this work would later prove a valuable asset in the formation and implementation of CBNRM. The previously mentioned experience of private land owners with the 1975 nature legislation, which granted them certain rights over wildlife would prove valuable. (Samuelson and Stage, 2007; Suich, 2010)

Secondly, Namibians had learned from experiences in other countries like Zimbabwe where a comparable program had been tried: the Communal Areas Management Program for Indigenous Resources (CAMPFIRE-program) (Matose and Watts, 2010). Not only experts in nature conservation, but also the future political leaders that were in exile in Zimbabwe during the liberation struggles saw the contributions of CAMPFIRE. These insights were coupled with broader (academic) insights coming from CRM-discussions. (Nelson and Agrawal, 2008; Cocks, 2005)

Lastly, there was a need from the local community to be better equipped in conserving their natural resources. This begun before the independence but was actively pursued by the government of Namibia after independence (Suich, 2010). This started by integrating the protection of the environment in the Namibian constitution and climaxed by designing the CBNRM policies. In 1995 the 'Wildlife management, Utilisation and tourism in communal areas' policy was approved by the Namibian government. This has been put into legislation in 1996 by amending the 1975 nature ordinance (Jones and Weaver, 2009; Duim et al, 2015; Suich, 2010).

A conservancy has to be *gazetted*<sup>8</sup> by the Ministry of Environment and Tourism. For it to be recognized it needs to present the following (MET, 1996):

- A list of members that form the conservancy committee;
- A constitution of the conservancy (which e.g. provides for the 'sustainable management and utilization of game' but also arranges who can be a member etc.); and
- The boundaries of the area encompassing the conservancy.

In starting the conservancy the will helped by multiple parties: e.g. the MET, NGOs and private partners. The CBNRM-legislation enables three ways in which conservancies can manage their natural resources and reflects the earlier mentioned CRM-processes:

- The system is rights-based which means that they receive conditional but well-defined rights over wildlife and more ambiguous rights over tourism. This relates to the CRM-process of devolution of rights to the local community.

<sup>&</sup>lt;sup>8</sup> Recognised by the minister and written into the state Gazette (sort of newspaper).

- Participation of the community is engrained in the conservancies, relating to the CRMprocess of participation. Regular meetings and extensive planning processes with participation of members are required for the conservancies.
- It is incentives-based, which means that the conservancy receives the income from activities (tourism/trophy hunting etc.) directly, they do not rely on the state. (Duim et al., 2015) This relates to the CRM process of 'contributing to livelihoods'.

Corbett and Daniels (1996) criticize the rights that conservancies receive: they claim that the policy will not be sufficient. They claim that the devolution of rights is not sufficient. The conservancy does not get the zonation right or land rights of their land. This creates problems with illegal settlements and secure (long-term) tourists' activities (e.g. a joint-venture lodge). The private partner that has to invest in the lodge wants certainty, which the conservancy can offer to up to 10 years. After ten years they have to negotiate with the relevant authorities again.

The next paragraph will go further into detail how the CBNRM program works nowadays. Figure 10 shows the conservancies, state protected areas, tourism concession areas and freehold conservancies in Namibia.



Figure 10: Conservation areas in Namibia. Source: Ministry of Environment and Tourism

#### 4.5.1. State of CBNRM in the present day

The experience on freehold land and in communal conservancies has shown that "providing land holders with the appropriate levels of decision-making authority over wildlife and the appropriate economic incentives has been a successful conservation strategy by the state." (Jones and Barnes, 2006). Wildlife numbers have increased, habitat has been secured and the economic activities have proven to be productive forms of land-use. (Idem) Figure 10 shows the current conservation area.

There are currently 82 conservancies which cover 19.7% of Namibia and are inhabited by approximately 189.000 people. The conservancies created around N\$102 million<sup>9</sup> in returns for the communities in 2015. They facilitated 5116 jobs via 184 enterprises based on natural resources in 2015. Figure 11 shows the growth in returns since the start of the CBNRM program.



Figure 11: Returns for conservancies in the period 1998-2015 Source: NACSO, 2016

CBNRM has three pillars:

- Institutional development;
- Natural resource management; and
- Business, enterprises and livelihoods.

Institutional development means the formation of the conservancy so that it is well equipped to undertake the other two activities. That means that there has to be a good conservancy management board, who knows the relevant policies and procedures. They have to be knowledgeable in how to approach the local community in their work on natural resources and the business-side of conservancies. (NACSO, 2016)

#### 4.6 HWC policy (2009)

One of the challenges to the current CBNRM program and the functioning of conservancies is the Human-Wildlife Conflict (NACSO, 2016; Treves and Karanth, 2003). In 2009, after much preparation, the Ministry of Environment and Tourism (MET) implemented the 'National Human-Wildlife Conflict management' policy. This policy describes the problems around HWC and the strategies to engage these problems. For conservancies the most important thing is that it arranges for funding from the Game Products Trust Fund<sup>10</sup> (GPTF) for Human-Wildlife Self-Reliance Scheme (HWSRS). Conservancies receive a fixed amount of money to offset the losses from HWC for certain animals. Farmers have to follow certain rules, e.g. report the incident within 24 hours and keeping the animals in a Kraal<sup>11</sup> at night. (MET, 2009)

<sup>&</sup>lt;sup>9</sup> This would be around €6.8 million

<sup>&</sup>lt;sup>10</sup> The GPTF is mandated to collect revenue from wildlife and wildlife products recovered on state land and reinvest it into wildlife conservation, communal conservation and rural development programs in Namibia.

<sup>&</sup>lt;sup>11</sup> A typical African enclosure for domesticated animals, typically made from Thorn bush.
Since 2001 conservancies monitor their natural resources and other information in the Event Book. It is used for collecting data on their wildlife, HWC and for example on rainfall. It has been devised by experts together with local communities to create a system that could be used by everyone in the field, even illiterate people<sup>12</sup>. Figure 12 shows the data that has been collected via this system since 2001.



Figure 12: Incidents of HWC in communal conservancy areas, event book data. Source: ConInfo/NACSO.

Although it seems to provide a clear picture on the rise of HWC in Namibia one should be careful to assign too much significance to it. Since 2001 the amount of conservancies has also risen, it is not mandatory to report on incidents and wildlife numbers have also increased a lot (Jones and Barnes, 2006).

The causes of HWC are variable but it is certain that activities of humans are increasingly taking place in the same area as where wildlife resides (Treves and Karanth, 2003). The conservancies can pay their members to off-set some of the losses from HWC, but there are also ways to mitigate the HWC. Enclosures for animals can be made stronger, water facilities can be made Elephant-proof and land zonation can be applied. The problem with the latter is that conservancies can make land use <u>plans</u> but not land-use <u>rules</u> which can be enforced. (Corbett and Daniels, 1996; Nyhus, 2005; Duim et al. 2015)

Many conservancies have such land use plans, which can assign wildlife/farming/tourism areas, but nothing stops animals or humans to use it differently. Recent droughts also cause the wildlife to go into farming areas and to kill many animals. Creating barriers for wildlife, like fencing, also contradicts the targets of CBNRM policy: to create an increasing area where wildlife can roam free.

<sup>&</sup>lt;sup>12</sup> For more information see: Stuart-Hill, G. et al. (2005): The event book system: a community-based natural resource monitoring system from Namibia. *Biodiversity and conservation*. 14: 2611-2631

Under the HWSRS the following off sets are being paid to farmers (MET, 2009):

Animal	N\$
Cattle	1500
Goat	200
Sheep	250
horse	500
donkey	250
Dog	0
Chicken	0
Human	5000
Pig	250

The payments are purposely not equal to the real value of the animals, the MET states clearly in their policy that the state cannot be held responsible for damages from wild animals (MET, 2009). The payments for human losses are meant to cover the costs of a funeral, it is not meant to reflect the value of a human life (idem). The conservancies can be allowed to take out certain 'problem animals' which means that they have to prove to the MET that there are certain wildlife that cause problems to humans. (Idem)

# 4.7 Description research areas

Both areas are located in the arid North-west of Namibia, in the region Kunene. The following paragraphs give background information on both conservancies.

# 4.7.1. #Khoadi-//Hôas



Figure 13: map of #Khoadi //Hôas. Source: NACSO

#Khoadi-//Hôas<sup>13</sup> means 'Elephant corner' in Khoekhoegowab, the language spoken by the Damara-Nama people living in #Khoadi-//Hôas. In 1990 the Grootberg Farmers' Union was formed which became one of the founding forces behind the conservancy. It was one of the first four communal conservancies in Namibia, registering in 1998. The local farmers saw the need for an integrated approach for resource management, which should help local farmers and the protection of nature. (NACSO, 2016/2015a)

#Khoadi-//Hôas covers approximately 3,364 square kilometres and a population of around 3,200 people (of which 2005 are members). In 2005 the conservancy opened the Grootberg lodge which is the first lodge to be fully operated

by community members, attributing to their capacity building (Taye, 2006). They also operate the Hoada community campsite and co-manage the Hobatere lodge (together with Ehi Rovipuka). The conservancy creates employment for 127 people, by employing them for the

conservancy or via the different lodges. The area where the current conservancy is located was part of the 'homelands' plan, meant for the Damara-Nama people.

Lion, Cheetah and Hyena share the top-three of being the most troublesome animals in the conservancy (NACSO 2015a). In 2015 there were 150 incidents between wildlife and livestock, there was one incident reported for crops. It had no incidents for the 'other' category, in the previous two years they reported between 30-50 incidents. There is no explanation for the decrease of this figure. (Figures from NACSO/ConInfo)



Figure 14: Figures HWC #Khoadi //Hôas. Source NACSO/ConInfo

<sup>&</sup>lt;sup>13</sup> The hashtag and the slash refer to different 'clicks' coming from the Khoekhoegowab language

# 4.7.2. Ehi-Rovipuka

Ehi Rovipuka means 'the place with many animals' in Otjiherero, the language that is being



Figure 15: map of Ehi Rovipuka. Source: NACSO

spoken by the majority of its inhabitants (the Herero). It was registered as a conservancy in 2001. The conservancy has a characteristic clock-shape, with its main village somewhat in the middle of it: Otjokavere. This is also where the conservancy office resides. On the east side it borders the Etosha national park, to the south it shares the Hobatere lodge with #Khoadi-//Hôas. As is shown in the previous chapter the conservancy generates most income from trophy hunting. (NACSO, 2016)

There are approximately 2500 inhabitants on 1980 km<sup>2</sup>, the conservancy has 2000 members. Membership is open on a voluntary basis to all adults of 18 years old or older who have lived in the conservancy for at least 3 years (Ehi Rovipuka, 2000 in Hoole, 2008, p. 147; NACSO, 2015b)). The inhabitants rely on subsistence farming for their livelihoods, mainly cattle or other domesticated animals (goat/chicken/sheep) and some small-scale agriculture is being done. The last few years there has not been much rain (NACSO, 2016) so during the visit of the conservancy the gardens were empty and dry. This is reflected in the figures of HWC for the conservancy, as is displayed in the Table below.

The history of Ehi Rovipuka has been marked by the colonial presence of Germans, who began displacing people, murdering Herero's and even forbidding cattle breeding and keeping. The Germans also began the proclamation of nature reserves: it created nature reserve no 2, which contained the present day Etosha National park. During the South African rule the border between Etosha national park and its surroundings was fenced and entrance into the park was prohibited for local communities. (Hoole, 2008) HWC in Ehi-Rovipuka (2015)

Figure 16 gives an oversight of the HWC that occurs in Ehi Rovipuka. 'Other damages' refers to infrastructural damages like elephants damaging water points or houses. In 2015 they shot two problem-animals: a Lion and a Cheetah. In earlier years the amount of damages to gardens was more extensive. Hyenas have caused the most incidents during the last three years, followed by lion and elephants. (NACSO, 2015b)



*Figure 16: HWC in Ehi-Rovipuka in 2015. Source: NACSO/ConInfo* 

# 4.8 Revision research questions

A research is an iterative process in which new knowledge produces new insights. The presentation and production of the theoretical lens and the descriptions of policy and history in this chapter ask for a revision of the research question. The first question of the research, the broader question on what CBNRM exactly constituted has been dealt with in this chapter. The theoretical lens provides us with a more precise formation of the research questions. The sub questions have been altered to incorporate the new insights and knowledge, as can been seen below.

- Does mitigation in conservancies change the views of local communities on wildlife?
- Does compensation in conservancies change the views of local communities on wildlife?
- Does the creation of benefits in conservancies change the views of local communities on wildlife?
- Does the participation of members in conservancies change the views of local communities on wildlife?

The goal with these new questions is to first focus on all the practices of the conservancy in isolation. How do they work and how do they influence the views of local communities. In the main question all the practices and frames will be taken together and a more holistic answer to what forms the attitudes of local communities will be provided.

# 5. Analysis

This chapter will deal with the analysis of the interviews that have been performed with local community members in the two visited conservancies. The interview guide that has been used followed the concepts outlined in chapter two and three, the analysis will describe every concept in the findings. This chapter will start with an introduction to the analysis in which some of the practical difficulties of doing this research will be elaborated on. Secondly there is an overview of the concepts and theories that will be used in the chapter.

Before taking off to the concepts there is a short description of the interviewees in both conservancies. Each concept will be introduced focusing on the reason for using this concept. It will be related to the questions and the goal of this research. After the introduction the findings in the different conservancies will be described, enriched with pictures and quotes wherever possible and appropriate.

Every concept will be concluded by a comparison between the two conservancies. These similarities and differences will be explained, where possible. Before starting the new concept a preliminary conclusion will be given. These conclusions will help answer the main and sub questions of this research in the next chapter.

# 5.1 Introduction

The conservancies have been visited during a period of two weeks. In both the management agreed to me visiting their conservancies and they promised that I would be helped by someone from the conservancy with navigating and translating. Navigation is quite difficult in these areas: there are very few official roads, mainly some 4x4 tracks in the sand.

Translation was also important. Only some of the respondents spoke English well enough for me to do the interview in English. Translation is always difficult in research as it does not allow you to engage with the information at first hand, but always through someone else. I discussed this with both translators when I explained what the study was etc. and tried to adjust for it during the interviews. It is also something that played a role in the analysis of the interviews: some words or phrases were repeated. I assume this is caused by using the same translator for all the interviews in a conservancy and I did not award too much value to the usage of the same words in the interviews.

The interviews started each time with some general information (name, age, occupation and membership) and I assigned to them an interview number: KH for #Khoadi-//Hôas and EH for Ehi Rovipuka. I always started by questioning about the last incident of HWC they endured and from there went through all the other subjects of the interview. Sometimes the interview led to different questions, for example when the respondent worked for the conservancy: how did that influence how he viewed wildlife.

The interviews were recorded with the phone of the researcher using the app 'Cogi'. The plan was to do 20 interviews per conservancy, I ended up doing 21 to be sure to be ahead of any technical errors. Despite the precaution I ended up losing 4 interviews in #Khoadi-//Hôas because of a problem in getting the interviews from the phone. It seemed like the interviews were uploaded fine but when I tried to open them in a later stage (I checked the first few files on errors) they were empty files. In the analysis there are 17 interviews for #Khoadi-//Hôas and 21 for Ehi Rovipuka.

The goal of this research is to investigate the relation between HWC and views on wildlife, mitigated by different practices of conservancies. The following subjects have been used in the interviews: conflicts, compensation and mitigation, benefits, participation and views on wildlife. All these subjects could play a role in the effect HWC on the way local communities view wildlife. In the subject of conflicts it is important to make clear what kind of conflicts were in both conservancies and what kind of impact that they had.

Compensation and mitigation are two strategies of conservancies to counter the negative influence of HWC. On the one side they can make payments to offset the damages, on which the rules and procedures from the HWC policy apply. Mitigation activities try to prevent conflicts occur. From the interviews it became clear that the rules and procedures that are prescribed by the HWC policy are very important in the effectiveness of compensation.

Benefit distribution and participation of members in the conservancies are practices of the conservancy that can have a big impact on how people view wildlife in the conservancy. Benefits can address the economic impact of HWC, especially in these areas. Participation in the conservancy can give members a sense of ownership and responsibility towards the natural resources in the conservancy.

Last, but not least, the view of the interviewees on the wildlife in their area will be discussed. How do they think about (non) damaging wildlife and what consequences it has? And what do the practices of the conservancy change, or not change, about that. The effect of the different practices will be evaluated. The chapter will end with a preliminary conclusion which will be continued in the next chapter.

#### 5.2 The conservancies

#### #Khoadi-//Hôas



Figure 17: location of the interviews.

Beginning the interviews in #Khoadi-//Hôas I discussed with the translator that I wanted to spread the interviews evenly over the conservancy. We succeeded in this: the maps shows the dispersion of the interviews. In the bottom-left corner one can see the brownish color of the Entendeka-plateau, this area is zoned as a wildlife-exclusive zone. Therefore, that was not where we should look for the farmers as is shown.

Of the 17 interviews two respondents were not members of the conservancy. One was a part-time farmer but he did receive some of the benefits from the conservancy (compensation). The other was in the process of becoming a member. Because of those circumstances it was decided to include them in the analysis. Every respondent was a farmer, some of

them were part-time farmers. Three of them were also employed by the conservancy and one was also employed as an electrician in Windhoek.

#### Ehi Rovipuka



Figure 18: location of the interviews.

Just as in #Khoadi-//Hôas, I wanted to have a spread of the interviews over the conservancy. The terrain in Ehi Rovipuka conservancy is very rugged and driving was not really easy. There are also places where no farmers live. As the map shows the spread as somewhat been achieved. The yellow dot in the middle is the office of the conservancy. In the east the conservancy borders with Etosha national park and this would be very important in the answers that would be given in the interviews.

There have been 21 interviews, 1 respondent did not know whether he was already a member (he had applied). All of the respondents were farmers, some were part time farmers. The part time farmers all had a job at the conservancy.

# 5.3 Conflicts

#### **General** information

The questions about the HWC have been used as an introduction to the interview: respondents were asked to explain some details about the last incident of HWC that they endured. This created a clear subject for the interview: respondents often referred back to the incident and the animals/wildlife involved. The subject itself was not theoretically grounded as it was not an explanatory concept. However, it was important to lay the groundwork for the rest of the subjects.

There were three things that were important in the explanations of the incidents: which animals were attacked, by which wildlife and when it happened. Farmers in these areas keep a lot of different animals: cattle, chickens, goats, sheep and dogs. In both conservancies they report that all of these animals get attacked, but most of all the goats and cattle: they are the animals that go out without escort and sometimes also at night. The attacking wildlife differs, as will be explained below. The time of the attack is also interesting: it happens mostly at night and in the field for both conservancies. This creates difficulties for reporting the incident and claiming payments for the damages.

#### Conflicts in #Khoadi-//Hôas

Many of the conflicts in the conservancy are caused by elephants and predators. Only respondent KH 7 could not report on an incident of HWC: he was just part-time farmer and he did not let his animals go out of the village. He reported that many other farmers did and that it resulted in incidents between animals and wildlife<sup>14</sup>. However, he worked for the traditional authority on the subject of HWC and so proved a useful respondent.

Respondent KH 17 notes that he especially hates the Cheetah: "one thing I don't like with the Cheetahs is they will come, kill about 4-5 goats. Without eating anything, they just kill it. But now I don't understand why they kill the goats, because they don't eat them.". Respondent KH 1

<sup>&</sup>lt;sup>14</sup> When speaking of 'animals' it means domesticated animals and when speaking about wildlife it means wild animals.

reported a massacre of 19 goats in 1 night by a Leopard or a Cheetah<sup>15</sup> which of course had a huge impact.

There are two places where attacks on animals can take place: in the "kraal" or in the field. Most animals go in the field unattended and that is where the most losses are (13/17 respondents). Usually the kraals are self-made and the animals are supposed to get back into the kraal at night, but farmers do not always do that and that is when the most incidents occur (except for KH 15, 16 and 21).

Respondent KH 8 reflects on the consequences of conflicts between Wildlife and animals: "The consequences that are arising from that, it has an economic impact. Because we are trying to sustain ourselves from this animals that we are keeping." This is reflected in multiple other interviews (KH 10 and 1). As most of the farmers in this area are dependent on their livestock the negative potential of conflicts is huge.

Elephants are abundant in #Khoadi-//Hôas, this is something we also see in the answers concerning the conflicts. Almost every respondent claims to have endured some form of damage from elephants: they are drinking from the dam, destroying the dam and/or pulling out the pipes and pumps where the local people get their water from. People living in this region rely solely on



Figure 19: damage done by Elephants, near the house of KH 19. Source: own material.

these dams so any problems with them have huge impacts. Figure 19 shows what kind of damage Elephants can do. Respondent KH 19 and KH 7 also report being chased and almost hurt by elephants. Respondent KH 19 reports that he had been chased by an elephant the week before the interview: he had also hurt the respondent. KH 7 describes an attack of elephants on his donkey cart, coming back to the farm they are chased by an elephant and they luckily could escape without being hurt.

#### Conflicts in Ehi Rovipuka

All of the respondents have endured some kind of conflict that they could recall. Eight respondents stated that their animals had been attacked by Lions (EH 1-8), respondents EH 9 till 19 and 21 reported attacks of other predators (Hyena, Jackal mostly). The animals that had been

<sup>&</sup>lt;sup>15</sup> Being both cat-like and of roughly the same size it is difficult to discern between the two.

attacked were mostly goat and cattle. The attacks took place mostly outside of the kraal, when the animals were alone in the field.

Respondent EH 2 tells a terrible story of HWC. He had some 15 cattle in the vicinity of his farm and in a few days the Lions had come to his home to kill all the cattle that he had. He also described that he had great trouble with reporting the incident:

"The, maybe the conservancy, the first my cattle was killed by lion and I was there to the office. To help the report, to come here and check. To take the picture. To taking my naam [name], my names and surnames. To take to the office there. And from there up to now, nothing."

This illustrates the economic impact of HWC, the gentleman describes that he has lost all his cattle and that he now has to try and make a living of something else. But there is nothing in the area. EH 20 also refers to the large impact of HWC and that the damages make her poor.

EH 20 was the only respondent that reported damage to her garden. Gardens are more common in the Ehi Rovipuka conservancy but by the time the interviews were held they had been dry for at least a year. She reported damage by an elephant and a porcupine, they destroyed her garden. EH 7, 14 and 15 also reported damages from the elephants: all of them damages to the water supply. EH 14 also reports other damages:

Elephant I hate it, killing our cattle with its horns. Eating our gardens, killing people and breaking our water tanks. These trees, it was also done by Elephant. You see that other top [broken tops of trees] over there, so I hate it also.

#### **Conclusion**

There are two things that stand out in this subject: the similarities in the places and times of the attack and the effect that it has on the respondents. First the places and times: a majority of the incidents occur in the field and during the night. The animals go out into the field on their own and should return at dusk to be protected in the kraal. When they do not return, they are very vulnerable to attacking wildlife. Another similarity is the fear for elephants because of their destructiveness ('you cannot do anything about it') and that they tend to come close to the houses of people in the area.

The incidents have a huge impact on the respondents: they usually detest the animals that do damage. The farmers are depending on the animals for their survival and every incident with it creates a direct (economic) problem. They cannot eat or they have to invest the little money that they have into new animals. The community members are also highly dependent on the water dams that have been created in this region: when elephants destroy these sources this has disastrous effects on views on Elephants.

#### 5.4 Compensation and mitigation

#### <u>Theory</u>

Compensation is the payments that are done by the conservancy under the rules of the HWC policy and the HWSRS to offset the damages that are done by the animals. The logic of paying for the damages that are done is that the way people think about the incidents will be less negative. That is why it is viewed as one of the practices of the conservancy to change the negative influence of HWC on view on wildlife.

Chapter 4 already mentioned that to be eligible for offset payments certain rules and procedures have to be followed. Every report is being reviewed by a committee that has to use a set of rules. There are two distinct problems with these rules: Conditions based on place and time of the incident and reporting within 24 hours.

In the Human Wildlife Self-Reliant System there are fixed amounts of payments for different animals. These fixed amounts do not take into account the differences between individual animals and are also about one-third of the value of the animals. Respondents for both conservancies also mention difficulties in reporting the incidents.

Mitigation entails the efforts to try and prevent the attacks from happening: enforcing kraals, supplying guard dogs and making water dams Elephant proof (etc.). When HWC can be prevented this would make it easier for local communities to live together with the wildlife that is potentially damaging. Mitigation provides a structural solution to the problem of HWC, where compensation is a temporary solution. Only the instances of mitigation that are mentioned in the interviews will be used in the analysis.

# Findings #Khoadi-//Hôas

# Rules for the compensation

# Conditions based on place and time of the incident

Respondents make clear that as the attacks usually happen in the field, you notice the incident when you do not see your animals coming back from grazing (e.g. KH 12). From the policy it follows that when your animals get attacked in the night and they are not in a kraal, that the farmer is not eligible for payments.

Respondent KH 5 tells the story of when he tried to go to the meetings once: because he had to go to a meeting of the conservancy he had put his donkey on a leash. He wanted to use the donkey in a donkey cart to go to the meeting and to be sure that he could get there in time he secured the donkey at home. He could not put it in his kraal because of other animals. The next day the donkey was gone and because it happened during the night, the conservancy could not pay him.

#### Reporting within 24 hours

The policy clearly states that farmers have to report the incidents of HWC within 24 hours of the conflict. Although it is unclear to me how they establish this time frame, some of the respondents state they do not receive compensation because of this rule. KH 5 describes it as follows:

Because I couldn't do anything, because the conservancy they say that we have to report before 24 hours. But before that time, when I was called, the guys were not even having credit when the accident happened. They got me after a day and they told me about the accident that happened.

So he was not there when the attack happened and the people watching his cattle did not have credit on their phone to ring him or the conservancy to tell about the incident. Reception for cellphones is a problem in this area. Also a lot of people do not have immediate access to transport, which makes reporting to the conservancy extra difficult.

Because of these two conditions (and other factors) to the payments of compensation a lot of respondents do not receive compensation from incidents of HWC. Only respondent KH2, 3, 6 8 and 15 stated to have received compensation on the incidents that they tell about. Respondent KH 5 and 7 said that they were still waiting for payments.

# Compensation

#### Amount

Respondent KH 5 makes clear that the individual features of animals are not taken into account of the payments: He had a pregnant goat which was attacked. In that incident he does not only lose 1 goat, but essentially three goats (she was pregnant with twins). When he would receive compensation he would get the value of 1/3 goat although he lost three goats.

All the respondents that were mentioned earlier who have received compensation stated that they did not think that the amount that is being paid is enough: "He is not, when he is going to buy another animal, goat, then he can't get a goat for 200 dollar." (KH 7). Some of the respondents that did not receive compensation also stated that they think that the payment for the animals is not enough (KH 1 and 7), that it should equal the value of the animal (KH 1, 4, 6, 7, 8, 12 and 13) or that it would also be a good idea to give another animal as compensation (KH 1, 10, 12 and 13).

# Communication

Because some of the respondents do not have the opportunity to contact the conservancy, they have to wait for the Game Guards to come to their area (KH 5, 8 and 12). Respondent 8 also states that sometimes the Game Guard wants to come to write the report, but they do not have transport available for the game guard. Cell phone reception and problems with phone credit also lead to not reporting or late reporting (KH5).

# Effect of compensation

Asking the respondents how they think about the compensation was interesting: as is made clear they would like the compensation to equal the value of the animals and they have problems with the procedures around the duty to report and the payments. These problems can even lead to the situation where people do feel the 'priority to report the incidents' (KH 8).

The potential to change views through proper compensation is acknowledged by respondent KH 10 and 11. They outline that HWC is in essence an economic dispute where wildlife damage their property. When they are reimbursed for these damages, they would be able to 'like' the wildlife more. We will later return to this when discussing the views on wildlife.

#### Mitigation

During the interviews three mitigation efforts were discovered: guard dogs, improved kraals and land zonation. The conservancy runs a project together with the farmers Union of Grootberg to supply guard dogs to the farmers living in the region. As people do not always have the means to provide for herding, they go with the animals themselves (KH 2). And sometimes with dogs that accompany the animals into the field can reduce HWC. Respondent KH 11 explains that she has some guard dogs that protect the goats from attacks, she explains that it helps to protect the goats and especially the small ones. Respondent KH 21 explained that he was the shepherd for the animals of his mother, going into the field with them.

Every respondent had his own kraal to help shelter the animals and protect from wildlife during the night. Usually these were self-made and of low quality. The fences would usually be 1-1,5 meters high and it was not difficult for the predators to get in and kill the animals. Respondent KH 20 had their animals in a steel, reinforced kraal that was built by the conservancy with money from the Millennium Challenge Account (MCA<sup>16</sup>). She said that since the MCA kraal was built

<sup>&</sup>lt;sup>16</sup> This is a fund of the United States of America

(2014) there have been no attacks on the animals inside of it. Respondent EH 19 was helped by the organization Africat to enforce their kraal, which satisfied him very much.



Figure 20: MCA kraal near the home of respondent 20. Source: own material

The HWC policy of Namibia made it possible for land zonation to be a part of the mitigation strategies of conservancies. By zoning different parts of the conservancy for different uses the HWC could be reduced. #Khoadi-//Hôas has 4 different land uses: Farming, mixed farming/wildlife, trophy hunting and exclusive wildlife. The problem with this land zonation is that, as is previously mentioned, it cannot be enforced by the conservancy. It cannot stop people from illegally settling in areas, but the respondents also state that because of the drought animals and wildlife are forced to go into areas where they are not 'supposed' to be (KH 6, 10, 19 and 17). The lack of fencing in conservancy areas is positive for migrating wildlife but when drought increasingly forces wildlife and animals/humans to use the same space it increases HWC.

Respondent KH 17 has, with help from the government, managed to re-build his water dam. He said that first he had built his dam high so the elephant could not reach in and drink water. But, being very strong and heavy animals, the elephants would break the dam to the point that they could reach in and drink the water. It is clear that it is sometimes better to accommodate the elephants through mitigation than to try and stop the HWC from happening. It is the other way around with the predators. There it seems useful to try and stop them from having access to the animals.

#### Findings Ehi Rovipuka

#### **Rules for compensation**

#### Place and time of the attack

EH 4 and 13 report why they do not receive payments: their animals were killed during the night and outside the kraal. The translator made clear that these conditions also applied to some of the other respondents, but that communication about the report is not always clear.



Figure 21: the remains of a calf, the result of a lion attack in the field. Own material

#### Report within 24 hours

EH 5 describes his problems with this rule as follows:

The rules of the Ehi Rovipuka conservancy, or the GRN<sup>17</sup>, they used to say one two days or let me say once you go for a third day you go into the bush and you saw your carcass. It is your goat or your what. Although you report it, they just come write. But nothing will help you. Because you must report within 24 hours, because they say that you must look after your cattle.

Because of these two conditions (and other factors) to the payments of compensation a lot of respondents did not receive compensation from incidents of HWC. Only respondent EH 5, 12 and 14 stated to have received compensation on the incidents that they tell about. Respondent EH 6 and 10 said that they were still waiting for payments.

The translator describes in the interview with EH 10: "He is, it is still under way. To be paid. As I told you already there is no money for all the people, that is why. There are too many, if it happened to come." This makes clear there are also problems at the conservancy to pay the offset payments.

#### Compensation

#### Amount

All the earlier mentioned respondents that received compensation stated that they did not think that the amount that is being paid is enough. EH 4: "There is difference, it can be but the thing is: the money that we are compensated. If there is 3 cattle killed and when there is compensation comes, it can nearly even buy 1 cattle."

Several respondents said that they thought the compensation should equal the value of the lost animals (EH 1, 4, 5 and 18). When asked if they would accept a comparable animal to the one that they lost, respondents EH 5, 10, 13 and 17 said that they would accept that. Respondent EH

<sup>&</sup>lt;sup>17</sup> GRN: Government of the Republic of Namibia. He refers to the rules following the HWC policy (2009)

17 even likes that idea even more, as he says that there is the possibility of not spending the compensation money on new animals but something else.

#### Communication

Communicating with each other can be difficult in places where cell phone reception is bad or not in place. The distances that have to be covered to reach the conservancy office call for transport, which a lot of people cannot afford. EH 9 describes that he has not seen any Game guards in his area. This makes it difficult for members to report incidents to the conservancy within 24 hours. Even if they manage to report incidents within 24 hours, sometimes the conservancy is not able to come and write the report (EH 3).

12 respondents claimed that they reported their incident to the conservancy (EH 2, 3, 4, 6, 7, 8, 11, 12, 16, 18, 19 and 21). Some of the respondent did not report it because they knew their report would fail or they were not able to report because of the above reasons. Of those 12 that did report, seven of them said that they never heard something about the report (EH, 2, 3, 4, 7, 16, 19, and 21). They did not know whether they could receive compensation and why. During the conversation with EH 1 the following has been said about it:

Maybe they must let the farmer know: any damage during night time, you are failing. But any damage in daytime, after hours, that money is yours. But I don't think that those people make them understand.

The danger in this confusion and lack of proper communication about reports and compensation is that people may stop reporting on incidents (EH 9 and 20). The information that is collected via these reports is very important for the conservancy and handling the report to the satisfaction of the members is important for the way the members view the conservancy and consequently also how they think about wildlife. Allowing HWC to create a separation between the conservation goals of the conservancy and livelihoods of the members will be negative for the conservancy as a whole.

# Effect of compensation

The potential effect of compensation can be really big; EH 4, 5, 10, 11, 12, 13, 16, 17, 18 and 20 all acknowledge that compensation of the HWC could improve the way they view wildlife. Some of those respondents also acknowledge that the reason why they accept damaging wildlife is the fact they have received some compensation in the past. EH 12 describes it as follows: *"The one that I did get something: I am proud of it. The ones that I did not get anything, I am still not okay."* 

EH 10 said something very interesting in discussion the influence of compensation on views on wildlife:

He is feeling a bit not good, because if this happens to your wife I do not think you would feel okay. That is why is feeling. And from there he is also feeling a bit okay, our conservancy always wants to pay our people things. But we are a lot, we do not have money in our conservancy.

The amount of money available for compensating HWC is limited and there are a lot of incidents that require compensating. As EH 1 put it: "He was one of the lion poachers. Because once they damage your things, it has no use to report it. Only a bullet.". The danger of not addressing HWC properly is that people will look for other 'solutions'. In the discussion surrounding views upon wildlife we will come back to this.

#### Mitigation

The first settlement that was visited was nearby the fence with Etosha. Although there is a fence, that does not stop predators and Elephants coming to the other side of the fence. In that

settlement they had an enforced kraal, similar to the one in #Khoadi-//Hôas. It was built by the government and Africat. EH 1 tells the story of lions just walking through the village and creating dangerous situations. The need for a reinforced kraal was dire here and they are very grateful for it.

However, although it was a sturdy kraal, lions still managed to endanger the cattle that was inside it. My translator and respondent EH 1 explain to me that the lions would urinate on their tails and throw their urine inside the kraal. The animals would panic and break out of the kraal. That was the only incident that occurred after the installation of the kraal. When used properly such a kraal has the potential to stop HWC from occurring, and in doing so eliminating the negative effects that is has on the views on wildlife of local communities.

# **Conclusion**

The problems with the rules for offset payments are the same in both conservancies. The conservancies follow the same set of rules and the farmers have the same breeding practices. The reason why there are rules is clear: the government considers that the farmers have a certain amount of responsibility over their animals. But the reasoning of the policy and the practices of the farmers do not match. To make matters worse: the drought creates less grazing for the animals and forces them to go further away from safety and creates more conflicts between animals and wildlife.

The amount that is being paid to offset the damages resulting from HWC is also too low in view of the respondents. The amount is deliberately kept low because the government does not see the damages from wildlife as their responsibility, as they do not see the wildlife as their property. It creates a situation where local communities are not allowed to minimize the wildlife, as they are protected under government law, but they are also not eligible to higher payments to offset damages under the HWC policy. The conservancy could raise the amount of the payments but they would have to finance that on their own, which is not possible.

Most of the respondents do not even want payments as it does not replace their animal, they just do not want their animal killed. Some of the respondents stated that their relationship with the animals is a very close one. Respondents reacted positively on the idea of replacing the killed animal with a new animal. This requires the conservancy to have a stock of animals to replace the killed animals. This is currently not done in the visited conservancies, but it could be a way to avoid high offset payments but also lessen the negative influence of attacks on the way people view wildlife.

Mitigation practices are mostly found in the #Khoadi-//Hôas conservancy where it proves to be highly effective. Especially the enforced kraal that makes sure that the animals within cannot be attacked by predators. The problem is that it costs a lot of money (it was externally financed) and that there are no funds available within the conservancy to create such kraals in the whole conservancy. The stories of the respondents make clear that it is very difficult to completely prevent wildlife from damaging their property. However, mitigation provides a more structural solution to the problem than offsetting the damage via payments. It could even be that on the long term it costs less money to mitigate the damage than compensate the damage.

# 5.5 Benefits

#### <u>Theory</u>

Benefit distribution has the possibility of raising the impact of the conservancy on individuals which can lead to more positive views on wildlife and ownership over the wildlife. Direct benefits, like salary, have the largest potential as it is also the largest sum of benefits. Indirect benefits like meat or diesel also have some impact, but much smaller than income. The indirect benefits have a bigger effect community-wide, as more people are affected.

#### Findings #Khoadi-//Hôas

#### **Direct benefits**

Respondents KH 6 and 11 receive direct benefits from work that they do for the conservancy, although it is not a regular job. KH 6 says that she gets some bread for doing some work for the conservancy and KH 11 gets money from helping the conservancy with construction. Respondent KH 21 says that he has been employed by the Hobatere lodge. For KH 21 having that job meant a lot. The salary and the possibilities to learn, are very valuable to him and he is very grateful for that and very positive when talking about the conservancy.

KH 6 states that because she receives the benefits help her think less negative about the lions that attack her animals. The respondent says: "He cannot say good but he also cannot say it is bad. There are two ways.".

KH 1 had some very interesting remarks on the subject of direct benefits. He was himself employed as a (part time) tour guide in Etosha, which meant two things for him in relation to HWC. First the extra income made it possible for him to better cope with the impact of HWC. By diversifying the income for a person it makes him/her less vulnerable when of the income sources gets affected. This is also something that conservancies themselves pursue.

Secondly, he claims that because of the education and experience that he gains from working as a tour guide makes it easier for him to live together with wildlife. This is not a tangible benefit, but it is very important for how people view wildlife. He said:

Yeah, it affects but as I have some little training about this wildlife like if they came closer very to you, you have to tame yourself or calm yourself. And blablabla. That is compared me to the other person. That person will get easy angry and kill that animal, but I will maybe say it is okay, let us see what he is doing.

There are multiple links between how he thinks about wildlife and the conservancy and his job as a tour operator. Further on in the conversation he lists a couple of activities that he thinks the conservancy should do to expand their touristic activities. He also thinks that other people can gain by learning more about the wildlife that they are living with. Respondent KH 5 also thinks that better knowledge on wildlife could help in being a better farmer.

#### **Indirect benefits**

The indirect benefits that are mentioned by respondents are: diesel, meat, family benefits and leagues. Meat and diesel are the most common ones mentioned by respondents. Members of the conservancy can apply for 10 liters of diesel when an elephant drinks water from their dam. This helps to limit the impact of elephants drinking water. The meat that the conservancy distributes comes from the hunting quotas, either for own use hunting or trophy hunting.



Although respondents claim to have received the meat benefits (KH 2, 9, 13, 14 and 17), they also make clear that the meat distribution is highly irregular and not much. The hunting quotas that the conservancy receives from MET are not sufficient to supply all the members with meat.

Figure 22: meat distribution in #Khoadi //Hôas. Source: Lorna Dax

In Namibia it is common to share your income with your family, this is also the case with respondent KH 8. The respondent mentioned the high unemployment rate in the area and that when someone has employment they "can see somehow it trickles down". The league system is very new in the conservancy: they do not want to disperse money directly to individuals so they want to give 10.000 Namibian dollars to smaller units in the conservancy. Respondent KH 5 would like to make water points with the money and KH 13 says that his league bought pots and chairs for when there are funerals in the area.

Respondent KH 8 is a very active member of the conservancy. He says: "Because maybe I am always around and I am asking, asking 'what is going on?' or 'when is this and this going to happen'. Ja.". After that he says that a lot of people do not approach the conservancy actively, but that he thinks that an active approach also leads to more benefits. This will be discussed further in the next paragraph.

#### Findings Ehi Rovipuka

#### **Direct benefits**

Two respondents worked for Africat (EH 1 and 10) and two worked for the conservancy (EH 5 and 6). Africat is an organization that works in this area for the protection of cats. The two respondents that worked for Africat were specially selected by Africat because they were known as the biggest poachers of their settlements. That is a strategy that has proven its value in the experiments with communal conservation: the poachers have the local knowledge that is needed for protection of animals.

EH 1 describes that he mostly did the poaching out of revenge for the damage that wildlife did towards his animals or those of someone else. EH 10 describes that he poached out of hunger, but nowadays refrains from it because wildlife now has more value for him alive then dead. EH 10:

He is saying that he once he refuses to kill animals, they are looking at all the tourists coming here with all their big cameras. Photographing those animals and those hunting guides and PH is coming, photographing. That is why about those things: just leave it men.

EH 1 describes that before the lion would rob him from his property by attacking his animals but they now "bring money into my pockets" and he sees no reason to kill them. Not only deriving

benefits from the jobs, all four also acknowledge that the fact that they learn something about the wildlife also helps them to accept and understand wildlife (EH 6).

The two respondents that are employed by the conservancy both work in the hunting camp. This is where the Professional Hunter (PH) comes with the guests that pay a lot of money to hunt in this area. EH 5 is skinner and EH 6 is a tracker. Both are very grateful for the labor opportunity and also describe that it creates for them an incentive to protect the wildlife, or at least accept their downsides more as they are also both farmers with animals.

#### **Indirect benefits**

The indirect benefits that are described by the respondents are diesel, meat and family benefits. Diesel is being handed out to make up for the water that elephants have drank from the water points (EH 15). EH 15 also describes that the conservancy sometimes help them to repair the water points when it has been damaged.

EH 11, 12, 13, 18, 20 and 21 all report that they have received meat. All the others did not receive meat from the distribution. While (trophy) hunting provides for a lot of benefits for the local community, the same applies as for the other conservancy: there are a lot of people and the supply of meat is not that big. Family benefits were mentioned by EH 6: he shares his income with family members and the meat that he helps shoot also goes to the community and his family.

#### **Conclusion**

Benefits do really have the ability to let people accept a certain amount of HWC, which has been shown for both conservancies. The problem is that there are a lot of people and there is just a limited amount of benefits to be distributed. #Khoadi-//Hôas has more members, but also a lot more money to use for the distribution of benefits. This is done in that conservancy by instigating the Leagues-project, but it not fully operational in every league and the benefits have been low until now

The possibility of receiving a direct benefit is higher in #Khoadi-//Hôas, because of employment in the conservancy or in tourism. The effect on individuals is the same: they value wildlife more and they learn more about wildlife, which also increases the acceptance of certain wildlife or teaches how to cope with wildlife better. As the plans are to create more employment in the Ehi Rovipuka conservancy, the acceptance of damaging wildlife should increase.

The respondents in the Ehi Rovipuka conservancy related a lot of benefits to trophy hunting, saying that wildlife should be conserved for trophy hunting or claiming that trophy hunting creates the benefits that conservancy members receive. This is probably caused by the fact that the conservancy generates a large portion of its money from trophy hunting and a lot of people are benefited by employment in trophy hunting or the meat that comes from trophy hunting.

#### 5.6 Participation

#### <u>Theory</u>

Participation of members in the decision-making of the conservancy is one of the goals of CBNRM policy. The conservancies have regular Annual General Meetings (AGM) where the committee has to report to the members of the conservancy what has been done and what the conservancy is going to do. They can also organize other meetings for a smaller subject or for a particular group of people. On the one hand it is the best tool the conservancy has to inform the conservancy members. On the other hand it should also create a forum where community members can discuss their problems and ways to address these through the conservancy.

#### Findings #Khoadi-//Hôas

Almost all the respondents say that they regularly visit the meetings of the conservancy, except for KH 7 and KH 2 who are old and see no possibility to go to the meeting. From the respondents that do attend the meetings we learn the meetings are mostly used to inform the members on what is going in the conservancy. Respondents KH 6, 11 and 21 are very positive about the meetings and the possibility to voice 'their problems' there. Respondents KH 7, 18 and 20 state that it is frustrating to them that decisions or concerns are not turned into action after the meetings: "Ja, they listen to us, but there is nothing that comes after the meetings." (KH 18).

It is difficult to get a good grip on whether the meetings of the conservancy allow the members of to participate in the decision-making process. When they are asked about the decisionmaking only KH 9 and 10 say that they feel like they have influence in the decision-making. When asked to give examples of that they cannot give an example. It is also nearly impossible for all the members to attend the meeting, or for the conservancy to facilitate all the members in their attendance to the meetings of the conservancy.



Figure 23: a woman speaking at the AGM of #Khoadi //Hôas. Source: Lorna Dax

The respondents that have lived in the area of the conservancy before the conservancy was started, could tell whether the conservancy really brought something new. Respondent KH 7 says that he knows that the conservancy is there and that they work for the wildlife, but that the conservancy did not change something for him. This is the same for KH 18.

Having a sense of ownership over the wildlife, not in a legal way, can also have an impact how people view wildlife. There is one respondent (KH 20) who states that wildlife is a 'government thing'. Other respondents regarded wildlife as owned by the conservancy and its members (KH 5, 6, 7, 9, 11 and 13). KH 9 and 13 describe that they think that the wildlife is owned by the conservancy and its members because they are the ones that benefit from the wildlife. So membership and the accompanying benefits can also create a sense of ownership. KH 11 puts it a little bit different: "yes, she is owner. (..) This is our conservancy and we must take care of our wildlife."

#### Findings Ehi Rovipuka

A large part of the respondents said that they attend the meeting of the conservancy (17 respondents). From the interviews it seems that 9 of those 17 also think that the communication in meetings is not a one-way street, but that there is room for members to speak up and raise their issues. The people that think that the communication in the meetings is more of a one-way street say that in the meetings it is 'mostly talking' and that there no real results being achieved in the meetings (EH 17).

The respondents are realistic about the amount of decision-making power the individual members have in the conservancy. EH 6 describes how he thinks his voice is heard, but not always followed:

# He [respondent] is saying that he has influence, but that the conservancy or the chairman of the conservancy comes back with excuses or (...) elaborate about things that they have done. For him that is also okay.

Participating in meetings brings something else: people are educated in wildlife in general and how to live together with them (EH 4, 10, 11, 12, 14, 15 and 21). Although participating in meetings of the conservancy can help members co-exist with natural resources and understanding the conservancy, it is accessible to a limited number of people. The problems mentioned earlier concerning communicating conservancy-wide and the transportation issues also apply here (EH 3). Respondent EH 9 mentioned something else that was interesting regarding the meetings:

# Translator: Yes, look once we are having meetings at Odjakavere, he [respondent] is become take to Odjakavere. Once the meetings starts he is hearing what the meeting is all about, from there he starts forecasting.

# Questioner: Okay, so he can't prepare himself? Translator: Yes.

The inability to prepare for a meeting makes the attendance of that person less productive. There is in essence a difference in knowledge on what is going in the conservancy and what is going to be discussed in the meetings between the committee (and other conservancy staff) and the members of the conservancy.

Membership of the conservancy and the benefits that come with it create a sense of ownership over the wildlife in the conservancy (EH 1, 7, 9, 13, and 16). Respondents EH 1, 2 6, 7, 9, 11, 12, 13, 19, 20 and 21 state that there is collective ownership: the conservancy and its members are the owners of the wildlife. Respondents EH 14, 16 and 18 state that they are themselves owner of the wildlife in the conservancy because they are a member of the conservancy. This makes the relationship between membership and ownership very close.

# **Conclusion**

The possibility for people to address their problems in the meetings of the conservancy is limited. This can partly be because of the limited rights that conservancies have: they are bound to what they have agreed on with MET. They are bound by different plans and also sometimes there are not enough resources to help the members. On the other hand: there are also a lot of members, who are impossible to satisfy. The conservancies have to make choices on which they address and which they do not address.

The meetings of the conservancy also create a possibility to educate members. Some of them already state that education is part of the meetings of the conservancy and some of them would like to see the conservancy educate them on some subjects. It has been said that education helps them better understand the wildlife and/or know how to avoid HWC.

Creating a sense of ownership is related to the membership of the community. Having the capability to take decisions over the wildlife, although not directly, but as a conservancy, creates that sense of ownership. The decision to direct the benefits that come from the natural resources in the conservancy to the members attributes to it. When people have (a sense of) ownership over their natural resources, they are more inclined to protect it.

# 5.7 Views on wildlife

#### Theory

According to the theory of social representations of Buijs (2008) the way people create their view on wildlife is through frames and different practices. These different practices have been outlined above, the subjects that all have the ability of changing the way people view wildlife. This paragraph will do two things: first try and show what the actual views of the respondents are and second how this view is affected by HWC and the practices of the conservancy.

#### Findings #Khoadi-//Hôas

All the respondents acknowledge that way they view wildlife had two sides: on the one side they like the wildlife that is non-damaging and on the other side they do not like the wildlife that has the ability to hurt them (or other people). In #Khoadi-//Hôas that means that conservancy members do not like predators and elephants, as those are the two groups of wildlife that do damage. HWC has an extra impact because the people that endure the damage are already very poor, and sometimes the animals that they have are the only things that they possess.

Acceptance of damaging wildlife is not really the case in this conservancy, in the sense that it does not matter to them that wildlife does damage. As far as people have told there is just 1 that has been involved in retaliation on wildlife (KH 17) and respondents KH 1, 5, 7, 11 and 20 have voiced the desire to kill the animals that damage them or their property. KH 20 mentioned something interesting when asked what he thinks about damaging wildlife: "They cannot kill anything, because it is a government thing.".

Some of the other respondents also said something in the sense of taking all the (damaging) wildlife out or away. When asked if all damaging wildlife should be taken out they objected to the idea. They said that not all of them should be gone, because of either their heritage value or because they like to see the animals themselves. The heritage value has been named quite often: they want their children to also grow up and live together with that wildlife. Others refer to such wildlife as 'beautifiers' for themselves. Another interesting thing was that some of the respondents actively pointed towards existing wildlife reserves (Etosha) as to where the damaging wildlife should go or be.

In addition to the HWC that people endure, some respondents also put forward the issue of competition from wildlife that grazes. Especially Zebra has been named (KH 5, 6, 8 and 11) to be causing problems. KH 8 describes it as follows:

"But they, they [are] trembling ground, whenever they are eating they are taking out the whole grass. The other animals which are grazing are just taking out on the top, but the Zebras, the Donkeys and so on they are taking out the whole grass with roots and all. But they are not being controlled."

This not a direct conflict between wildlife and people or their property, but certainly has its impact on the way people view wildlife.

#### Findings Ehi Rovipuka

Just as in the other conservancy there is a clear separation in how people view wildlife: damaging wildlife and non-damaging wildlife are two worlds apart. But because the respondents did not have as many incidents with Elephants it means that they are a bit less negative about those. But still there are respondents that would rather not have the elephants in their area (EH 7, 14 and 21). There is a clear relationship between the fact that they do (substantial) damage to people' property and the way they view elephants.EH 14 even goes so far that he would rather see the elephants be killed than that they are present in his area. EH 7 says that the elephants should go "to the place where they belong, Etosha".

Eight respondents were very negative about predators (EH 3, 7, 8, 9, 11, 13 and 17). EH 9 and 16 clearly state that they want all the problematic wildlife taken out, so they can restore their "productivity". However, also some of them do not want to take out all the predators, as they still have some value for them. They want to preserve wildlife for the next generation, they see them as 'beautifiers' of their surroundings or see in that some of the wildlife bring in benefits for the conservancy.

Especially this last reason is interesting: EH 6, 8, 13 and 18 say that benefits create for them the incentive to protect wildlife, even if it is damaging for themselves. There is also a link between trophy hunting and the benefits that it creates for the conservancy: EH 5, 6, 11, 20 and 21 all acknowledge that is important to protect their natural resources as it provides those benefits through trophy hunting. The same thing goes for tourism, this also creates incentives for respondents to protect wildlife (EH 10, 11 and 12).

#### **Conclusion**

The respondents from both conservancies shared their view on animals in logical way: they detest the wildlife that do damage and do not mind the wildlife that does no damage. So there is a connection between the HWC and the way people view wildlife. It does not really matter if they had damage from a particular animal to not like it: predators and elephants are generally not liked by the respondents.

Some of them even want the animals that do damage out of the conservancy: they do not see a place for those wildlife in the conservancy. Sometimes they would refer to the Etosha national park that they know, or say that the wildlife should be in 'its own kraal'. Fenced off from the farmers so that they do not harm their property.

However, there are also reasons to keep the wildlife on the land, as becomes clear from this analysis:

- Benefits: benefit creation from natural resources and distributing them among the members has been named as a potential 'view-changer' by respondents of both conservancies. Especially interesting is that in #Khoadi-//Hôas the respondents mainly relate this to tourist activities and in Ehi Rovipuka they relate benefit creation mostly to trophy hunting.
- Compensation offers a temporary solution and mitigation offers a structural solution for the incidents of HWC. Compensation makes up for the economic damage that has been done and mitigation efforts try to prevent the HWC from occurring.
- Education makes it easier for conservancy members to learn more about the wildlife and how to better live with the animals.
- Participation in meetings and simply being a member creates (a sense of) ownership over the animals, which results in more protection and people accepting that some animals should be protected.
- Respondents also state that they would want to keep the wildlife on the land because they think that it is part of the area and it 'beautifies' their surroundings.
- Preserving the wildlife for next generations is also a reason to protect a certain amount of wildlife (not all the wildlife), because next generations also need to know about the wildlife.

These last two reasons to keep the wildlife can be seen as frames for the wildlife and so create a particular view on wildlife in which there is room for damaging wildlife. The other reasons to accept wildlife, especially damaging wildlife, in the conservancy are practices of the conservancy that make influence the way people view wildlife.

# Chapter 6: conclusion and recommendations

This thesis started with introducing the topics of HWC, views on wildlife and the influence on that relationship of CBNRM and conservancies in Namibia. These topics were theoretically grounded in chapter 2 and methods have been devised to research it in chapter 3. The socio-political history and the relevant policies have been described and the analysis of the interviews was performed. The last step in getting the answers to the questions in chapter 1 will be made in this chapter.

This chapter will begin with a small recap of the analysis, including the differences and the similarities between the conservancies. In section 6.2 the research will go back to the theories that have been described in chapter 2: Common Resource Management (CRM) and the related devolution, participation, benefits and compensation/mitigation. The second theory was the 'social representations theory' in which the subjects mentioned above were integrated because it is the theory that they influence the way people view wildlife. This chapter will also deal with the question whether the theories provided a good lens through which to look at the situation in the conservancy.

In section 6.3 the main and sub questions of chapter one will return. The goal of the research is to find answers to these questions to be able to conclude the research and its findings. The last section (6.4) is for the necessary reflection and recommendation: what did the methods that were employed in this research bring and what could have been done differently? Besides academic reflection and recommendations it is also important to make practical recommendations. After all, besides an academic relevance for the research, there was also a societal reason to perform the research. A set of practical recommendations will be put forward in the last section of the research.

#### 6.1 Comparing the conservancies

The previous chapter deals with the finding and the first step of the analysis. As has been explained this chapter will deal with the second step of the analysis. This step will be a reflection on the theory and how it helps us understand the findings and the other way around: how do the findings help us understand the theory and concepts that have been used in this study. Did they live up to their theoretical expectations? The analysis will be concluded in the answers to the questions. Before that it is necessary to recap what has been said in the previous chapter. This is done by highlighting the differences between the conservancies and similarities.

#### 6.1.1 Differences between the conservancies

The largest difference between the two conservancies is the creation of direct benefits in the form of employment for the conservancy members. In #Khoadi-//Hôas 81 people were employed either directly in the conservancy (13) or in the private sector (68). These jobs created around 1.8 million Namibian dollar for conservancy members. (Figures over 2014; NACSO, 2016b) As has been shown in chapter 5: direct benefits have the biggest potential of changing views on wildlife of local communities.

In the Ehi Rovipuka conservancy 39 people have been employed by either the conservancy (13) or by the private sector (26). This is substantially less than in the other conservancy, which is due to the fact that Ehi Rovipuka has only recently been involved in a tourist venture: Hobatere roadside lodge. In total the employment in the conservancy creates 314,000 Namibian Dollar in direct benefits for conservancy members. (Figures over 2014; NACSO, 2016c) Although the total of direct benefits is smaller in the Ehi Rovipuka, the potential effect of direct benefits on views of

individuals is still substantial. Only the community-wide reach of the benefit is smaller and with that the total effect of direct benefits on the views of community members as a whole.

Correlating with the difference in employment and direct benefits as described in the last section, the total income of the conservancy also differs greatly. #Khoadi-//Hôas generated in 2014 a total income of 2,757,470 Namibian dollar. This includes the income that comes from employment. With this money they can cover the management-costs of the conservancy, the money that is left over can be spent as the conservancy likes, for example on the benefits that they create for members. (NACSO, 2016b; Naidoo et al., 2016)

Ehi Rovipuka created a total income for 2014 of 643,200 Namibian Dollar. This also includes the income that is generated through employment in the conservancy. Ehi Rovipuka also has the ability to cover their management-costs and even distribute benefits among members. (NACSO, 2016c) On the other hand, they do not earn as much they cannot do the projects for the communities like #Khoadi-//Hôas. This makes the impact of the conservancy on their members a lot smaller. The difference in income becomes more remarkable as the amount of memberships are compared: they both have roughly 2000 members.

The final difference has to do with the way the conservancies earn their money: while #Khoadi-//Hôas earns its income mostly with tourism, trophy hunting generates the most income for Ehi Rovipuka. Both of these activities, as they are generating the benefits for members, have an impact on the way people view wildlife. This difference in income-creation is reflected in the interviews: in #Khoadi-//Hôas they relate the creation of benefits and the acceptance of damaging wildlife to the potential of wildlife for tourism. For Ehi Rovipuka this is the case with Trophy Hunting.

The downside to this is that people will value wildlife according to their ability to create benefits. To put it differently: damaging wildlife like Lions, that can potentially create big benefits, are more accepted then animals like Hyena and Jackal. Especially when (rich) hunters are more interested in certain animals, as is the case for example for the 'big five'<sup>18</sup>.

#### 6.1.2 Similarities of the conservancies

A striking similarity of both conservancies is that members do not regularly see or notice the conservancy: there is a lack of outreach of the conservancy on the individual level of members. This is the case in dealing with reports of HWC and distribution of benefits. Respondents even reported to just simply 'never see the conservancy'. This is tied together with the notion of some respondents that the conservancy deals only with wildlife. The only ones that did not report any of such 'lack of outreach' are the members that received direct benefits.

There are also similarities in the views on wildlife: both conservancies have a certain basic level of acceptance of damaging wildlife in the two conservancies. Of all the respondents there was 1 that acknowledged that he killed wildlife that damaged his properties. There were even some success stories of poachers that had turned into nature conservers, due to (direct) benefits. Although it is difficult to assert whether there is really no illegal killing of wildlife, the numbers of the conservancies show little poaching done in both areas (NACSO, 2016b and c). It is equally difficult to directly tie the existence of the conservancy to the lack of illegal killing of wildlife, however respondents have either stated that the rules of the conservancy do not permit them to kill wildlife or that benefits (although being different among respondents) withhold them from touching wildlife.

<sup>&</sup>lt;sup>18</sup> Historically these would be the wildlife that is most dangerous or difficult to hunt in Africa: Lion, Cheetah, Elephant, Rhino and Elephant. All of these can be legally hunted in Namibia.

Both conservancies had some measures for mitigating HWC. In the light of the small resources for mitigation, as it usually entails large sums of money, it does not have a big impact on the community as a whole. But where HWC was being prevented in an effective matter, for example the reinforced kraals, it showed positive effects on the views on wildlife of the local community.

As became clear in the analysis of the interviews, in both conservancies there are great possibilities for compensation and benefit-creation in influencing views on wildlife. The issue is that there are just not enough resources to accomplish those changes. The HWC policy prescribes a lower amount for the compensation than the value of animals that are attacked. Farmers receiving the offset payments do not feel compensated for the damage that has been done. Benefits are created and distributed but it is difficult to reach the individuals: there are a lot of members to divide the benefits over.

The meetings of the conservancies, AGM's and other meetings, are not 'owned' by the community. According to Arnstein (1968) this represents no 'real participation'. Real participation is where the community themselves makes decisions and manage the area. On the other hand the community is also not left out, which is a huge improvement. That is to say, the respondents that have been interviewed for this research have not been left out. The influence of participation on the views on wildlife of the community is, when compared to benefit-creation and compensation/mitigation, smaller.

In both conservancies the members have a 'sense of ownership' of the wildlife in their conservancy. This 'sense of ownership' is created by benefit-creation or the participation of the community in decision-making of the conservancy. In both instances the membership of the conservancy is crucial in the 'sense of ownership'.

# 6.2 Back to theory

According to Buijs (2008, 2016) there are three important factors in the creation of 'social representations of nature': experiencing the object nature, processes of framing and (social) practices. The way people experience HWC is a big denominator for how people view wildlife (Lindsey, Du Toit and Mills, 2005; Browne-Nuñez, 2010). This research revolved around the impact of conservancies on this negative relationship between HWC and how people view



Figure 24: conceptual model of the research. Adapted from Buijs, 2008.

wildlife.

The process of creating social representations (views on wildlife) on nature is shown in figure 24. The object nature is at the bottom of the figure: this is the physical nature that can be experienced. Through different processes we create social representations of the nature. HWC has a big effect on the way local communities in Namibia view wildlife. The practices and frames of the conservancy are

used to change these views on wildlife, to more positive ones.

Namibia has been successful in the implementation of CBNRM: policy based on the CRM principles of devolution of power and rights over natural resources, participation of the local community and a positive contribution to local livelihoods and the natural environment (Ostrom,

2015; Ostrom and Agrawal, 2001). The reasoning behind the CBNRM policy is that the local community should be the executive body behind nature conservation. Devolution of rights over natural resources creates the possibility of managing the conservancy, participation of the local community in decision-making and the management of their natural resources creates affection with those natural resources. Creating benefits from those natural resources and making sure they end up with the local community creates incentives for protection.

#### Frames

Buijs (2008) stated that there were two powers that could influence the way people view the object nature: frames/framing and (social) practices. Framing and the usage of frames that can be attributed to the CBNRM to influence the view on wildlife and occur in the visited conservancies were: a common frame that was earlier called '<u>heritage'</u> and the active framing of the conservancy via educating their members to <u>co-exist with wildlife</u>.

# <u>Heritage</u>

Asking why there should be wildlife, also damaging wildlife, the respondents would often answer that the wildlife should be conserved for future generations. As the findings of chapter 5 show conserving wildlife for future generations was a common frame for respondents: a reason to still keep at least a part of the damaging wildlife. Respondents stated that their children should be able to grow up with wildlife, as it is a systemic part of life in the conservancy. They noted that it is important for them that future generations know what a Lion is and what a Cheetah is.

It is a frame that is being conveyed by conservancies (NACSO, 2016) and it is a frame that is being shared by multiple people within the conservancy. This asserts the theory of Buijs (2008) that in communicating with each other and applying the frame of 'heritage' changes the way people view nature. This is shown in the interviews by the comments about damaging wildlife: although they do damage, not all of them should be removed. One of the reasons for this argumentation is that at least a part of the damaging wildlife should be conserved for future generations. This makes it an important frame that is being used for the social representation of nature in the conservancies.

# Co-exist with wildlife

Almost all the respondents that were visited for the interviews argued that they want to live together with the wildlife in the conservancy. Although they say this is difficult when wildlife does damage to your property, they share a frame of co-existing with wildlife. One of the things that were deemed important in this frame is the practice of education.

There is not a hard line between frames and social practices: education is in itself a social practice but it is also used to convey frames onto the local communities. From the data it seemed that respondents like the general education that they received on wildlife and especially education on how to co-exist with wildlife. Different respondents mentioned that education on wildlife, by the conservancy in meetings or via employment, was important for their co-existence with that wildlife. The need to co-exist with wildlife can be seen as a frame that is of particular importance for the conservancy. The practice of education, in communicating this frame, can be fitted into the frame of Buijs (2008).

# Practices

Practices of the conservancy are the benefit-distribution, compensation, mitigation and participation of the community. They, as has been showed in the data-analysis, all have potential in changing the views that people have over wildlife. Especially to curb the negative influence HWC has on the views on wildlife. Ashley (2000a/b) concluded that benefits that conservancies create are not enough to make a difference in their lives.

Naidoo et al (2016) concluded that some of the conservancies do not even have enough income to cover their management costs. The difficulty of creating benefits that are tangible in the community as a whole seems difficult, even for a conservancy that creates a relatively large income like #Khoadi-//Hôas. The indirect benefits that were reported in #Khoadi-//Hôas were larger or more frequent than the benefits reported by respondents in Ehi Rovipuka.

However, from the respondents in both conservancies it became clear that the impact of benefits as a whole (direct and indirect) does not have a large impact on how local communities view wildlife. This is shown by the respondents that were not employed by the conservancy: the indirect benefits did not have a large impact on individuals. The respondents report that the distribution of benefits could have potential in creating more positive views on wildlife. However the indirect benefits are so small and so sparsely distributed that it does not live up to its potential. For example: distribution of meat, with a quota of e.g. 20 Springbok, is not likely to reach every member. And the meat that does reach a member is probably not much.

The direct benefits (coming from employment) make a big difference in how people view wildlife in the conservancies. Not only the financial side of employment, but also the fact that they are involved in the protection of wildlife and receive education on the subject of wildlife. Indirect benefits, on the other hand, do not make an individual impact. Because of this lack of impact, it does not play a role in how people view wildlife. In the scheme of Buijs (2008), the practice of indirect benefits does not have a large impact and direct benefits seem to play a big role in way people view wildlife.

Compensation and mitigation have the same problem: lack of sufficient resources to make a tangible difference on the individual level and with that on the community level. Apart from the amount of compensation that is being paid according to the policy (MET, 2009) it is also questionable whether the conservancies would be able to pay the real value of HWC. Findings from the interviews suggest that the compensation is considered useless by the respondents: 'I cannot buy another goat for 200, what do I do with the money'? The amount of compensation is not even a solution to the problem, more a small plaster for a big wound.

The respondents that were affected by mitigation efforts proved that its effect is strong: the reinforced kraal in #Khoadi-//Hôas paid for by a US government fund resulted in the amount of successful attacks being brought down to zero. Other examples from chapter 5 also showed that mitigation efforts can have a big impact: take away the negative influence of HWC causes people to view wildlife more positively. As has been stated in chapter 5, mitigation efforts usually cost a lot of money. It is done in the conservancies, not necessarily done by the conservancies itself, but as it does not affect a lot of people its impact on the way the local community view wildlife is small.

The process of paying the compensation is also making matters worse: the rules to be eligible for payment are strict and sometimes unclear for respondents and unclear communication defuses the potential of offsetting the damage that has been done by wildlife. In theory paying compensation is the economic answer to the damage that wildlife does to people's property (Gusset et al. 2009). In the conservancies that have been visited, and because of the restraints on the payments of compensations, the potential of changing views on wildlife by compensation and mitigation are not living up to their expectations.

Creating possibilities for local communities to participate in the conservancy has been one of the central goals of the CBNRM policy. Disadvantaged communities during the apartheid should regain the control over their natural resources, as an incentive to protect it (Jones and Barnes, 2008). As has been explained there are practical issues in letting the whole community in the visited conservancies participate, 2000 members cannot be reached through meetings. The respondents argued that the more general practice of being a member of the conservancy

creates a strong sense of ownership over the natural resources and also acts as an incentive to protect the natural resources. Almost all respondents said they owned the wildlife in the conservancy because they were a member.

So what do we learn from the theory of Buijs (2008)? The processes that constitute the social representations of nature have been found in the visited conservancies. HWC does indeed have influence on the way the people see the object nature, as they experience wildlife through the HWC that they endure. The practices and frames have a role in the constitution of social representations of nature, as the findings of this research show.

The frames of 'heritage' and 'co-existing with wildlife' proved very important for the respondents. These frames are communicated through the conservancy: education through employment and meetings play a big role in this communication. Practices like benefit-distribution, compensation and mitigation can play a big role, but it depends on whether it has a big individual impact. The question of how these separate practices and frames play a role in the whole process will be answered through the main question.

Participation as a practice also plays a role, although it does not resemble true participation of the community: the big decisions are made by the management of the conservancy. However, the fact that they are informed about it and involved in it, does make a big difference. Especially comparing it with the non-involvement (even exclusion) that took place before the conservancy. Simply being a member also creates a sense of ownership, which makes people want to protect the natural resources of the conservancy.

The theory of 'Social representations of nature' gives the opportunity to combine the experiences of individuals of nature, in this research how they experience HWC. And show how community wide processes like CBNRM influence the way communities experience nature. By using the different theories and concepts like benefit-distribution, participation and compensation/mitigation we can materialize these 'community wide' processes like CBNRM in Namibia.

To answer these questions we must use the information that the theoretical lens provides to look at those community wide processes and assert whether they really (can) make a difference in the way communities experience HWC.

# 6.3 answers to the questions

The answers to questions are hidden in the previous chapters and sections. Chapter 4 sketched the social-political history, the present situation in Namibia and the most important policies for this research: CBNRM (1996) and the HWC policy (2009). To be able to give an answer to the main question, which is ultimately the goal of this research, the sub questions first need to be answered.

#### 6.3.1 Sub questions

- Does mitigation in conservancies change the views of local communities on wildlife?

Mitigation is in potential the biggest changer of views on wildlife, in light of it being negatively influenced by HWC. Because as HWC negatively influences the views of local communities on wildlife, taking away that negative influence should result in more acceptance and even a more positive view on wildlife and especially on damaging wildlife. Mitigation is about preventing the damages: creating predator-proof kraals, water dams that cannot be damaged by Elephants and try to restrict animal farming in areas of wildlife.

These tactics are all employed by the visited conservancies with great success. The (re-)enforced kraals stopped or severely limited predators attacking animals in both conservancies, as long as the animals were inside after sunset. However, these kraals cost a lot of money which the

conservancy members do not have and the conservancy cannot provide the necessary funding for all its members. It is done on a limited scale and that reduces the effect that it has on the entirety of conservancy members.

In both conservancies, the damage of elephants is mitigated by lowering the water dams. . A problem though, is not only that the Elephants destroy the water dam when they are too high, but also when they are empty. In that case they attack the water supply, which creates significant damage. The damage that Elephants do is also of large impact on individuals as they usually inflict the damage in the vicinity of people's houses or, in some cases, they even hurt humans. As some of the respondents suggested: 'you cannot stop the Elephants'. Therefore, it is also a question of whether mitigating Elephant damage is even possible.

Land zonation into areas with a specific (economic) function is also an option that has been devolved to the conservancies from the central government. But, as Corbett and Daniels (1996) already wrote when the CBNRM policy was issued, the devolution of certain rights is not enough when they cannot be enforced. From the findings of this research it becomes clear that this is also a problem in the #Khoadi-//Hôas conservancy (Ehi Rovipuka does not have land zonation). In #Khoadi-//Hôas they created for example an exclusive wildlife zone, but it is worth nothing that the conservancy cannot stop people from farming there, said respondents. They also report that drought also caused the animals and wildlife to migrate into areas they should not be, according to the land zonation.

Of the above three mitigation efforts there is just one that really does what mitigation intends to do: prevent the damage. Changing the water dams only fixes a small portion of the negative influence of HWC. Land zonation is just a plan, without enforcement it has no use. That said, it can be concluded that mitigation in the visited conservancies does not really change a lot in the negative influence of HWC on the views on wildlife of the community as a whole.

- Does compensation in conservancies change the views of local communities on wildlife?

As has been pointed out above, compensation has two major flaws: the amount of compensation that is being paid and the whole process around the payments of compensation. The amount of compensation has been regulated to be 1/3 of the value of the animal that has been hurt. This severely limits the possibilities of compensation limiting the negative influence of HWC on the views on wildlife of local communities.

Because of the processes around paying the compensation there is a big possibility that a report does not lead to payment of compensation. That is partly due to the fact that farmers do not follow the guidelines of the HWC policy: putting the animals in the kraal at night and not to leave them wandering around during those times when they are most vulnerable. However, there is also a lack of communication from the conservancy about the reports and sometimes even the inability to take on the reports. The financial resources probably also limits the conservancy in being able to pay the full value to all the members that endure HWC. It is possible that the financial burden is too big for some conservancies to cope with, especially when the government would not supplement the funds for compensation.

As presently formed compensation of HWC does not have the ability to curb the negative influence of HWC on views on wildlife of local communities. Respondents put forward that when the compensation is equal to the value of the damage, there is the possibility of changing the way HWC shapes their views on wildlife. It is even argued that conservancy could give an animal for an animal, but such a plan also needs considerable resources.

- Does the creation of benefits in conservancies change the views of local communities on wildlife?

There were two kinds of benefits that could have an influence on views on how wildlife is shaped, and have a potential to change the negative influence of HWC. The first is benefit creation. This was differentiated following Naidoo et al (2016) in direct benefits and indirect benefits. Direct benefits are the benefits that members receive for labor: i.e. income from employment. The potential for direct benefits to change the views on wildlife is high, not only because of the economic contribution to livelihoods. But also the social contribution to livelihoods, e.g. education on wildlife, helps conservancy members co-exist better with (damaging) wildlife.

#Khoadi-//Hôas has more employment for their members than Ehi Rovipuka, but in both conservancies only a small portion of the members are being reached by the direct benefits. Although there is tradition of sharing income and resources, the positive effect of direct benefits is mostly felt on the individual level.

The challenge in creating benefits is to make them tangible for the community as a whole. Indirect benefits are leagues, handing out diesel and distribution of meat. The first only applies to #Khoadi-//Hôas and relates to realizing projects worth 10.000 Namibian dollar for smaller units of members (leagues) within the conservancy. These projects benefit large groups of members and are potentially worthwhile but it is a novelty for the conservancy and not fully functional in all of the leagues of the conservancy.

Handing out diesel and meat is an activity that is highly valued by the respondents but which cannot be done often. There is of course a limited amount of meat and diesel that can be distributed: for the meat the conservancies are relying on the hunting quotas and the diesel must be bought by the conservancy. Because of the limited distribution of these benefits over the conservancy as a whole it is difficult for it to have a clear impact on the way people view wildlife and/or to counter the negative effect of HWC on those views.

- Does the participation of members in conservancies change the views of local communities on wildlife?

When applying the 'ladder of participation' of Arnstein (1968) the conservancies would be somewhere between degrees of citizen power and tokenism, Arnstein would argue that there is not 'real participation'. From the interviews it becomes clear that there is not a consensus about the amount of decision-power the respondent have. There are respondents that do not even visit the meetings, although usually because of practical reasons (no transport or too old). As mentioned before; it is practically impossible for the whole conservancy (2000 members) to participate in the meetings.

Decision-making power is more of an individual asset than it is a community wide activity. Participation by the members has an added benefit: being a member and for example receiving benefits, creates a sense of ownership. Although the conservancy is not necessarily owned by the members, they feel that they as members of the conservancy do really own the natural resources of the conservancy. That 'sense of ownership' as a frame is very important to provide an incentive to protect their natural resources.

So participation as a social practice does not change the way people view wildlife, but the frame of ownership over the wildlife does create the practice of protecting the natural resources.

# 6.3.2 Main question

Now there is an answer for the sub questions, the time has come to answer the main question. What this research has tried to do is to zoom in at the individual level (interviews) tried to zoom out. The sub questions tried to get answer on the level of the concepts that were used in this research. The main question is aimed at providing the overall picture. The main question was:

# <u>What is the effect of CRM-institutions on the negative relationship between HWC and attitudes</u> <u>of local communities towards wildlife in Namibia?</u>

The main questions consists of three segments: HWC, attitudes of local communities and CRMinstitutions. The HWC is abundant in Namibia: a land famous for harsh environments and populations of predators and Elephants that compete with people for space and resources (Jones and Barnes, 2008). This is also picked up from the interviews: every farmer has had endured conflicts with wildlife, moreover the poverty that endures in the rural regions of Namibia intensifies the HWC.

The negative effect of HWC on the attitudes of local communities on wildlife is also clear from the interviews. Almost all the respondents want to have something done about damaging wildlife. Ranging from fencing them off from agricultural activities to 'killing them all'. There is a clear relationship between wildlife affecting peoples' properties and how they view that wildlife (Lindsey, Du Toit and Mills, 2005; Browne- Nuñez, 2010).

The relevance of this research lies in the role of CRM-institutions in this relationship. As is argued in chapter 1 and continued in the whole thesis it is the application of CRM, as a more holistic vision on the influence on the negative relationship between HWC and attitudes (Lindsey, Du Toit and Mills, 2005). This holistic lens can give a more complete answer to how attitudes are formed. CRM-institutions are called 'communal conservancies' in Namibia. Two conservancies have been visited and studied in depth: #Khoadi-//Hôas and Ehi Rovipuka.

So what can the conservancies do to change the negative influence of HWC on attitudes of local communities? Buijs (2008) has provided the theoretical conceptualisation for the formation of group attitudes which he calls 'social representations'. He argues that there are three processes that influence the social representations: experiencing nature, social practices and the use of frames in communication. This has been applied on this research as is shown in the previous chapters.

Experiencing nature is the experiencing of HWC on the individual level. This is essentially the first part of the main question. Buijs added social practices, these have been provided by the different policies and theories: benefit distribution, participation, compensation and mitigation. Buijs (2008) also stated that communication of frames added to the creation of social representations: co-existence and heritage. Figure 25 puts the practices and frames coming from the conservancies in the conceptual model of this research. Basically there is the presumption that there is a negative relationship between HWC and attitudes of local communities. CRM-institutions try to weaken the negative influence of this relationship. This is done via practices (yellow boxes) and frames (blue boxes).



Figure 25: relationship between the different concepts of the research. Own material.

The sub questions regarded the different concepts coming from the theoretical discussion individually. The intention was to assess their individual relevance for attitudes of local communities in the conservancies. To be able to answer the main question we have to be able to conclude on all the practices and communication at the same time. To assess the functioning of CRM-institutions as a whole it is necessary to strike a balance of the different practices and frames. The model of Buijs (2008; 2012) lets us assert all these practices and frames at the same time.

One thing that becomes clear from the analysis of how people view wildlife is that social representation can be different within social groups. These differences can be accounted for by how the different practices work on individuals: one example from the interviews is the difference between direct and indirect benefits. The people that receive direct benefits have a more positive attitude towards the received benefits than people that received indirect benefits. This remark is supported by a paper of Agrawal and Gibson (1999). He concludes that communities groups vary according to "size, composition, norms and resource dependence" (idem, 639).

Buijs (2012) recognizes that social representations can be different among different social groups. He adds that within social representations there are "consensual and stable central elements that provide the overall meaning of the SR [social representation] (the stable core), and more dynamic and flexible peripheral elements that allow for adapting the whole structure to other representations and social groups" (Buijs, 2012, p. 1171). From the findings of the conservancies we can recognize a stable core: all the different interviewees have a certain level of acceptance of wildlife in their conservancy.

What can explain this stable core of the social representations of nature in these conservancies? As has been explained before is that the membership of the conservancy and the sense of ownership contributes a lot towards the acceptance of (damaging) wildlife. The devolution of rights over wildlife to the lower level of the conservancies, and consequentially to the members of the conservancies has explained the stable core of the social representations.

What Buijs (2012) calls the "more dynamic and flexible peripheral elements" are the other practices and framing. Influence of the distribution of benefits on the way people view nature depends on the individual impact that those benefits have on people. The individual impact depends on the amount of benefits, more benefits means a more positive view on (damaging) wildlife. When interviewees were employed in the conservancy or related jobs, they relied on those natural resources to provide them with benefits: this is a very strong incentive to protect nature. It makes the ownership over the natural resources stronger, intensifying the stable core of the social representations.

Compensation and mitigation also fit into the more flexible periphery of social representations. However, the problem with these practices is that compensation does not promote a sustainable solution: the amount of compensation is too low to be viewed as a real compensation and it does not make the HWC go away (Nyhus et al, 2005). The findings seems to accord what Nyhus et al. (2005) state on fully compensating HWC: these authors claim that fully compensating HWC does not provide an incentive for the protection of wildlife. However the findings show that paying too little compensation does not add to the acceptance of (damaging) wildlife either. Moreover, the respondents claimed that only fully compensating HWC is an incentive for protection of damaging wildlife.

All the practices and frames attribute to the formation of the periphery of the social representations. However they do not necessarily contribute equally to the social representations. This depends on the conservancy, but also the individual. To explain this further, let's put forward the strengths and weaknesses of the different practices:

- <u>Benefit-distribution</u>: the strength of benefit-distribution in the formation of attitudes lies in the individual impact on conservancy members. They see HWC as an economic conflicts; benefits and especially direct benefits counter this economic conflicts directly. The weakness is that employment possibilities are low and there are a lot of members to distribute the benefits over. Devolving benefit distribution to a lower level within the conservancy, as #Khoadi-//Hôas tries with the Leagues project, makes it easier to distribute benefits to a larger group. Ehi Rovipuka misses the resources to do this, but with rising income from tourism it is hoped that they can also create a meaningful benefit distribution for their members.
- Participation: the strength of participation is that it gives members the possibility to be a part of the decision-making of the conservancy meetings, to put forward their problems and ideas. It is not necessarily the decision-making itself that creates more positive attitudes, but the more generally speaking being a member of the conservancy. The membership of the conservancy creates a sense of ownership over the wildlife, which increases the frames of heritage and co-existing. The downside of participation is that, with a large group of members, people will be left out. The lack of outreach of the conservancy, or the lack of visibility of the conservancy contradicts the positive side of being a member and the creation of the sense of ownership.
- <u>Compensation</u>: this functions as an economic restitution after the incident has been done. The strength of compensation lies only when there is full compensation. The compensation leverages the economic impact of HWC by replacing the animal with the

monetary value. Its weakness lies in the fact that the conservancy cannot give full compensation: replacing a dead animal does not work with 1/3 of the monetary value. Giving too little compensation does not take away the negative influence of HWC on attitudes of local communities towards. It merely functions as a plaster that is too small for the wound: it does more irritation than contribute to healing the wound.

 <u>Mitigation</u>: the strong point of mitigation is that it is the only practice that takes away the HWC. Taking away the HWC also means taking away the negative influence on attitudes of local people. The weak point of it is that mitigation efforts are expensive, e.g. building re-enforced kraals. The resources lack at the conservancy to provide its members with proper mitigation efforts.

Weighing the different practices in which practice contributes the most is difficult: it depends on the way the conservancy is managed, the resources that it has available for the different practices and how individuals are influenced by the practices. The most important thing for conservancies to do is to contribute to the two frames that have been found: co-existing and heritage. They are partly inherent to the people living in these areas for decades, but the conservancy can attribute to them. For example co-existing can be promoted through education on wildlife. Contributing to the sense of ownership through participation and membership of the conservancy is also important.

To come back to the main question: there is an effect of CRM-institution on the negative relationship between HWC and attitudes of local communities. The effect is determined by the resources that the institution has to its disposal. This research added that it is also important to not only focus on practices that need a lot of resources (compensation and mitigation) but also on practices that focus less on resources. A good example of such a practice is the participation, which creates a sense of ownership of the wildlife and also over the conservancy itself.

# 6.4 reflections and recommendations

This section will reflect on the research in two ways. First there will be a theoretical reflection: what are the consequences of choosing this theory and what could have been improved by choosing different methods. There will also be some more social reflections: what are the practical improvements that can be discerned from this research?

#### 6.4.1 Academic reflection

The choices that were made in the application of certain theories and methods to this research brings with them positives and negatives. This research has shown that using just compensation and mitigation in explaining how people view nature in Namibia is very limited. This research has shown that less tangible concepts like frames and framing of nature have more significance in the process of creating views on nature.

The theory of Buijs (2008) on social representations also shows that views on wildlife (and nature) are not static. They can change, through the use of frames and practices. Not only through compensation and mitigation, but also involving local communities in the management of wildlife as is done in the conservancies. The downside of the theory on social representations is that it is very vague. It needs an extra set of theories to be able to say something sensible about nature. In its original form it can be used to <u>describe</u> the formation of social representations of nature, but not to <u>explain</u> how those representations are formed. To pursue the latter goal the theory needs an additional theory and concepts. This study used the CRM-theory and concepts associated with it.

In the selection of the cases this research used a set of criteria that preferred successful conservancies. Only the conservancies that had enough resources to undertake all the practices that have been outlined could be used. However, the selected cases showed that even in resource-rich conservancies like #Khoadi-//Hôas the conservancy could not create a large enough impact through e.g. the indirect benefits on conservancy members. That is to say, not enough to change the way they view (damaging) wildlife.

Choosing semi-guided interviews as the primary source of information makes it susceptible to misinformation (Yin, 2003). One of the downsides of conducting interviews, according to Yin (2003, p. 85) is that respondents are influenced by the way the interviewer asks them the question. To counter-act misinformation coming from interviews the interviewer has tried to use objective questions and has tried to eliminate the bias of the translator to speaking positive about the conservancy. The researcher also checked certain claims with documents or checked it with the conservancy (staff). For example, a lot of respondents made claims on the compensation and the processes around it, those were checked against the HWC policy.

There is also the issue of the amount of interviews: 20 per conservancy. Within the timeframe that was available for the fieldwork it proved to be enough, however it could be argued that speaking to such a small part of the community members (1%) reduces reliability of the research (Yin, 2003). The researcher tried to counter-act this by spreading the interviews over the conservancy.

Instead of using interviews the data could also have been collected by using surveys (Browne-Nuñez, 2010). The survey is an excellent tool to avoid subjective questions, as it avoids the interview from asking questions that were not carefully selected and crafter beforehand. It also enables the interviewer to collect a lot of data in a shorter time (cf. Störmer, 2016). However, there is a big disadvantage that was central to this research: the strictness of surveys does not permit to look into subjects that were not so clear beforehand. For example: the influence of participation in the way people view nature could have been derived from theory (as is done in this research). What did not become clear, which is also the added value of this research, is that the sense of ownership (through participation, benefit-distribution and being a member) was very important for the way people view wildlife.

# 6.4.2 Social reflection and recommendations

In reflecting on the more social side of this research there are three recommendations for the people that work on the subject of this thesis in the real world. The researcher does not want to pretend that this research claims to know better than experts in the field, but there are three distinct issues arising from this research.

The first one is more of a meta-recommendation and it supports the neo-liberal critique that was mentioned in section 2.2.3. There it was said that coupling capitalism to nature conservation creates issues: for example an imbalance in power and resources creates inequality. This can be seen in this research when it looked at the effect of direct benefits on the way people view wildlife. The respondents that had employment related to wildlife were more positive on wildlife than the people that lacked those employment possibilities.

Secondly, there are two distinct consequences of tying together economic development and nature conservation. First it makes the conservancies and its ability to manage their natural resources, susceptible to macro-economic changes. For example an international economic depression could lower the incomes from tourism, severely limiting conservancies like #Khoadi-//Hôas in their practices. And with that, following the conclusion of this research, severely affecting the way people view nature. Related to this point is the reliance of conservancies on trophy hunting: the income of such conservancies could be severely limited when countries decide to limit the possibility of trophy hunting.
It shows that conservancies rely on outside sources of income in changing the way people view nature: some of the practices need money, which is derived from tourism and trophy hunting. When that money stops coming in, the members could deem the conservancy as useless. This would be dramatic for their view on wildlife, and would take away the incentives for protecting wildlife. The fact that people (only) value wildlife because of their benefit-creating abilities creates weak points in the conservation of nature.

Thirdly, the lack of impact from the conservancy on the individual level creates big problems for the way people view nature. This is not only the case for benefit-distribution, but respondents also reported that they literally do not see the conservancy (staff). If one sees this point from the viewpoint of the conservancy it is difficult to improve on this point. Both the conservancies have 13 employees, to oversee an area of 3364 KM2 (#Khoadi-//Hôas) and 1980 KM2 (Ehi Rovipuka). Having just 3 vehicles in #Khoadi-//Hôas and 2 in Ehi Rovipuka it is difficult to oversee each KM<sup>2</sup> of the conservancy. As is the case for the benefits: the resources are limited in light of the big amount of members.

Fourthly, the mitigation of HWC is in itself the most effective practice in countering HWC and its negative influence on attitudes of local communities towards wildlife. The places where mitigation efforts have been implemented it had a huge effect on attitudes of community members, especially the reinforced kraals. A less costly mitigation effort could be the community-wide introduction of guard dogs that go with the smaller animals into the field.

Lastly, the compensation of HWC should improve. There can be improvements in how much is paid, but that is a more political issue. This could be adjusted in the policy on HWC, accommodated with more funds for compensation. However, there are some things the conservancy can do to improve people's perception of compensation: improving communication about the compensation. This includes communicating clearly concerning the rules and procedures surrounding compensation. It also includes making sure everything is done within a short timeframe. The farmers have the obligation of reporting within 24 hours: the conservancy should make it obligatory to handle the reports of the conflicts within a prescribed timeframe and adhering to this timeframe.

The following recommendations are meant for the conservancies and can also be done without much resources:

- Increase education for your members. Not only through meetings, but also through primary and secondary education. Education is a powerful tool in changing the attitudes of local communities (Owen-Smith, 2010).
- Increase the visibility for the conservancy to community members. Show what you are doing and why you are doing it.
- Improve communication with members or make the constraints coming from difficult communication (e.g. reporting within 24 hours) less harsh.
- Experiment with a compensation scheme that is not money dependent but offers a new animal when an animal has been killed by wildlife.

## Bibliography

- Agrawal, A., & Gibson, C. C. (1999). Enchantment and disenchantment: the role of community in natural resource conservation. *World development*, *27*(4), pp. 629-649.
- Agrawal, A., & Ostrom, E. (2001). Collective action, property rights, and decentralization in resource use in India and Nepal. *Politics & Society*, *29*(4), pp. 485-514.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, *35*(4), pp. 216-224.
- Ashley, C. (2000a). Applying livelihood approaches to natural resource management initiatives: experiences in Namibia and Kenya. London, UK: Overseas Development Institute.
- Ashley, C. (2000b). *The impacts of tourism on rural livelihoods: Namibia's experience*. London: Overseas Development Institute
- Brockington, D., Duffy, R., & Igoe, J. (2008). *Nature unbound: conservation, capitalism and the future of protected areas*. Earthscan.
- Browne-Nuñez, C., & Jonker, S. A. (2008). Attitudes toward wildlife and conservation across Africa: a review of survey research. *Human Dimensions of Wildlife*, 13(1), pp. 47-70.
- Buijs, A. (2009). *Public natures: social representations of nature and local practices*. Wageningen University (Wageningen University).
- Buijs, A., Hovardas, T., Figari, H., Castro, P., Devine-Wright, P., Fischer, A., Mouro, C. & Selge, S. (2012). Understanding people's ideas on natural resource management: research on social representations of nature. *Society & Natural Resources*. 25(11). Pp. 1167-1181.
- Carter, M. R., & Olinto, P. (2003). Getting institutions "right" for whom? Credit constraints and the impact of property rights on the quantity and composition of investment. *American Journal of agricultural Economics*. 85(1). Pp. 173-186.
- CIA fact book (2017) factsheet on Namibia. Accessed on 17-1-2014 via: <u>https://www.cia.gov/library/publications/the-world-factbook/geos/wa.html</u>
- Cocks, M. (2006). Wild plant resources and cultural practices in rural and urban households in South Africa: implementations for bio-cultural diversity conservation. PhD dissertation for the University of Wageningen.
- Corbett, A., & Daniels, C. (1996). *Legislation and policies affecting community-based natural resources management in Namibia*. University of Namibia Windhoek.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches* (2). Sage publications.
- Dierks, K. (2002). *Chronology of Namibian history: from pre-historical times to independent Namibia*. Namibia Scientific Society.

- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American Sociological Review*. 48 (2).
   Pp. 147-160.
- Dressler, W and Büsscher, B. (2008). Market triumphalism and the CBNRM 'crises' at the South African section of the Great Limpopo Transfrontier Park. *Geoforum*. 39. Pp. 452-465.
- Dressler, W., Büsscher, B., Schoon, M., Brockington, D., Hayes, T., Kull, C., McCarthy, J and Strestha, K. (2010). From hope to crisis and back again? A critical history of the global CBNRM narrative. *Environmental Conservation* 37 (1) Pp: 5–15.
- Duim, Van der, R., Lamers, M., & van Wijk, J. (Eds.). (2014). *Institutional arrangements for conservation, development and tourism in eastern and southern Africa: A dynamic perspective*. Springer.
- Gusset, M., Swarner, M. J., Mponwane, L., Keletile, K., & McNutt, J. W. (2009). Human– wildlife conflict in northern Botswana: livestock predation by endangered African wild dog Lycaon pictus and other carnivores. *Oryx*, *43*(01), pp. 67-72.
- Hajer, M.A. Doing discourse analysis Coalitions, practices, meaning. In Van den Brink, M and Metze, T. (2006) *Words matter in policy and Planning Discourse Theory and Method in the Social Sciences* (pp. 65-74). KNAG.
- Hardin, G. (1968). The tragedy of the commons. Science, 162(3859). pp. 1243-1248.
- Hoole, A. (2008). *Community-based conservation and protected areas in Namibia: socialecological linkages for biodiversity.* PhD dissertation for the University of Manitoba.
- Jones B.T.B. & Weaver, C. (2009). CBNRM in Namibia: growth, trends, lessons and constraints. In Suich H, Child B & Spenceley A (eds). *Evolution and innovation in wildlife conservation: parks and game ranches to transfrontier conservation areas*, p. 223–242.
   CABI: London.
- Jones, B. T. B., & Barnes, J. I. (2006). *Human wildlife conflict study: Namibian case study*.
- Lindsey, P. A., Du Toit, J. T., & Mills, M. G. L. (2005). Attitudes of ranchers towards African wild dogs Lycaon pictus: conservation implications on private land. *Biological Conservation*, 125(1), pp. 113-121.
- Lapeyre, R. (2011). The Grootberg lodge partnership in Namibia: Towards poverty alleviation and empowerment for long-term sustainability? *Current Issues in Tourism*. 14(3). Pp. 221-234.
- March, J.G. and J. P. Olsen. (1989) Rediscovering Institutions: The Organizational Basis of Politics. New York: Free Press.
- Matose, F. en Watts, S. (2010). Towards community-based forest management in Southern Africa: do decentralization experiments work for local livelihoods? *Environmental Conservation*. 37(3). Pp. 310–319.
- Ministry of Environment and Tourism (1996). Government Notice No. 151, Promulgation of Nature Conservation Amendment Act, 1996 (Act 5 of 1996), of the Parliament in Government Gazette of the Republic of Namibia, No. 1333. Windhoek, Namibia

- Ministry of Environment and Tourism (2009). *National policy on human-wildlife conflict management.*
- Mufune, P. (2015). Community based natural resource management (CBNRM) and sustainable development in Namibia. *Journal of land and rural studies*. 3 (1): 121-138
- NACSO (2016). The state of community conservation in Namibia: a review of communal conservancies, community forests and other CBNRM initiatives (annual 2015 report).NACSO: Windhoek
- NACSO (2015a). #Khoadi-//Hôas annual conservancy audit report 2015.
- NACSO (2015b). Ehi Rovipuka annual conservancy audit report 2015.
- Naidoo, R., Weaver, L. C., Diggle, R. W., Matongo, G., Stuart-Hill, G., & Thouless, C. (2016). Complementary benefits of tourism and hunting to communal conservancies in Namibia. *Conservation Biology*, 30(3) pp. 628-638.
- Nelson, F., & Agrawal, A. (2008). Patronage or participation? Community-based natural resource management reform in sub-Saharan Africa. *Development and Change*. 39(4). Pp. 557-585.
- Nyhus, P. J., Osofsky, S. A., Ferraro, P., Madden, F., & Fischer, H. (2005). Bearing the costs of human-wildlife conflict: the challenges of compensation schemes. *Conservation biology series* (9) pp. 107-121.
- Ostrom, E. (2015). Governing the commons. Cambridge university press.
- Owen-Smith, G. L. (2010). *An arid Eden: a personal account of conservation in the Kaokoveld*. Jonathan Ball.
- Pellis, A. (2010). Access to benefits from community based tourism. Master thesis for Wageningen University.
- Pellis, A., Duineveld, M., & Wagner, L. (2015). Conflicts forever the path dependencies of tourism conflicts; the case of Anabeb Conservancy, Namibia. In Jóhannesson, G. T., Ren, C. & van der Duim, R. (Eds.), Tourism encounters and controversies: Ontological politics of tourism development, 115-138.
- Perfecto, I. en Vandermeer, J. (2008). Biodiversity Conservation in Tropical Agroecosystems A New Conservation Paradigm. *Annals of the New York academy of sciences.* 1134: pp. 173–200
- Poucq, De, K., Thomas, E., Arts, B., Vranckx, A., Léon-Sicard, T., & Van Damme, P. (2015).
  Conflict in Protected Areas: Who Says Co-Management Does Not Work? *PloS one*, 10(12), e0144943.
- Ramutsindela, M. (2005). *Parks and People in Postcolonial Societies: Experiences in Southern Africa*. Kluwer: Dordrecht
- Ribot, J. C., Lund, J. F., & Treue, T. (2010). Democratic decentralization in sub-Saharan Africa: its contribution to forest management, livelihoods, and enfranchisement. *Environmental Conservation*. *37*(1), pp. 35-44.

- Ribot, J. C., & Peluso, N. L. (2003). A theory of access. *Rural sociology. 68*(2). Pp. 153-181.
- Robbins, P., J. Hintz and S.A. Moore, Risks and Hazards, in P. Robbins, J. Hintz and S.A. Moore. (2010) *Environment and Society*, Wiley Blackwell, pp. 79-95.
- Sallu, S.M., Twyman, C and Thomas, D.S.G. (2009). The multidimensional nature of biodiversity and social dynamics and implications for contemporary rural livelihoods in remote Kalahari settlements, Botswana. *African journal of ecology*. 47(s1). pp. 110-118
- Samuelsson, E., & Stage, J. (2007). The size and distribution of the economic impacts of Namibian hunting tourism. *South African Journal of Wildlife Research*. 37(1). Pp. 41-52.
- Schlager, E., & Ostrom, E. (1992). Property-rights regimes and natural resources: a conceptual analysis. *Land economics*, 249-262.
- Shackleton, S., Campbell, B., Wollenberg, E., & Edmunds, D. (2002). Devolution and community-based natural resource management: Creating space for local people to participate and benefit. *Natural Resource Perspectives*. *76*. Pp. 1-6.
- Shackleton, S. and Campbell, B. (2001). *Devolution in natural resource management: institutional arrangements and power shifts.*
- Störmer, N. (2016) A survey of values and attitudes towards wildlife in communal conservancies in Namibia. Master thesis for the Friedrich-Schiller-University Jena.
- Suich, H. (2010). The livelihood impacts of the Namibian community based natural resource management program: a meta-synthesis. *Environmental Conservation*. 37(1). Pp. 45-53.
- Taye, M. (2006). Evaluating Capacity Development for Local Participation: The #Khoadi-//Hôas Conservancy Experience. Final Report for International Development Research Center (IDRC)
- Thakadu, O. T. (2005). Success factors in community based natural resources management in northern Botswana: Lessons from practice. *Natural Resources Forum.* 29 (3), pp. 199-212.
- Treves, A., & Karanth, K. U. (2003). Human-carnivore conflict and perspectives on carnivore management worldwide. *Conservation Biology*. 17(6). Pp. 1491-1499.
- Wagenaar, H. (2014). *Meaning in action: Interpretation and dialogue in policy analysis*. Routledge.
- Yin, R. K. (2003). Case study research: Design and methods (3). Sage publications.

## Annex I – interview guide

Interview number:

Personal information: male/female age occupation

- 1. Have you (or someone you know) ever been engaged in a Human-Wildlife conflict?
- i. Kettle been killed? Crops destroyed?
- ii. Specifics of the attack in additional questionnaires
- 2. What do you think after the conflicts?
- i. What are the consequences of those thoughts?
- 3. Have you been helped in any way after the conflicts?
- i. Conservancy/MET/NGO/other people?
- 4. What are the activities of the conservancy that affect you as a farmer?
- i. General and specific to HWC?
- 5. What are the activities of the conservancy that affect you as a farmer?
- 6. What is your opinion on the wildlife in the conservancy?
- i. Quantity/quality?
- ii. Is there difference between certain species?
- 7. What are the good and bad properties of the nature in the conservancy?

## 8. Do you think that you are involved in the decision-making of the conservancy?

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