

Poverty in Small-Scale Fisheries

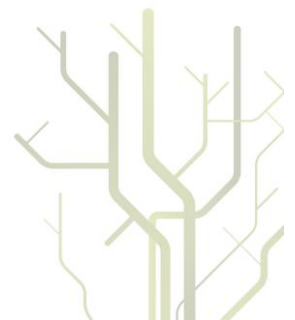
Governance Challenges in Lake Victoria Fishing Communities, Tanzania



Paul Ochieng' Onyango

A dissertation for the degree of Philosophiae Doctor

June 2011



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Table of Contents

Acknowledgments	i
Abstract.....	iii
List of Articles	iv
1. Introduction	1
2. Research background and problems.....	3
2.1. Background information	3
2.2. Research Questions	4
3. Perspectives on poverty	6
3.1. The notion of poverty.....	7
4. Methodological reflections	9
4.1. Epistemological perspectives	9
4.2. Methodology: Ethnography and Grounded theory.....	11
4.2.1. Methods for data collection	12
4.2.2. Participant observation	13
4.2.3. Document analysis	14
4.2.4. Interviews	14
4.2.5. Focus Group discussions	15
4.3. Data analysis	16
4.4. Research quality	17
4.4. Ethical considerations	18
5. Understanding poverty.....	18
5.1. Poverty as an aspect of the systems-to-be-governed.....	19
5.2. From meta-governance to decision-making	20
5.2.1. Values as foundation of the meta-governance process.....	23
5.2.2. Decision-making and power.....	24
6. The Articles: Summary of content	26
6.1. Introduction to the Articles	26
7. Conclusions	30
7.1. Prospects for poverty focused governance	30
7.1.1. Changing perceptions about poverty	31
7.1.2. Governance principle 1: Recognise poor fishers as partners in poverty alleviation	32
7.1.3. Governance Principle 2: Poverty alleviation requires home-grown solutions.....	33
7.1.4. Governance Principle 3: Poverty alleviation requires rethinking freedom.....	34
7.2. Theoretical contribution	35
7.2.1. Rethinking about decision-making process.....	36
References.....	38

Articles 1 – 5

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Abstract

The pursuit of a world without poverty is without doubt among the leading global challenges not only for governments but also the poor themselves. This challenge is also in small-scale fishing communities where poverty is persistent and has become a thorny issue to the poor as well as governing actors. Strategies have been formulated and implemented but the results have not been up to the expectations. Why haven't these strategies yielded expected results? This is the central question of this thesis.

This study seeks to understand why poverty persists despite the good instruments that have been directed at its alleviation. It examines poverty through studying the underlying factors that determine relationships between and among the many variables that make poverty a multidimensional problem. It argues that the persistent poverty in small-scale fishing communities in Lake Victoria Tanzania finds explanation in the manner in which poverty and its challenges have been understood and addressed.

By using Kooiman's and Jentoft's (2009) 'meta-governance' perspective, the study discusses how differences in, what people consider as important (values), what they believe is morally mandatory to do (norms) and what should direct behaviour or action (principles), explain the persistent poverty in fishing communities. The study shows that there is inconsistency in the way poor fishers', riparian to the Lake and governing actors in Tanzania understand poverty in the fishing communities and how to confront it. This inconsistency exists at the meta-governance level i.e. with regards to values, norms and principles. The study proposes that to alleviate poverty, a solution to this difference should be sought from a governance mechanism that addresses the dissimilarity. This must be a process which provides governing actors and the poor opportunities to interact in order to influence policy.

List of Articles

- Article 1 Onyango, P. O. 2009. Re-configuring Poverty: The Wickedness Perspective. *African Journal of Tropical Hydrobiology and Fisheries*, 12, 37-46.
- Article 2 Jentoft, S., P. O. Onyango and M. M. Islam 2010. Freedom and Poverty in the Fishery Commons. *International Journal of the Commons*, 4 (1), 345-366.
- Article 3 Onyango, P. O. and S. Jentoft 2010. Assessing poverty in small-scale fisheries in Lake Victoria, Tanzania. *Fish and Fisheries*, 11, 250-263.
- Article 4 Onyango, P. O. 2011. Occupation of last resort? Small-scale fishing in Lake Victoria, Tanzania. In Jentoft S. and A. Eide (Eds.). *Poverty Mosaics: Realities and Prospects in Small-Scale Fisheries*. Springer Verlag
- Article 5 Onyango, P. O. and S. Jentoft. 2011, (Forthcoming). Climbing the Hill: Poverty Alleviation, Gender Relationships, and Women's Social Entrepreneurship in Lake Victoria, Tanzania. Accepted for publication in *MAST (Maritime Studies)*
- Film Documentary (not part of the PhD thesis)
- Onyango, P. O. (2010). Invisible Possibilities. Accepted for the 2011 Culture Unplugged Film Festival under the theme Green unplugged. Festival organised by [Culture Unplugged](#).
- <http://www.cultureunplugged.com/play/5788/Invisible-Possibilities>

1. Introduction

Why are small-scale fishers so often poor? Why are efforts to alleviate poverty among small-scale fishers not producing expected results? What is poverty and how is it experienced in these communities? Is poverty in this sector different from the poverty that people in other sectors are experiencing? Must poverty alleviation strategies in fisheries communities be different from those in other communities? But why should poverty exist in these communities at all when the fisheries present immense wealth? Such are questions that get protracted in the minds of those concerned with the development of small-scale fisheries (FAO, 2002).

This project explores the questions posed above. It does this by examining governance mechanisms, processes and actions (Kooiman, Bavinck, Jentoft & Pullin, 2005) needed to bring small-scale fisheries dependent communities out of a vicious circle of poverty

Poverty alleviation in small-scale fisheries presents a good area for exploring the merits of governance systems because of the way they are understood and conceptualised. For example poverty is typically understood as a problem and a cause of overfishing and resource degradation. This, in the next instance, would suggest that addressing poverty must address the overfishing problem and the decisions and institutions that are established to manage fisheries.

Although work is still scanty, what has so far emerged points out that poverty in small-scale fisheries is not necessarily related to the state of the fisheries resource (Béné, 2004 & 2003), neither is it specific to fishing nor a fishing problem *per se* (Béné, Macfadyen & Allison, 2007). Rather, the incidence of poverty has much to do with the distribution of the wealth generated from the fisheries (Béné, Bennet & Neiland, 2004; Eide, Bavinck & Raakjær, 2011; Sen, 1981); “it reflects the wider issue of rural poverty and the general lack of economic, political and institutional development that affects rural areas in which fishing communities tend to live” (Béné et al. 2007, p. 9). Poverty has also been widely accepted, in fisheries, as a multi-dimensional issue (Townsend as cited in Béné et al. 2007) evidenced by overcrowded living conditions, inadequate health services, and low levels of education, and political disempowerment and vulnerability (Jentoft and Eide, 2011).

Poverty has, however, for the most part been given what could be viewed as a macro-analysis approach revolving around the issue of good governance, economic growth and institutional development at the level of the nation-state and beyond. Recent work, however, has brought new dimensions in understanding poverty and its alleviation, emphasizing the need for a micro-analysis (Krishna, 2010). This micro-analysis takes the view that an effective

way of addressing poverty demands a focus on the trivial details of a person's everyday life or struggles, what Krishna calls 'ground-level facts' (2010, p. 3). The new perspective is built on the recognition that poverty is context-specific and that poverty alleviation strategies must take into account how poverty is actually experienced by the poor themselves (Alcamo et al. 2003; Narayan et al. 2000). In other words, poverty knowledge must also be generated based on situations, locations and or places and should be concretised from below. This is not only necessary but unavoidable in order to come up with effective policy designs that contribute to improving people's lives.

The micro-analysis has a lot of relevance in small-scale fisheries which are undertaken in specific locations with different socio-cultural traditions and patterns, and practices. Fishers are adapted to their particular environments and their experiences are quite different from place to place, although they may appear to be same (van Ginkel, 2009; Lowe & Caroths, 2008; Cordell, 1989). In addition, decisions regarding poverty alleviation have often been influenced by the state of fish stocks regardless of the differences in each fishery and community. It has been assumed that well managed fish stocks will ensure a long lasting availability of fish for an impoverished fisher community and thereby uplift them from their impoverishment (WCED, 1987).

However, what has been witnessed in small-scale fisheries in Lake Victoria and elsewhere is a paradox. Despite the fact that a lot of wealth is generated in fisheries, fisher's lives and their daily struggles are showing minimal improvement (Abila, 2007; Onyango, 2007; Omwega, Abila & Lwenya, 2006; Onyango, Salehe & Mrosso, 2006; Odongkara, 2005; Odongkara, Abila & Onyango, 2005; Onyango, 2005; Shoko, Hoza & Mgaya, 2005). Their communities are often void of clean water, sufficient supply of energy to cook and keep warm; they live in rural, remote and isolated areas with limited access to health services and markets; they are often poorly organized and politically voiceless, and they are vulnerable to accidents and natural disasters which may easily push them into long-lasting poverty and finally their malnutrition levels are higher than the national averages. (Islam, 2011; Salas, Bjørkan, Bobdilla & Cabrera, 2011; Geheb et al. 2008; Béné et al. 2007; LVFO, 2006; RK, URT & RU, 1995). It is unclear why small-scale fishers should live in poverty when fisheries resources they depend on continue to be lucrative and generates substantial incomes both at micro and macro levels (FAO, 2005). For instance, the entire Lake Victoria where this study is situated, generates fisheries income of about USD 500 million every year at a macro-level and in essence making a few people very rich, while the majority of fishers (mostly small-scale) generates on average USD 4 per day (Odongkara, Abila & Luomba, 2009).

It is not only this paradox that has to be confronted in addressing poverty in Lake Victoria region. Poverty in general presents a range of hard choices which have complicated the problem (Lakwo, 2008; Omwega et al. 2006; Rao, 1978). This study addresses the paradox by examining the ground level facts and how people struggle to survive on a daily basis. By focusing on two fishing communities in Lake Victoria, Tanzania this study explores the meaning of poverty and its alleviation. The study examines the degree to which there is inconsistency in the way poor fishers', riparian to the Lake and governing actors in Tanzania understand poverty in the fishing communities and how to confront it.

The next section presents the background to the study and the research questions. This is then followed by a discussion on the concept of poverty and how it has been understood over time. Here I draw on literature from poverty research and briefly discuss how to analyse poverty. I also show how I position my work within the existing and relevant literature on poverty in small-scale fisheries and interactive governance. In the section that follows, I reflect on methodological issues related to studying poverty in small-scale fisheries, and discuss the research tools I used and how I handled the data collected. I then explore the meaning of poverty and propose a framework for assessment and alleviation. Finally I conclude this introduction with some suggestion on poverty governability and the contribution of this study with regards to where poverty alleviation effort should focus on.

2. Research background and problems

2.1. Background information

The idea of undertaking a study on poverty in fishing communities was inspired by a desire to find out the reasons why Lake Victoria small-scale fishers with whom I have been associated since childhood are not able to live better lives. Although poverty has been an issue in Tanzania (URT, 2007; RAWG, 2007a & b, 2006; Bagachwa 1994), its presence in fisheries raised a lot of questions in my mind. I wanted also to examine how fishers were coping with the problems they faced. What was, however, most disconcerting to me was the reality that the fishery was very lucrative especially with the boom of Nile perch *Lates niloticus* from the mid-1980s (Kolding, Zwieten, Mkumbo, Silsbe & Hecky, 2008; Mkumbo, 2002; Mkumbo, Ezekiel, Budeba & Cowx, 2002; Abila & Jensen, 1997; Jansen, 1973). The proliferation of Nile perch fisheries in the lake brought with it incomes, employment, foreign exchange and a motorised fishing technology, but did not match fishers' poor living conditions. This was an observation that made me interested in poverty and poverty alleviation as a research issue.

I started developing the research questions from a preliminary field trip I made to the Lake communities in February 2008. During this period, I discussed my research project with the local fishers, researchers, fisheries officers and academics and through these discussions some research questions were suggested. The main interest from these groups was to determine what poverty really is and why it persisted in the fishing communities. To them the efforts to address poverty (those already undertaken and those that were underway) were generating only marginal results.

Therefore, to theoretically understand the wealth/poverty paradox, this study set out to examine the interaction between fishers and governing actors). More specifically, it focuses on what values, norms and principles underpinning the understanding and addressing of poverty seemed and how to what extent they perpetuate the existence of poverty.

2.2. Research Questions

In this study I focus on how fishers individually and collectively experience, define and cope with poverty and resource crisis. I am also interested in how fishers' perception of poverty aligns with that of governing actors. My ultimate aim is to address what would be a proper governance approach that would consider the challenges of poverty alleviation, resource degradation and the hard choices that managers and resource users are faced with (Kooiman & Jentoft, 2009)., In particular I focus on the values (what is considered as important when it comes to understanding and fighting poverty), norms (what is believed to be mandatory when it comes to confronting poverty) and principles (what directs behaviour or action when fighting this problem) underpinning governance mechanisms and initiatives (see Articles 3 & 4).

This demands that I examine the kind of institutional set up used and needed to address poverty, the role that the poor could play and how they could be included in decision-making pertaining to poverty alleviation efforts. It is also necessary to explore the relationship between nature, culture, and cognition in reasoning and decision-making. These broad aims lead to the following specific research questions which are addressed in the articles that make up this thesis.

- i. Who is poor or what characterizes poverty in small-scale fishing communities? (Article 1 & 3)
- ii. Why does poverty persist in small-scale fishing communities and how can it be addressed? (Article 2 & 4)

- iii. When formulating poverty alleviation strategies for small-scale fishing communities, what is considered important and essential and how do these essentials enable or restrict coping strategies at the individual/household and community levels? (Articles 2, 3 & 4)
- iv. How do culture and gender roles influence poverty coping mechanisms in small-scale fishing communities? (Article 4, 5)

By attempting to get a deep understanding of what poverty in these fishing communities means (Question i & iv), I consequently aim at how they cope and why poverty persist (Question ii, iii & iv). By doing this I am able to discern the effect of poverty on the fishing practice and how government (the agency which has power and capacity to make and implement policy (see Kjær, 2004)) efforts relate to the coping strategies (Question iii). Through this, I try to understand the challenges facing poverty alleviation in fishing communities. This study also establishes how interactive governance as outlined by Kooiman et al. (2005) provides a relevant framework in understanding and alleviating poverty. The study proposes a governance mechanism for how best poverty could be assessed. The study examines how choices are confronted and decisions are made to not only address daily livelihood activities but also policy making.

In this research, I use case studies of two fishing communities (Kasheno and Nyakasenge villages) located around Lake Victoria Tanzania (Figure 2.1). Kasheno village is to the west whereas Nyakasenge is to the east. Both villages are gazetted by the Fisheries Division of Tanzania as fish landing beaches where Fish Processing establishments also collect fish.

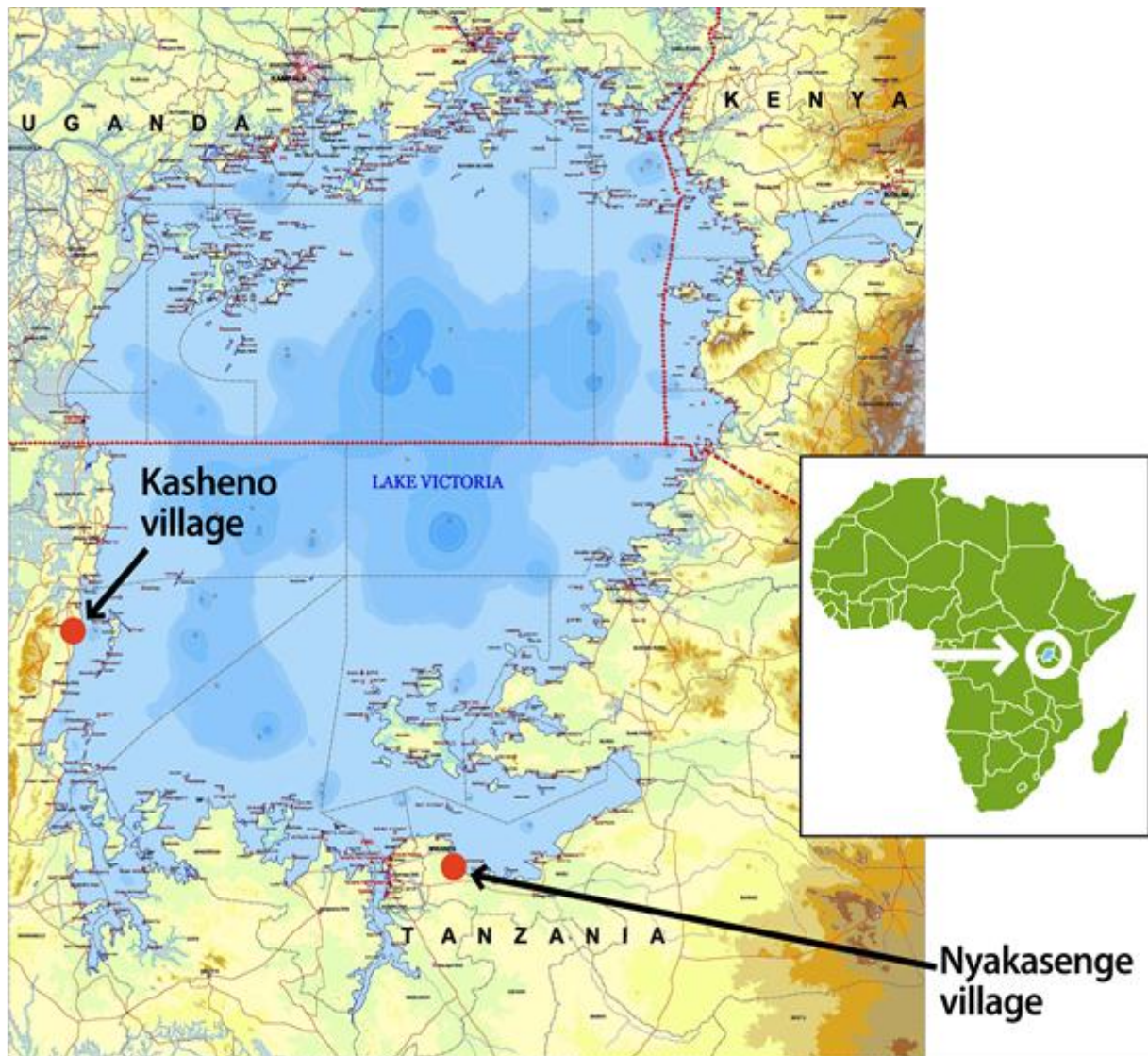


Figure 2.1: Map of Lake Victoria showing location of study sites.

3. Perspectives on poverty

During the course of this study, I was persuaded to accept that the conventional way of addressing problems (Conklin, 2006), which requires starting by defining the problem and thereby finding the solutions as I have traditionally believed, is just not the only way in addressing poverty. I have observed that problems such as poverty may not benefit from what definitions are supposed to provide. In my mind a more relevant approach was to examine how poverty is defined in the first place by the poor and by governors whose tasks is to develop policies and strategies for alleviating it and to examine the underlying factors.

3.1. The notion of poverty

As I discuss in article 1, three perspectives stand out in the research literature on poverty. These are (a) *The individual perspective* which argues that the poor are themselves responsible for their “pathological habits and life ways” (Hyatt 2001), a line of thinking that led to what Lewis (1998) called the “culture of poverty”; (b) *The structural perspective* which contends that the people are led into poverty by external factors (systemic failures). Therefore poverty alleviation requires intervention by the government or some other external agent (Hyatt, 2001); and (c) *The multifaceted dimension* which argues that poverty is neither an individual issue alone nor a structural issue alone but a combination of both (Jentoft & Midré, 2011; Alkire & Foster, 2008; Béné 2003; Hanson 1997).

The multifaceted (or multidimensional as discussed by Alkire, 2008, and Alkire & Foster, (2008)), nature of poverty explains this problem by several variables at the household level such as education, health, and living standards. Its measure is based on individuals who are seen to suffer from multiple deprivations.

Broadly the multifaceted poverty identifies the poor through their physical safety and security, employment and quality of work, empowerment and agency, ability to go without shame (dignity) and meaning and psychological and subjective well-being (Alkire, 2008).

The multifaceted approach has a two face explanation: -

(a) It is explained by multiple variables such as capability, economic well-being, and freedom, cultural and political exclusion among others. This is to say that for someone not to be poor, his/her *well-being* (determined by physical safety and security i.e. not being a victim of property, physical or lethal violence-crime /conflict); *Employment and quality of work* (meaning that one is not underemployed, working in unsafe environment or receiving low pay); *Empowerment and agency* (meaning that one is not acting under force or compulsion in one or more domains); *Ability not to feel shame* (one is not stigmatised, feels humiliated, isolated, indignified and discriminated) and *meaning and psychological and subjective well-being* (deprivation:- alienation, anomie, dissatisfaction) have to be enhanced (Alkire & Foster, 2008, Sen 1999, 1981).

(b) The multiple variables are related to each other as shown by the arrows in Figure 3.1. This makes poverty a complex problem. The relationship between and among the multiples variables indicate that there is a dynamic process going on at the backstage which enable the relationship to be seen. It is this process that I envision as the interactions between governing actors and the fishers/stakeholders (who are the poor).

Based on these two explanations, I argue in this thesis that an interaction mechanism where actors do not have any influence on decisions or activities geared toward poverty alleviation is likely to inhibit the overall capacity to alleviate poverty. Interaction within the community would depend on a number of factors including the value system of a community or group where an individual belongs. Values help individuals in a community or group construct meanings and even patterns of relationships and interactions.

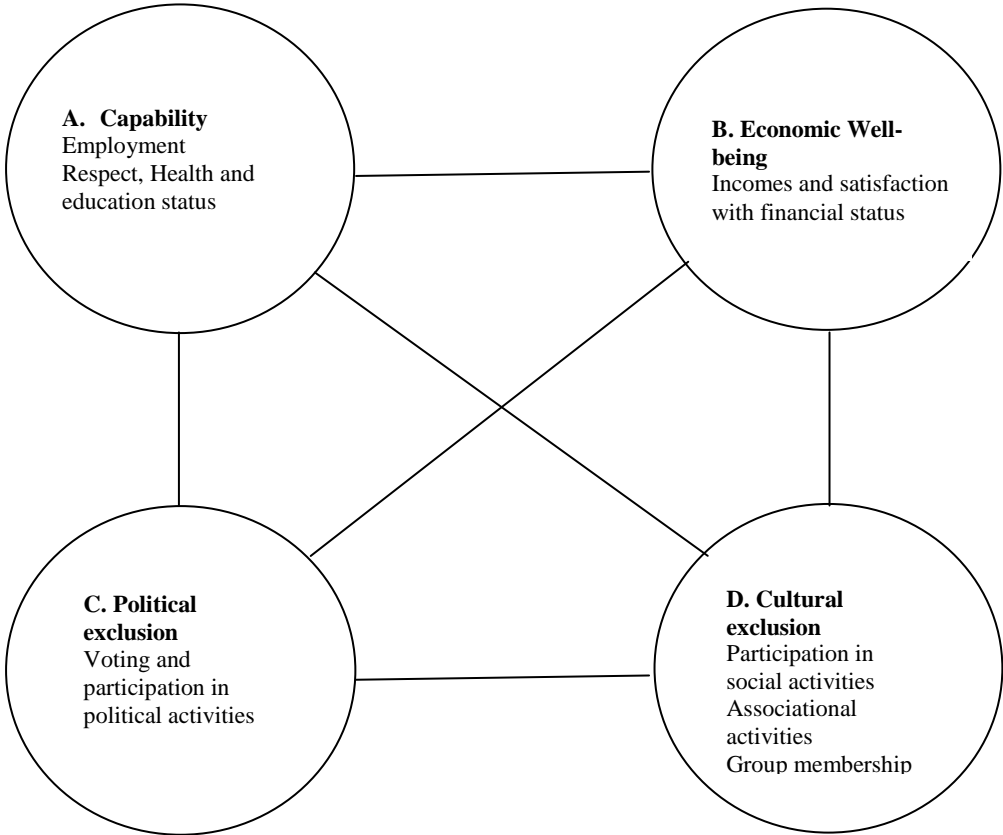


Figure 3.1: Relationships of the multidimensional poverty variables (Adapted from Wagler, Undated; Sen, 1999, 1981; Alkire & Foster, 2008).

Figure 3.1 indicates that the multifaceted poverty involves multiple indicators comprising capability, economic well-being, political exclusion and cultural exclusion. Each indicator is related to the other. For instance, (A) a person’s capability, which is determined by his health, education status and respect is a prerequisite for (B) economic well-being, here identified by incomes and financial status. Similarly, (A) a person’s capability will enable him to participate in (C) political (voting and other political activities) activities and (D) cultural activities within the community. Participating in (C) political and (D) cultural processes is also a way to build (A) capability and (B) economic well-being as it builds social capital.

I argue in this thesis that the formulation of poverty alleviation strategies should depend not only on the understanding of the various aspects of poverty as outlined in section (a) above, but also on (b) that is how its understanding is shared between governing actors and fishers/stakeholders. I therefore analyse poverty and its persistence in the two fishing communities by examining the role values, norms and principles between governing actors and fishers/stakeholders play in defining and alleviating the poverty problem. I look at whose values, norms and principles counts when it comes to designing poverty alleviation strategies. To capture these meta-governance elements, I observed fishers daily activities and how they make their decisions on the difficulties that they are confronted with. I also analysed poverty governor's values, norms and principles through the poverty alleviation strategies they have formulated for small-scale fisheries. I particularly examined reports, official government documents as well as published articles and books. I operationalized values as what the poor fishers and governing actors considered as important, norms as what they believe to be morally mandatory for them to do (norms) and what should direct their behaviour and or action (principles).

4. Methodological reflections

4.1. Epistemological perspectives

Given the nature of poverty as a composite and a 'wicked' problem (White, Killick, Kayizzi & Savene, 2001; Rittel & Webber, 1973), which is experienced differently at different scales, locations, among sectors and age groups, its study methodologies should capture the diversity of contextual perceptions, meanings attached to relationships and responses to situations. The methodologies have to be applicable in understanding respondents in their natural and socio-cultural settings and the on-going processes within the particular contexts in which they live their lives and do their work. The inquiry has to be able to capture how meaning and social life is constructed, lived and modified. In other words, it demands an understanding of how social actors responds emotionally, intellectually as well as practically to situations that confronts them in the on-going process of social life (Goffman, 1958).

The idea here is that the reality we can know through our scientific inquiry is that which is represented by a person's concepts (Geertz, 1974). Such a reality is independent and exists outside the individual's thought, but it is also interpreted, theorised, expressed and acted upon by the people who live in that reality. In other words, poverty is recognised as a real phenomenon in a community, something that can be observed, surveyed and measured.

However, meaning or understanding of poverty are something that is, as argued here, socially constructed interactively by members of that society who experience and reflect on what it is to them (Parsons, 1951). It involves looking at the ways social phenomena such as poverty are created, institutionalized, known, described and in some instances embedded into the culture of the community (Berger & Luckman, 1971; Lewis, 1998).

Faced with the fact that focusing on context is inevitable, poverty understanding would also more importantly require a kind of knowledge that is acquired by being part of a community or culture. This is the kind of knowledge that Aristotle referred to by his concept of *phronesis* which examines social phenomena (poverty) focusing on values and knowledge of a particular group (Flyvbjerg, 2003; See Article, 1 & 5)).

Aristotle equally emphasised other forms of knowledge namely *episteme* and *techne*. *Episteme* is knowledge generated about universals through analytical rationality. This is where, poverty is analysed as an outcome of a linear and a rational process. In other words poverty is for example defined as a low income issue, that those who are poor are those who live below the poverty line. To reduce poverty therefore programs that target increase in incomes above the poverty line are deemed appropriate (United Nations, 2010; URT, 2010a & b; Collier, 2007; Mehrotra, & Delamonica, 2007). *Techne* is the use of technical knowledge and or practical skills to address problems. With regards to poverty, *techne* is evidenced for instance in the numerous technical measures of poverty that includes poverty line, poverty gap and poverty index, head-count index, squared poverty index, the Foster-Greer-Thorbecke measures (Haughton & Khandker, 2009). It is this kind of knowledge that a community and or a fisheries development expert would have.

After mid of the 20th century, certain societal problems have presented themselves in a manner that defy established, disciplinary perspectives in understanding them. Rittel and Webber, (1973) termed them “wicked” problems. Such problems include but are not limited to say climate change, natural hazards, HIV/AIDS disease, influenza pandemic and poverty. Fisheries and coastal governance has also been seen as a wicked problem (Jentoft & Chuenpagdee, 2009). Rittel and Webber (1973) argued that such societal problems cannot simply be handled by the traditional linear, analytical approaches, which addresses problems through a top down process working from the problem to the solution.

However, the different faces in which poverty has continued to presented itself and defy known and accepted methods of solving problems calls for conceptualising it in a different way from what *episteme* and *techne* has so far achieved. This is one reason that this study adopted *phronesis*, modelled to inform practical reasoning also as an important

methodological perspective in studying poverty. In addition this study show how interactive governance is a way that provides some hope in addressing wicked problems (Jentoft & Chuenpagdee, 2009)

4.2. Methodology: Ethnography and Grounded theory

In order to capture meaning of poverty in the communities when the study was undertaken, I largely employed ethnographic research techniques. Ethnography is considered as a form of research that focuses on social meaning through making observations on socio-cultural phenomena (Clifford, 1999). I was additionally inspired by grounded theory (Glaser & Strauss, 1967) by focusing on how small-scale fishers living in poor conditions interpret their condition, define their problems, and generate meaning that enable them to see how they as individuals fit in with the larger picture of their communities. These techniques also allowed me to explore how people act on their perception, i.e. how they respond by attempting and sometimes succeeding to improve their conditions, relationships, entitlements and capacities.

The grounded theory approach motivated me to identify how these fishers understand their poverty and how they make sense out of the world in their own terms (Agar, 1986). As discussed in article 1, it helped me to understand that poverty in Nyakasenge is an issue of not being able to use one's head, hands and legs and that to be considered poor one must be in a state in which one cannot even ask for the basic necessities. Elaborating on this technique, Glaser and Strauss (1967) argued that scientific truth results from observation and emerging consensus within a community of observers as they make sense of what they have observed. This, as Suddaby (2006) argues, reflects a pragmatic approach to social science where reality is perceived as the on-going interpretation of meaning that is generally produced by members involved in a common activity.

Whereas ethnography enabled capturing and interpreting meanings the way it actually worked in particular contexts and in real time, grounded theory allowed understanding of concepts to emerge and be strongly grounded on the observed daily activities and interactions and interpreted meanings of small-scale fishers (Glaser & Strauss, 1967). Moreover, grounded theory enabled complex social processes and the small details driving relationships among poor small-scale fishers to be observed and analyzed.

4.2.1. *Methods for data collection*

I used in-depth interviews of key informants and participant observation for a broad and clear understanding of fishers' lives. Other methods used included document analysis, focus group discussions, trend analysis. I also collected life histories.

The fishing communities studied were not new to me. For over 10 years, as a researcher with the Tanzania Fisheries Research Institute (TAFIRI), I undertook research among the lake's fishing communities, including Nyakasenge and Kasheno communities. Notwithstanding my familiarity with this place and people, I still faced some difficulties especially in winning the trust of the community members. Being an outsider I was first treated with suspicion. This was complicated by the fact that the period of my fieldwork coincided with a time when illegal fishing practice was rampant and the Fisheries Division had increased efforts to reduce it. Nyakasenge fishers therefore viewed me as hiding behind research to monitor illegal fishing practice in their community. I nevertheless explained my intentions in various community forums such as community gatherings (Figure 4.1). One of the beach leaders in Nyakasenge village accepted to accommodate me despite underground resistance from other village leaders. I later learned that during my initial days in Nyakasenge, a meeting was held secretly, where my host was put to task to explain why he agreed to accommodate me and



Figure 4.1: Village Chairman addresses village members at a village gathering. This was the meeting where I was introduced to the village.

what he had understood to be my objectives. He was warned that in case the information I was collecting ended up in the hands of fisheries authorities he would pay dearly for betraying the community. He had to take responsibility for any eventualities with regards to how I would use the information I got from them.

As I did my fieldwork, I also took several photos which eventually rescued me to some extent because I ensured that I printed them and gave them out without any charges. I was therefore referred to as the photo man. At the end of my fieldwork I also showed them a video documentary that I had made about them (the Video is titled “Invisible Possibilities” and is attached to this thesis). This made some of the few who did not offer to cooperate apologised to me. They felt that the information they saw in the documentary presented the reality of their daily struggles with their fishing activities. I was able to do my research in this community for a period of 12 months.

4.2.2. Participant observation

Through this method I became a member of these two communities (Nyakasenge and Kasheno). By living in Nyakasenge community, I was able to see them differently from the way I had understood them in my ten years of research among the Lake fishing communities. The fourth article in this thesis exemplifies this; I learned to appreciate how they relate to their fishing not as an occupation of last resort, but something they value regardless of the income it provides. I attended their meetings which were convened for various reasons including: resolving conflicts among them; making contributions to members who were bereaved; participated in funerals and; planning to receive visitors and take action on an upcoming activity. I also went out fishing with them, and participated in festivities. In my own assessment I became an insider in Nyakasenge. In fact I observed that the community members perceived me as one of them despite the initial lack of trust. For instance, it is common practice here that visitors are given special treatment during public gatherings, where they would be given seats while the rest were left to find theirs. They would also prepare meals specifically for the visitors and only a chosen few were allowed to eat together with them. I never had these privileges. I was just treated like any other member of the community.

Participant observation allowed me to note unobvious and ignored aspects of these fisher’s lives. For instance, I did not see certain characteristics which have been used to describe the poor such as misery, hopelessness and powerlessness (see Articles 1 & 4). By using ‘the wide angle lens’ that Spradley (1980, p. 56) talks about, I was able to take note of a broader spectrum of information finding out what it feels like to be a fisher and or to live

under conditions of poverty. I also understood the meanings of poverty as constructed by the Kasheno and Nyakasenge fishers. Becoming part of these fishers' daily life helped me see their life from an 'inside-in' or 'emic' perspective (Headland, Pike & Harris, 1990; Jentoft, 2007b). Poverty was part of their life, but certainly not everything.

4.2.3. Document analysis

This method involved analysing published journal articles retrieved from the internet and authors of papers, books and technical reports from the TAFIRI library, the University of Dar es Salaam library and the Lake Victoria Fisheries Organization. I also retrieved published and unpublished research reports from TAFIRI, local newspaper reports, official government reports and Policy documents from the Ministry of Livestock Development and Fisheries, the Poverty Eradication section in the Ministry of Finance. The policy documents provided information on historical management regimes in this fishery, the resource status, policy and legal changes that have occurred, poverty levels and its understanding and how it has been addressed. These documents also helped in developing questions posed to Nyakasenge and Kasheno village residents.

4.2.4. Interviews

I undertook interviews (Figure 4.2) with researchers, former and current administrators, village leaders, retired men and women in the village, government officers at village, district, regional and national levels as well as fishers. In total sixty six interviews were undertaken for this study. These focused mainly on individual perceptions of poverty within their communities. I however experienced some challenges. For instance, some of the people interviewed misunderstood my objectives. They thought that my work was to identify the poor among them so that I could arrange to assist them. Some respondents had to leave during the interviews to attend to their families or fishing activities and some thought that the interviews were a waste of time because they were just series of questions without me providing any answers.

The interviews did not have a set of prepared questions. On the contrary I only had broad topics for which the interviews focused. These included social relations and socio-economic conditions of the fishers, fishing activities, motivational factors in fishing, perceptions on poverty, incomes and expenses, welfare activities at community and government levels, governance structures, what is important to them as a group, how they



Figure 4.2: Doing a key informant interview with the oldest village member.

described their belonging, perceptions regarding how they see themselves with respect to others. Interviews helped in capturing sensitive and complex issues such as incomes, making sense out of ones activities and life, to gain new insights and perceptions. Interviews with administrators focused on policy issues such as care of children, institutional structures for poverty alleviation, meaning of poverty and efforts on its alleviation. I also discussed with them about challenges faced in addressing poverty.

In order to take into consideration my respondents' physical and emotional state and appearance, interviews were scheduled at an appropriate time for the respondent in an area in which he/she felt comfortable. The interviews were undertaken in the respondents' homes, or in cafés to provide an environment that most of them preferred. The cafés were very useful places for interviews because they were only active in the morning before 10 am and late in the evening from 6 pm. Interviews were however undertaken between 11am and 5pm. Each interview lasted at least between 45 minutes to 2 hours at most.

4.2.5. Focus Group discussions

This method was used on crew members (those who go out to fish in the Lake), beach leaders, gear and boat makers and menders, and women in the two fishing villages. At least six to ten persons in each category were involved in each of the discussions. The discussions were undertaken right in the fishing villages under tree shades, some were held at the fish landing

areas when women or fish traders were waiting for boats to arrive. In Nyakasenge most interviews were undertaken at an open space that was very popular with the residents. This place is between the fish landing area and the houses at the beach. The discussions were centred on discourses which shape practices of everyday life, the ways in which meanings are created and challenged, and the creation of knowledge out of seemingly familiar understandings (Lunt & Livingstone, 1996). The discussions were often very lively as respondents listened and responded to each other's contributions. The interactive aspect (Cameron, 2005) provides opportunity to explore different points of view and formulate and reconsider their own ideas and understandings. Thirty three focus group discussions were undertaken for this study.

4.3. Data analysis

The data collected for this study was analyzed both while in the field and after. Data from interviews were largely analyzed together with the respondents. For instance perceptions on issues pertaining to identity, values, and motivational factors among others were synthesized in the field and finally discussed with the respondents (Table 4.1). Information from the documents was analyzed by establishing both regularities and irregularities, identification of poverty alleviation strategies and status of poverty in the country were also discussed with some administrators. Data from focus group discussions were also analyzed while in the field. Analysis was done manually where responses for each question were grouped together. Explanation was then sought for the answers either while in the field or after returning from the field. When there were no more new answers, explanations and interpretations coming up, the data obtained was considered analyzed.

Table 4.1: Examples of how interview statements were analyzed

Responses	Analysed as meaning.....
<i>Question: What does fishing mean to you? (see Article 4)</i>	
<ul style="list-style-type: none"> • “Fishing is the only activity I grew up thinking about” • “This is what I live from. Fishing gives me the things I need to live as everybody else” • “When you go out to fish and are able to control or subdue the forces in the water/Lake to attain what you want, then you feel you are a real man” 	<ul style="list-style-type: none"> • Fishing is a meaningful activity • Fishing as a way of life • Fishing gives identity to fishers

4.4. Research quality

For this study, the following issues were undertaken to achieve research reliability and validity;

- a) *Maintaining transparency and openness throughout the study*: During the entire period of research, transparency was maintained by being open from the research questions development to the writing and publishing of the attached Articles. Four meetings were held each with researchers, managers, fishers and fish processors to discuss the research questions methods and design. The production of the attached Articles equally went through a rigorous peer review which did not only involve the review mechanism of the journals in which they are published but also a review from people who have worked in the Lake region and or are interested in the thematic topics of the Articles (see acknowledgements in each Article). Additionally, draft versions of these Articles were discussed in several international conferences as well as internal departmental seminars at the Norwegian College of Fishery Science and PhD courses/seminars I attended. The study also used two research assistants for data collection (interviews and focus group discussions). This also helped to check on biasness that would easily have arisen if I were the only person doing the data collection.
- b) *Use of constant comparison*: Through this method, the study started off with three interviews from which answers were grouped and commonality or difference was identified. Categories of incidences from the data that came out as common were then analysed in detail by comparing how each of the interviews brought them out. In addition subsequent interviews also looked at how the common issues were coming out from the respondents. This culminated in generating an understanding (theory) about concepts that were used to describe what, for instance poverty, involved.
- c) *Ensuring attainment of saturation point*: Validity and reliability were also ensured by reaching a point of saturation where no more new information was forthcoming. This was a point we arrived at when the more we dug deeper into an issue the more we got repetitive answers of information and existing conceptual categories.
- d) *Relating findings to literature (comparing and contrasting)*: Data collected were also compared or contrasted with the existing published information. This was done throughout the whole research period including the period of writing this introduction.

4.4. Ethical considerations

Undertaking a study among poor and vulnerable people require ethical issues. Respondents were conscious about me using their difficulties to generate incomes for myself. This was because in 2004 a film (Darwin's Nightmare) had been made from the Lake which depicted fishers as living in a deplorable manner. Fishers resented strongly taking of their pictures without payment or providing their names in any interview. In order to ensure that I protected their identity, we (I and them) agreed in principle not to write names in my reports and or publications. We also agreed that I should take back a copy of my outputs to the village for them. I also asked for their permission to use their photos in my outputs. Some agreed and others vehemently refused. Some had to verify and decide the specific photo that they allowed me to use.

5. Understanding poverty

Poverty in Nyakasenge and Kasheno fishing communities is not something different from what the concept of poverty has been understood to mean elsewhere, i.e. living a life with difficulties to access material, economic and social needs. However as argued in article 4, in as much as the impoverishment perspective is useful, we cannot only see small-scale fishers in the light of their deprivations. This should not be understood to mean that fishers in these communities do not suffer from inadequacies', neither should it be taken that wants are not essential in understanding fishers poverty. Also poor fishers are endowed with capabilities both individually and collectively. They have knowledge and skills and they also have community in other words they have both human and social capital. This is also what I try to show in the 'Invisible Possibilities'. I also argue that fisher's requirements must be seen as part of a bigger problem. Wicked problems are usually part of bigger problems. Poverty is a problem that is experienced by fishers in their community but it may also be part of a problem that relates to the relationships between their community and government. It may also be part of a larger social and cultural issue. For instance Tweyambe Women Enterprise (TFE) (Article 5) needs and the manner in which they have endeavored to address them is deeply embedded in their community and in traditional culture.

Poverty is clearly a governance issue. My reason for framing poverty in governance terms is that the persistent poverty in small-scale fishing communities cannot only be addressed through technical and/conventional approaches (see Haughton & Khandker, 2009; Alkire & Foster, 2008; Morduch, 2005 on some of these technical approaches). Neither is poverty a fisheries management problem that can easily be fixed by government intervention.

Rather, it is a complex – or a “wicked” (Rittel & Webber, 1973) - societal problem, which requires an interactive governance mechanism (See Articles 3 & 5). Its alleviation requires the interaction of both the poor and the government acting together in developing a shared understanding and confronting the poverty problem.

The interactive governance perspective as developed by Kooiman (2003) and later applied to fisheries by Kooiman et al. (2005) became a game changer in this study project. It inspired me not only to write article 3 attached but it was also an eye opener for understanding the poverty in Lake Victoria fishing communities. Consequently I thought that the understanding of poverty required a broad governance perspective and that its alleviation demands ‘an art of governing’ involving what Flyvbjerg (2003), inspired by Weber and Aristotle, calls *value-rationality*, and *phronesis*. My use of the interactive governance perspective focuses on the extent to which the existing form of interaction gives actors opportunities to influence relevant policy alternatives for poverty alleviation by mobilizing their practical knowledge and social values.

I observed that the fisheries management strategies used here were not congruent with local level institutions and therefore they were not meeting their intended goals. There was a mismatch between what Jentoft (2007a) would call the governing system and the system-to-be-governed. Fisheries institutions were not adequately and effectively addressing the declining fish stocks, neither did they relate effectively to the needs and concerns of the local community. I noted that these two systems were not adequately interacting. Interaction was then an issue worth examining. Could it be that poverty paradox and the poverty alleviation failure is explained through ineffective interaction?

5.1. Poverty as an aspect of the systems-to-be-governed

The interactive governance framework operates on a three systems perspective of a) systems-to-be-governed, b) governing system and c) governing interaction (see Article 3; Chuenpagdee & Jentoft, 2009; Jentoft & Chuenpagdee, 2009; Bavinck et al. 2005). The systems-to-be-governed, which is comprised of fishers (boat and gear owners, crew members and boat and gear menders) while the governing system comprises the government, civil society institutions including donor agencies, private sector and or market and fisher organizations who are involved in governing (for example the Beach Management Unit leaders) (see Figure 2 in Article 3). The interaction (Kooiman & Jentoft, 2009; Kooiman, 2003) between these two systems is central in understanding of how poverty is generated in the first place and how effective poverty alleviation strategies are and can possibly be

governable. The two systems and their interactions are within this framework seen as inherently diverse, dynamic, and complex and operate at different scales (Chuenpagdee & Jentoft, 2009; Bavinck et al. 2005; Jentoft & Chuenpagdee, 2009; Kooiman et al. 2005; Kooiman, 2003). These system characteristics create limits and opportunities to poverty alleviation.

I postulate that ineffective interaction (where actors for instance have unequal opportunity in influencing outcomes) between the two systems would generally result into poverty and make poverty persist. Such an interaction would mainly revolve around decision making-processes, power and power relations, representation, participation and learning. The inadequacy and ineffectiveness in interaction between the system-to-be-governed and governing system is an issue that can partly be traced from the values that the actors within the two systems hold. This is because values determine how governors view poverty and how they prefer to deal with it and how people such as fishers respond.

5.2. From meta-governance to decision-making

The governance orders of the interactive governance theory, namely first order, second order and third order or meta-governance (Kooiman, 2003), offer additional insight into the poverty problem in the two communities. First order governance focuses on solving problems and creating opportunities on a daily basis within and between the system-to-be governed and the governing system. The second order focuses on the institutions that are established to solve problems and create opportunities within the systems. The third order or meta-governance is about the deliberation and deciding on values, norms and principles that these institutions are set and operate. Thus, to detect what these values, norms and principles are one would need to explore both systems and their interactions.

Kooiman and Jentoft (2009) have expounded on the meta-governance. To them ‘values are the most general and fundamental notion, and choices the most applied and specific. Norms and principles have intermediate positions in this sequence’ (Kooiman & Jentoft 2009, p. 823). Their model is represented in Figure 5.1 and ends with choices. Jentoft, Chuenpagdee, Bundy and Mahon (2010) have further discussed additional factors such as reflection and action in the context of how images of problems and opportunities are formed. In the interactive governance framework, images belong to what Kooiman et al. (2005) call governance “elements.”

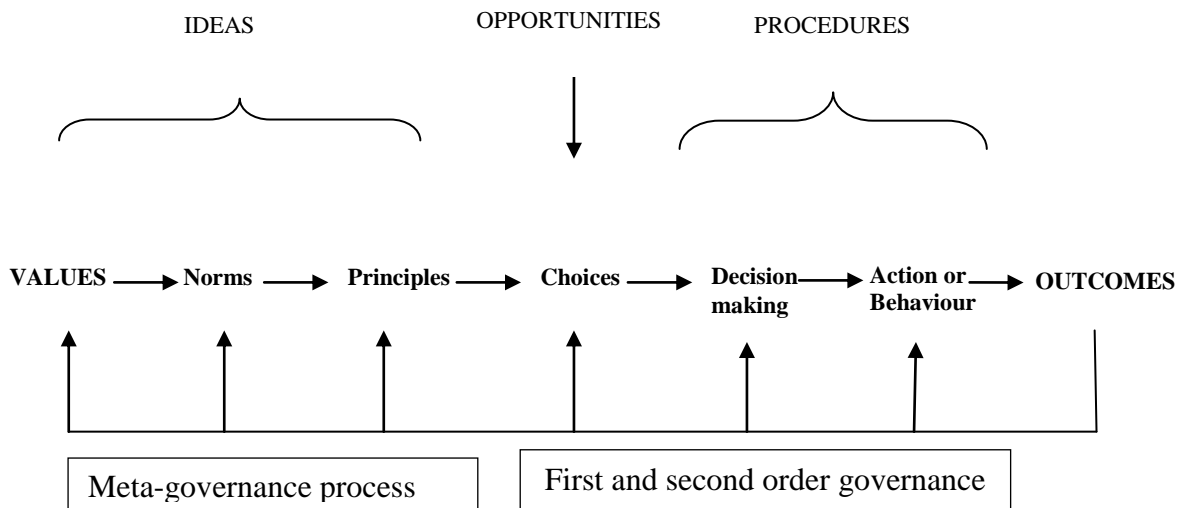


Figure 5.1: Relationship between the meta-governance process and decision-making. See Kooiman and Jentoft, (2009).

From the model (Figure 5.1), values, norms and principles (meta-governance process) can be categorised as ideas which influence how opportunities (choices) are pursued. Decision-making processes and procedures are often but not always institutionalised. The arrows from outcomes indicate a feedback system thus making the relationship between the meta-governance and governance outcomes to be dynamic and one in which learning from experience influences changes at all levels the process.

Whereas I concur with the approach of Kooiman and Jentoft's (2009) meta-governance process, I here indicate how the meta-governance process links with other steps in the governance process, i.e. choices, decision-making and action/behaviour. When faced with choices, decisions have to be made. Choices here are a set of alternatives which one can select from. Alternatives are what decision makers are presented with to examine before making a decision, i.e. coming up with a final choice. In the traditional perception of the problem solving mechanism, choices are the solution that results from analysis of data or situation under scrutiny (Conklin, 2006). The period between having one or several choices and coming up with a final choice involves a process that is generally known as decision making (Kahneman & Tversky, 1984). In the meta-governance perspective, on the other hand, as far as wicked problems are concerned, the process is less linear. Defining the problem is often the problem, and solutions often precede definitions (Rittel & Webber, 1973). The wicked problem perspective would also suggest a less linear process than what is indicated in the model presented above. As an ideal type model, this however, will be left for empirical

investigation. In such investigation, I suggest that the following aspects of decision-making must be considered:

According to Harris (2010), “decision making is the study of identifying and choosing among alternatives based on the values and preferences of the decision maker”. The values and preference are acquired by belonging to a community or the environment in which one has to make the decisions. This involves a mental process in which a decision-maker, for instance fishers in Nyakasenge and Kasheno as well as government administrators, have to choose the alternative that yields the highest possibility of success while fitting with the values and aspirations of the decision-makers and their peers (Harris, 2010; see Article 4).

In making decisions, Kahneman and Tversky (1984) argue that the focus of the decision-maker is mainly on questions regarding rationality, logic, beliefs and preferences as they are, not as they should be (1984, p. 341). This calls for a less idealistic/normative theory and more for a theory generated from the study of empirical reality (as would also be the argument of Glaser and Strauss (1967)). They argue that decision makers are normally driven by the subjective valuation of the outcomes of the decision, and talk about two decision-making strategies. The first one is *risk averse*, which means that decision makers will select alternatives with outcomes that they are certain of. The other strategy is *risk-seeking*, meaning that decision-makers rather bargain the outcome, whether the final outcome has lower or higher (monetary) value. In short, decision-makers either go for what they are sure of or what they hope for. For instance when fishers in Nyakasenge and Kasheno decide to remain in fisheries even when the incomes are low, they do so because they value their life as fishers within the community. As in the case of the TFE, rather than leaving the community to seek better incomes, they actively engage in trying to improve the conditions under which they live, thus believing and hoping that life could become better than it currently is (Article 4 & 5).

Understanding decision-making as part of interactive governance, we can further benefit from Langley (1995, p. 63) who discusses two mechanisms; “Paralysis by Analysis” and “Extinction by Instinct” The former is where decisions are arrived at after a thorough study and synthesis, while the latter is where decisions are made arbitrarily without systematic study and reflection. These decision-making processes (risk seeking and risk averse and/or Paralysis by Analysis and Extinction by Instinct) are analytical constructs and indicate that there is indeed a difference in making decisions. They are not the only processes upon which all decisions are made. It is not the case that one decision making process say Paralysis by Analysis will be exclusively used by one group, for example the governors, while the poor

will exclusively use Extinction by Instinct. Rather both processes are used either together or interchangeably by different groups depending on the problem that needs to be solved. In the Paralysis by Analysis, the meta-governance process plays a more explicit role. This does not mean that values, norms and principles are not present in the Extinction by Instinct approach, only that they are less reflected on in the moment, they are simply internalised and “embodied”, and are therefore more difficult to assess from a methodological point of view. This is also why understanding what poverty means to people and how they cope with it in the two communities, has been a challenging endeavour.

The Paralysis by Analysis process taken in arriving at decision involves reasoning, or what Jentoft et al. (2010) is referring to as “reflection.” The basis of reasoning will differ from say the poor fishers on the one hand and those charged with the responsibility of designing poverty eradication strategies. Reasoning for each group will depend on the values, norms and principles which are often different and in conflict. From a normative perspective, deliberate efforts must therefore be made to allow an elaborate interactive mechanism at the decision making level so as to bridge the mismatch between these two reasoning processes so that they can possibly come up with a shared decision to address poverty. I argue in this thesis, that the less frequent or more ineffective the interaction between the reasoning processes that occurs within the system-to-be governed and the governing system, the further apart the actions to address poverty will be and the more persistent and widespread will be poverty. In both systems Paralysis by Analysis must be given a greater chance as Extinction by Instinct can easily lead the poverty alleviation process astray. There is however, a risk that Paralysis may lead to inaction. Governability would require the thoroughness of the former and the decisiveness of the latter.

5.2.1. Values as foundation of the meta-governance process

Values are the starting and turning point in influencing attitudes and behaviour as well as for understanding and solving problems (Figure 5.1 & Table 5.1). This is because they are in essence what determine the basic norms, principles and choices for any action to be taken (figure 5.1) at both first and second order. Values, norms and principles are also inherent in social action (Kooiman & Jentoft 2009; Kooiman & Chuenpagdee, 2005). Although there are some generally universal values, norms and principles, for instance those that relate to human rights (rights to food, shelter and clothing), they are in reality culturally bound (Kooiman, 2005). This implies that values, norms and principles may differ from one culture to another. In other words the values, norms and principles that guide understanding on what poverty

means and what should be done about it to one culture will not necessarily be the same in another culture. This is why poverty issue in Nyakasenge is different from that in Kasheno (Table 6.1).

As discussed about the TFE in article 5, values are present in everyday life of community members. This is also in line with Krishna's argument leading him to stress the need for micro-level analysis and his "stages of progress methodology" (Krishna, 2010, 2005). This is to say that when a community lists factors that identify one as poor or not, just as Nyakasenge and Kasheno fishers did, the factors listed are value-laden and often specific to the community. The list will largely reflect what richness and poverty mean to people as defined by the community one belongs to. Thus the presence of values in everyday interactions at all governance orders provide a rich ground to understand poverty

Using the meta-governance order (Kooiman, 2005) and the stages-of-progress (Krishna, 2005), the variables in governance for which an understanding of poverty and its alleviation can be worked through are (see Table 5.1) identified as decision-making processes, power and power relations. These variables are present all three orders.

5.2.2. Decision-making and power

Everyday life can be seen as an on-going process of making decisions and implementing them. From the time somebody wakes up to the time he goes to bed, from the time offices are opened to when they are closed, decisions are being made and/or implemented (see Article 1, 4 & 5). Even implementation of already made decisions involves making decisions. How decisions are made and implemented is therefore an important factor when it comes to understanding and alleviating poverty. Kooiman (2005) argue that governors' main daily tasks involve confronting problems and creating opportunities. To do this, governors are constantly involved in deciding on the best mechanisms through which they can address the said problems (read poverty) and create opportunities (read how decisions are arrived at when dealing coping and alleviation of poverty) at different scales. This is therefore a central subject of inquiry in this thesis (Table 5.1).

In their discussion on how to handle hard choices, Kooiman and Jentoft (2005, p. 289) argue that 'mutual learning' plays a role. They note that mutual learning cannot take place without interactions between social actors. Learning involves a process which should be the focus of investigation. The focus should not only be on the decision that is taken at a particular moment in time. Their idea, which I also concur with as I argue in article 3, is that when it comes to hard choices, people will seek support in values, norms and principles, i.e.

"meta-governance". These are issues where no one has a particular authority, but which are best arrived at through a process of mutual learning and collective decision-making. Thus, the only way to reach meta-order decisions for wicked problems such as poverty, i.e. which values, norms and principles should guide poverty alleviation, is to talk about them (both at individual and structural levels) and then try to reach some mutual understanding about what is at stake. This is also to say that "meta-governance" requires learning to be interactive.

In Table 5.1 I propose a framework for assessing what poverty alleviation decision-making would involve. It is worth examining how the process enables or creates opportunity for all stakeholders, including the poor, to participate and voice their concerns. How it ensures that opinions are respected and moreover how the process creates a mechanism for reaching compromises is a research issue.

In making decisions, power has an influence not only on the type of decision to make but also on who should have the last word to close up a discussion. Consequently, it would be in order to examine whose values, norms and principles take precedence when decisions are made, and why at all orders. For the second order, how does power form institutions that are established to address societal problems such as poverty? How does institutional disables or enables the poor to voice their concerns and to organize themselves. Sometimes those in authority limit the poor to operate independently and form associations that will empower them, especially when such associations are seen as a threat (see Jentoft, 2007b). Power can also be used to divide the poor, keep them down, and limit their action space.

The framework I propose below for analysing poverty is formulated on the interactive governance components in relation to the variables of values, norms and principles, decision making and outcomes (cf. Figure 6.1).

Table 5.1: Framework for analysing poverty in small-scale fisheries

Variables	System-to-be governed	Governing system	Governing interactions
Values, norms and principles	How do small-scale fishing people experience and define poverty within their community? Which values, norms and principles are considered crucial for poverty alleviation? (Article 1 & 3)	How do governing institutions define poverty in general and with regard to small-scale fisheries? Which values, norms and principles are underpinning their approach to poverty alleviation? (Article 2, 3 & 4)	How are values, norms and principles converting into the relationship between government and fishing communities? Which are shared, which are in conflict? Which mechanisms are installed in order to bridge differences? (Article 3 & 4)
Decision-making	Are they enabling or restricting the coping mechanisms of fishing people at the level of the community (Article 2)?	How are poverty alleviation decisions arrived at? Is the process transparent, responsive to the poor, inclusive, consensus building? (Article 2, 3 & 5)	How do the poor and governing actors interact as they negotiate on definition of and reach decisions for poverty alleviation? (Article 2, 3 & 5)
Action/Behaviour	What exactly are the poor fishers doing to cope with and confront their poverty situation? (Article 1, 4 & 5)	What policies and action/s are governors undertaking to address poverty in fishing communities? (Article 2 & 3)	How do governors and poor fishers interact, i.e. communicate, cooperate, and proceed as they fight poverty in fishing communities? (Article 3 & 5)
Outcomes	What outputs are generated when addressing poverty? Satisfaction, justice, happiness, trust, well-being, freedom? (Article 2 & 3)	How do governing institutions learn and adapt from outcomes achieved? Have changes occurred over time? (Article 3)	How do outputs affect how the poor and governing actors interact? Do they increase or decrease interaction, or does interaction assumes new form? (Article 3 & 5)

6. The Articles: Summary of content

6.1. Introduction to the Articles

Here I provide a short introduction to the five articles that comprises this thesis and show how they are connected. I also present a summary of the findings and show how I proceed to discuss them. The articles were written to address the research questions as shown above (See also Fig. 6.1). Briefly:

Article 1 explores the meaning of poverty. As I worked on this article, I realized that the understanding of poverty must be grounded on the beliefs or ideals about what is considered as good or desirable in fishing communities. Its understanding is something that goes beyond the income-expenditure nexus. I noted that poverty is a problem that the Nyakasenge and the TFE fishers perceived from the community perspective. In other words the nature of the poverty problem is unique, can be explained in several ways, it is very complex and socially embedded. With regards to the framework (Table 5.1), in this article I questioned how small-scale fishing people experience and define poverty within their community (values, norms and principles)? In particular I noted that I was dealing with a “wicked problem”, whose meaning largely depend on the values and relationships I observed among Nyakasenge and later on among the Kasheno residents. The wickedness of poverty was in the difficulty of its definition. I therefore concluded that the description of poverty may be the same for several communities but the impacts and possible solutions will differ from situation to situation. For this reason I conceptualized it as a problem with a value judgment rather than being a simple measurable inadequacy. To confront it, realistic judgments must consider the values and interests of those affected by it.

Article 2 explores whether fishers’ poverty can be understood in relation to accessibility to the fish resources. The aim with this article is to examine how values (freedom) relate to norms (participation), principles (transparency) and choices (centralized or decentralized management process) and ultimately affects decision making. The article examines whether freedom accounts for the poverty among these communities. By contrasting the concept of freedom as discussed by Hardin (1968) and Sen (1999), the article argues that tragedy in the commons, and consequently poverty, is not necessarily caused by too much freedom, but by lack of it. These two freedom perspectives also present a dilemma with respect to poverty alleviation as well as fisheries management. This article draws empirical information from small-scale fisheries of Bangladesh and Lake Victoria. It demonstrates the relevance of Sen’s broader concept of freedom as being the one that should underpin resource governance and poverty alleviation. By contrasting these two freedom arguments, the article discusses persistence of poverty and how formulation of poverty alleviation strategies restricts or enable coping with poverty. The article focuses on decision-making within the system-to-be-governed, the governing system and the governing interaction.

Article 3 uses the interactive governance a) components; systems-to-be-governed; governing system and governing interaction, and b) governance orders; first; second and third

or meta-governance orders, to explore the wickedness of poverty, especially the challenges related to its governability. The article discusses how understanding of poverty is related to how its alleviation strategies are formulated and implemented. It explores how poverty alleviation strategies, especially institutional set up, are formulated within the framework of interactive governance. This article therefore captures the discussion on values in the first two articles and argues that the orders of governance in the interactive governance perspective namely: - the first, second and third (Meta) governance orders, offers guidance in addressing three fundamental governability questions for poverty which are (i) where to look for it (ii) what to look for; and (iii) what to look at.

Articles 4 discuss how values, norms and principles are translated into everyday life among fishers who are poor. This article examines how fishers make decisions to cope with and confront their poverty. It shows what fishing means to fishers and the satisfaction they derive from it. The article shows what Nyakasenge fishers do in order to live life in the way they prefer and the specific actions they undertake. The article discusses how fisher's culture influences coping mechanism. It examines fisher's perception on fishing activity, their reason for joining and remaining in it despite low incomes that they generate. I argue that poverty reduction strategy should not commence from an image of small-scale fishing as an activity of last resort, which focuses on effort reduction. Such a focus risks violating peoples' perceptions of what constitutes a preferred life and the values they cherish. The article therefore proposes the need to develop fisheries management relevant social variables and indicators that focusing on people's judgments of their well-being, capabilities, and satisfaction that are essential to their understanding of fishing as their 'way of life' so as to guide achieve poverty reduction.

Article 5 focuses on gender roles and how such roles influence coping mechanisms as well as poverty alleviation efforts. By discussing a story of a women group (the TFE), the article shows how these women have become change agents in their community that has allowed them to become actively involved, indeed leaders, in addressing poverty. The article covers values, norms and principles, decision making and outcomes within the three governance systems, i.e. systems-to-be-governed (community), governing system (TFE) and governing interaction (Table 5.1). The article illustrates how the TFE have taken steps to address the problems of poverty and underdevelopment while at the same time, has changed women's subordinate status relative to that of men. Through the TFE, women have created a larger action space for themselves as well as for the community. By using Aristotle's concept of *Phronesis* the article argues that practical and contextualized knowledge, including the

social relational capabilities and skills which are captured by this concept, have proven to be an important asset when dealing with poverty and women’s subordination. The article also indicates how interaction between and among governing actors can generate positive outcomes that addresses poverty in communities.

The articles together show that poverty is indeed a wicked problem whose meaning is thorny: as within academic discourses as a whole. There is no consensus about it in the Lake fishing communities. Table 6.1 below provides a summary of the typologies of poverty in the attached articles. The table also show variables that have been identified from the articles.

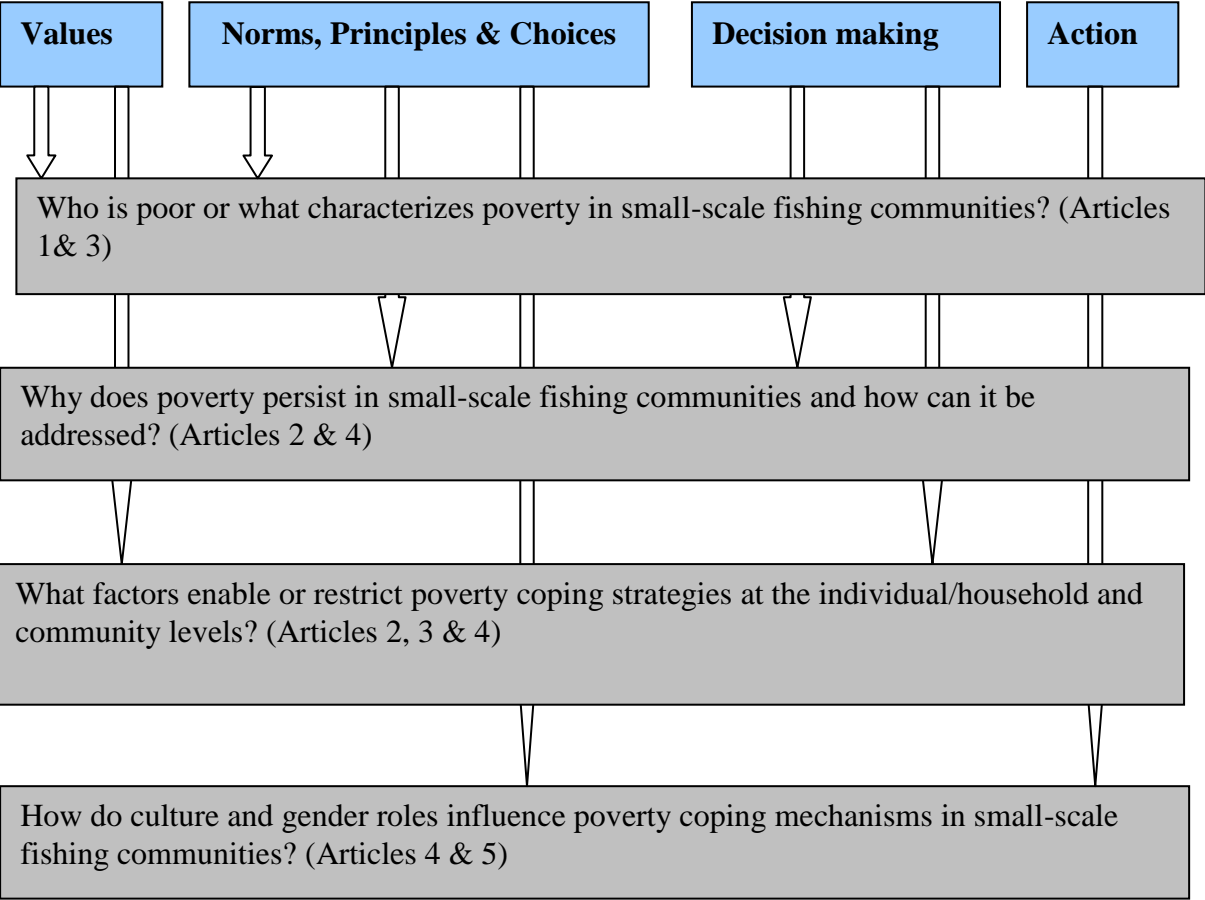


Figure 6.1: Summary road-map of the research questions and analytical framework

Table 6.1: Typology of poverty as discussed in the attached articles

Article	“Poverty is.....”	Central meta-governance variables
1	a wicked problem	Values: <i>Conflicting values</i> and perceptions
2	lack of freedom	Choices: Enhancement of <i>opportunities</i> , entitlements and capabilities
3	a governance issue	Values: <i>Social values</i> effect on governability of poverty
4	lack of opportunities and choices	Norms, Principles and Choices: Capturing of people’s <i>judgments, perceptions and meanings</i>
5	a relational and gender issue	<i>Rationality</i> in being social entrepreneurs

7. Conclusions

This study initially aimed at finding out a proper governance mechanism to address the perennial poverty in the small-scale fishing communities like those of Lake Victoria. It therefore discusses some of the obstacles facing poverty alleviation particularly related to the choice of strategies, policies and activities that are finally implemented in the fishing communities. More specifically, this study focuses on meta-level reasoning processes concerning poverty and poverty alleviation both within the system-to-be governed, i.e. within the local communities, and within the governing system, i.e. within government. In Lake Victoria different process (reasoning about values, norms and principles and how they are translated into decisions, actions and outcomes) have largely been occurring side by side rather than seeking to interact. The study has therefore provided an insight into the applicability of interactive governance perspective in poverty alleviation and how to bridge the gap between the two governance processes.

In concluding this introduction I return to the questions posed in the beginning. How can we govern poverty prevention and alleviation more effectively? This conclusion section tries to address this question and to synthesis what governance principles would be essential in the process alleviating poverty.

7.1. Prospects for poverty focused governance

In order to govern poverty alleviation processes in the fishing communities of Lake Victoria, my study suggests that a solution should be sought in addressing the difference that exists

between governing actors and the poor's values, norms, principles, choices and decision-making i.e. those that exist within the system-to-be-governed and those within the governing system. This is because complex societal problems such as poverty require the inputs of virtually all governing actors and not only government. Kooiman (2003, p. 11) has captured this in an unequivocal manner,

No single actor, public or private, has the knowledge and information required to solve complex, dynamic and diversified societal challenges; no governing actor has an overview sufficient to make the necessary instruments effective, no single actor has sufficient action potential to dominate unilaterally.

The mismatch I have observed to exist among governors and the poor needs to be closed. There is need for a governance mechanism that enables two groups to build not only shared understanding of poverty (its current status and difficulties) but also a shared commitment in addressing it (determining how and what has to be achieved). This is also to say that governability (Chuenpagdee & Jentoft 2009; Jentoft & Chuenpagdee 2009; Bavinck & Salagram 2008; Kooiman & Chuenpagdee 2005) of poverty should be sought from the meta-governance. In as much as poverty alleviations strategies are important, the process of defining the poverty problem is central. Therefore to improve the process of poverty alleviation, I suggest the following: -

7.1.1. Changing perceptions about poverty

Since the question 'what is poverty (in small-scale fisheries)?' is not agreed upon, in Lake Victoria it has presented a real challenge (See also Article 1). Consider Jed's case discussed in article 1. Is Jed's poverty a consequence of not being served with good roads, or treated and clean water. Is his poverty a problem to be located in his capabilities or economic well-being or political of civic participation? (Individual perspective) Or is it to be located in the systems inability to provide schools or health facilities? (Structural perspective) Or is his problem a consequence of both? This is to say that when poverty is defined as: - being sick and not being able to afford to see a doctor; that poverty is about not knowing how to read; it is not having a job; or without a future; living one day at a time; poverty is lack of representation and freedom; where or what exactly is poverty being located or understood to be? Is poverty a 'state of being' and or a 'property', often associated with need, hardship and lack of resources across a wide range of circumstances? Or is being sick from unavoidable diseases a problem

when such diseases can be treated? Is the desire to live forever a problem when this is just not possible? Is poverty really being in a state or condition of difficulty as is argued normally? Is lacking clean water or energy to cook and keep warm for instance the problem? Is the difficulty in the clean water or energy when these can be provided or it is somewhere else? In other words is there really a problem when there is a solution or no solution?

I agree that the actual condition such as lack of clean water or energy to cook and keep warm are not necessarily in themselves the poverty problem. What then is the problem? This is why poverty should be seen in a different light. Poor people cannot be blamed for their misery, but the social and political arrangements which Amartya Sen (1981, 2009) talks about. Poverty is not a natural phenomenon. Rather it is a social and institutional problem and, hence, a governance problem. To understand the deficiencies of poverty it is important to seek answers not only in the system-to-be governed, but also in the governing system and in the ways one system communicates with the other, i.e. the governing interactions (Chuenpagdee & Jentoft, 2009; Jentoft & Chuenpagdee, 2009; Kooiman & Chuenpagdee, 2005).

Thus assessing poverty (as a wicked problem) and poverty alleviation (as a complex solution) would be seen as an assessment of governability in order to identify those mechanisms within the system-to-be-governed, the governing system and the governing interactions that would help stretching the limits of governability. Understanding and then alleviating poverty as a wicked problem must recognize the diversity, complexity and dynamics of these systems. Although causes of poverty and the solutions must be sought at multiple scales ranging from the individual to the global, it is particularly important to focus largely on the community and the kind of life it offers to the people. It must also recognize, that poverty involves a range of issues and concerns, and that there is no one solution or a magic formula that will solve the problem once and for all. Most of all, an interactive governance approach to poverty alleviation would regard poverty not only as a statistical item but as a lived experience, and issue of well-being. It is about securing livelihoods and about enabling people to live more rewarding and meaningful lives, which among other things involves the idea of a better future.

7.1.2. Governance principle 1: Recognise poor fishers as partners in poverty alleviation

Poverty in small-scale fisheries is a practical problem. Fishers are daily involved in addressing their needs. In most cases they have a deep understanding of their conditions and environment. They know what to do and how to manoeuvre in their villages. Indeed they can

be referred to as expert ‘practitioners of everyday life’ (Holstein & Gubrium, 2003, p. 73) or ‘poverty experts’ according to Narayan et al. (2000). For this reason, it is important to look at them as partners rather than clients in the fight against poverty. They should not be looked at as poverty subjects, who only need to be assisted. Neither should they be seen as deficient, hopeless and without any capabilities. On the contrary they should be seen as people with abilities, skills and knowledge about their problems and how to solve them.

Local fishers are endowed with varied capabilities. As discussed about the Nyakasenge fishers in article 4 and the Tweyambe Women Enterprise (Article 5; the Video documentary), these fishers know how to make use of their social capitals to work together to plan and run projects that change their communities. Given their experience with their situation, they have learnt to cooperate and interact among themselves. They have realized that to address their community’s economy, socio-cultural factors related to community, values, norms and principles play an inevitable role.

To partner with poor fishers requires a new policy direction for poverty alleviation. There is need to shift from a macro (global, regional and national) policy approach to micro (local, community focused) policies that target the essentials of communities. As co-producers of poverty alleviation strategies it is important to formulate an integrated policy approach to poverty which enables interaction among governing actors in working together towards alleviating poverty. This could be an approach built around what the Tweyambe fishing Enterprises have initiated in their community. I suggest a strategy that focuses on the lake Victoria fishing communities, something like a Lake Victoria Strategy for Growth and Poverty Alleviation that would be part of the National Strategy for Growth and Poverty Alleviation. This is particularly relevant because poverty is a practical and contextual problem. Thus to understand and alleviate it, capturing of solutions from those who know it best (the poor fishers) is a logical thing to do.

7.1.3. Governance Principle 2: Poverty alleviation requires home-grown solutions

In order to address poverty in the Lake fishing communities, I argue that it is important that solutions be generated from where poverty is experienced

Poor fishers and even policy makers should decide on how to interact (at a micro-level) and or what they think is the right thing to do in those places. This study therefore echoes Krishna’s (2010) recommendation that when addressing poverty, one should not begin by looking at available solutions and trying to determine their applicability in a particular environment.

‘Implemented on a large scale, even very worthwhile solutions get discredited because they do not work well everywhere. Developing solutions is important, but figuring out which to employ and where requires an understanding of the specifics of particular situations’ (Krishna 2010, p. 147)

Solutions must therefore be home-grown and should not be applied across the board. Solutions for one community may not necessarily be applicable in another. Moreover solutions must not only be appealing because they conform to what has been done in other similar communities in other regions or countries, neither should they be because they fit a particular poverty alleviation paradigm. Solutions should be able to lead to changes that will be experienced by the poor fishers and their families and dependants in their villages and not only documented in the aggregate as in Gross Domestic Product (GDP).

7.1.4. Governance Principle 3: Poverty alleviation requires rethinking freedom

Fisheries authorities have always seen the declining fish stocks in the Lake as being explained by an influx of increased effort. To control this, decisions have been made to limit freedom through effort control. Such decisions have been grounded, as is the case with many fisheries, on the ideas propounded by Gordon (1954), Beverton and Holt (1957) argument on sustainable fishing built around the idea of exploitation rate. Recognising that fisheries resources were subject to over-exploitation, it was without doubt logical to set fishing levels that allowed what remained to replenish. In order to do this, effort had to be controlled. Fishers had to be restricted to the types and sizes of gears to use, where and periods to fish and size of boats to use. In addition the marketing sector of the main commercial fish (Nile perch) confined fishermen to sell their catches through a relationship between them and fish factory agents who collected and delivered fish to the Processing Establishments. Fishers’ freedom was greatly reduced through these decisions.

The assumption which was made with regards to addressing this issue of freedom was that attaining good healthy fish stocks was to alleviate poverty by ensuring a well- managed fishery. Thus, when stocks declined there was need for more restrictions on effort. In other words any observed ruin in the fish resources was automatically taken as a Hardin’s (1968) tragedy (Jentoft, 2010). It is a case in which management decisions are built on the notion that particular events and entities are perceived as instances of general patterns or laws (Kolding et al. 2008). For instance the decline in fish stocks in the Lake is seen to follow a pattern that has

been observed elsewhere and as such the most logical response is through limiting fishers' freedom. However, limiting freedom through the technical input and output controls in fisheries (FAO, 2002) have not yielded the desired results.

Hardin's (1968) idea on the role of values and morality for resource management fits well with the argument on the meta-governance process (Kooiman & Jentoft 2009) which has been used in this study, it also calls for a re-examination of freedom in the commons, more in line with that of Amartya Sen (1999). To him freedom is the opportunity to pursue the objectives of those things that one has reason to value. This is a kind of freedom that gives the poor fishers the assets they require, including those that will empower them. Again this would point in the direction of interactive governance, one that allows the poor to become actively and collectively engaged in addressing their poverty but with the cooperation and support of government and civil society organizations such as NGOs.

7.2. Theoretical contribution

The theoretical aim of this thesis has been to explore the values, norms and principles that guide understanding and alleviation of poverty. This study has proposed a framework for this purpose. The framework builds on the meta-governance process of the interactive governance perspective and how it is translated into decision about how to address poverty. The framework identifies decision-making as the particular area in which varied governors of poverty should engage interactively to seek reasoned meta-governance values, norms and principles. Kooiman and Jentoft (2009) argued for open deliberations but did not provide where in the meta-governance process such a debate could be initiated. This study suggests that when faced with hard choices, it is important for governing actors to interact not only at the decision making level but also at the meta-level i.e. with respect to values, norms and principles.

The terminologies such as 'pro-poor', 'people centred', and 'responsive to the poor' could only make sense if decisions are being made together with them (the poor). Indeed the interactive governance perspective in this sense becomes a very useful tool not only analytically, but also normatively as a relevant idea to address some of the wicked societal problems that gives rise to poverty. Although its relevance has so far been documented in fisheries management, this study has found it useful in understanding poverty in small-scale fisheries. This implies that the perspective is applicable in several sectors. It can be used on a range of topics and not necessarily fisheries management. The perspective can be used to

understand poverty in any other community such as livestock, farming, hunting and even the service sector.

7.2.1. Rethinking about decision-making process

This study proposes a decision-making process that utilizes not only the BMUs but also local groups such as the Tweyambe Fishing enterprises as a governance mechanism to first understand what poverty means and then how to address it. The underlying principle is that the poor fisher's practical knowledge (phronesis) of their poverty is a prerequisite for any poverty alleviation strategy. The importance of such practical knowledge is based on the fact that context is essential for social phenomena such as poverty and that such knowledge is situated in the normal everyday life (Flyvbjerg, 2003).

In this study, I call attention for a process that works towards bridging the gap among decision-makers within and between the systems to be governed and the governing systems. This is an arrangement where decisions made through any reasoning process, say extinction by instinct and paralysis by analysis, are avoided. I propose that it is important to prioritise developing a shared understanding of values, norms and principles.

I propose a process that centres on interaction where governors develop an attitude of interdependence and joint destiny, and acquire a culture of good governance. The process of which decisions are made must therefore become the entry point of the analysis (Donati, 2011; Emirbayer, 1997) in order to understand why poverty is so persistent in small-scale fishing communities as well what avenues are necessary for alleviating it.

Although I have spent considerable time and effort on studying poverty, I am not alone in being unclear as to its definition, as the continuous flow of literature on this subject indicates. As I argued in the beginning, I found this direction of thinking quite challenging and only abandoned pursuing it. How then could I proceed without clarity on what I focused on? I think that the answer to this question lies at the heart of the contribution of this study. The point is that it is possible to undertake a study on a concept and or subject without necessarily having to bother with its definition. Rather, one can make peoples definition the subject of inquiry.

The traditional way of solving a problem (Conklin, 2006) is not the only way to actually solve a problem. We should make sure that we do not miss other opportunities. We should try to understand poverty through the way the poor understand it, in other words from an emic perspective. We should not start with a preconceived definition of what poverty is but leave that for a through empirical investigations of the real life that people live in fishing

communities, trying to grasp what goes on in their minds with regard to values, norms and principles from which they find meaning and direction for how to live in community with others.

With regards to the interactive decision making process I think more work should be directed at two areas. First, it is important to examine how interactive the two decision making processes are i.e. is poverty alleviation driven by Paralysis by Analysis and Extinction by Instinct? These two concepts offer a rich way of commencing the work. Other areas of work could focus on *risk taking* and *risk averse* (Kahneman & Tversky, 1984). There is need to explore these within the framework of governance orders (first order, second order and third/meta governance). But most importantly work is needed on how to bridge the gap between definition and decision-making processes that goes on among governance actors and how interactive governance can help achieve a more effective poverty alleviation approach in small—scale fishing communities.

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