# Where the past meets the present: An assessment of the social and ecological determinants of well-being among Gimli fishers

By

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#### **Abstract**

Lake Winnipeg is under examined, yet a very interesting lake. This 10th largest lake in the world supports a small-scale fishery, which today is pre-dominantly for walleye. Currently, the fishery is very strong. Historically, however, it has been characterized by fluctuations in both catches and returns. The end of the 1960s and the beginning of the 1970s was a turning point for the fishing industry. At that time, the fishery experienced declining catches and diminishing returns. In order to reverse the trend, the Provincial Government of Manitoba introduced a quota system while the Federal Government established the Freshwater Fish Marketing Corporation (FFMC) to handle the marketing of freshwater fish. Today, the fishery on Lake Winnipeg has been at a record level of production and these two institutions play a significant role in the fishery. Knowledge of the history of these institutions and other social aspects of the Lake Winnipeg fishery is, however, relatively poor.

To gain an insight into fishers' social context in the Gimli area, a social well-being analysis was applied following design of the ESRC Wellbeing in Developing Countries Research Group adapted by Sarah Coulthard and colleagues. The social well-being analytical tool shed light on three domains of fisher's life; material well-being, subjective well-being and relational well-being. Together, these domains give an insight into how satisfied fishers are with their current social environment.

The analysis of fishers' social experience in the Gimli area shows that current policy seems to be working equally well in the areas of relational and subjective well-being. In fact, the quota system and the FFMC still have great impact on the fishers, not only from an economic view but also for their subjective values and relational well-being.

These two institutions have great impact on material well-being of fishers since the fisher's income depends on the market strategy and how much quota he/she holds. However, the fishers hold contrary views towards these institutions. The fishers have become irritated by the inability of FFMC to increase prices for their fish and believe it has become too bureaucratic. At the same time, due to recent discussions of possible closure of the FFMC, they perceive FFMC as a shelter for their independence and freedom. To emphasize the importance of the FFMC, the fishers made reference to the history of the fishery. The fishers also hold equally contrary views on the quota system. It has enhanced their independence and financial security but it has also made it expensive to enter the industry, which constrains younger fishers.

The thesis only represents the experience of fishers in a specific area of the lake which means that the results cannot be generalized to the whole lake. Nonetheless, the thesis shows the importance of further studies since in the next few years ecological and policy shifts may trigger major changes in the industry.

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#### 1.0 Introduction

"Fishing is a way of life" is a widely used phrase when social scientists describe the strong tie that fishers have with their local community and occupation. The phrase describes how fishers relate their occupation and who they are (McGoodwin 1990; Coulthard et al. 2011). From a young age, I had the privilege to get an insight in this unique way of life as many would describe the life of a fisher. When I was growing up in Iceland I was surrounded by fishers. My father worked on a trawler in my home in Akureyri, Iceland during my childhood and early adolescence. Moreover, my grandfather worked in the fishing industry from the 1940s – 60s when the Icelandic fishing industry grew rapidly to become the backbone of the Icelandic economy.

My childhood was no different from others who have been raised by a fishing family. Every summer, when my father came back home after being away for a month, we usually spent some time on the dock with a fishing rod, trying to catch some cod or haddock. In my memory, we were very successful at it. We always caught something, which we took home, where my father tried to show the right method to fillet. This is, I believe, my first memory related to fishing. However, my first real experience of the fisher's life was when I was 12 years old when I was finally allowed to go with my father on a fishing trip on the trawler that he worked on. This was a great experience for a young man to spend a couple of weeks on a trawler and witness how the fisher's life on a trawler can be. Moreover, to get an opportunity to participate and learn from the older fishers that none of my peers could ever dream of doing was truly a privilege.

As I have become older, I have looked at this experience as my first ever participant observation. During my time on the trawler with my father, I observed many

interesting things, such as how difficult it was for many of the fishers to stay away from their families for such a long time. Nevertheless, I also noticed how satisfied they were with their job, despite spending a big portion of the year away from their families, just like Pollnac and Poggie (1988; 2006) have pointed out elsewhere. My spell on the trawler made me realize, however, that I did not want to become a fisher like my father or my grandfather. As many of the older fishers in my family have said many times, I simply did not have "it" in me to work as a fisher. Moreover, as others had told me, you cannot force someone into fishing, you have to want to learn and have "it" in you to be able to enjoy fishing. I have accepted the fact that I will never be a fisher. Instead, I want to make contributions in order to improve fishing in one way or another. Anthropology has therefore opened a door into the fishing industry. Methodologies of anthropology such as participant observation and interviews not only enable me to experience "it" through my informants but moreover, they give me a chance to help others to gain a better understanding of what fishers do

While growing up, my father solely worked on trawlers and I did not pay much attention to other types of fisheries. In my defense, the main policy in Iceland when I was growing up was to concentrate on making the fisheries more efficient by taking advantage of economies of scale and modern technology (Arnason 1995). In fact, Iceland is not the only country that is guilty of emphasizing large scale fisheries. In recent years it has been constantly pointed out that large scale fisheries have been favored at the expense of small scale fisheries in policy making (Allison 2001; Allison and Ellis 2001; Berkes et al. 2001; Berkes 2003; Hauck 2007; Johnson 2006; Salas and Gaertner 2004). This difference in treatment between large scale and small-scale fisheries in policy making did

not catch my attention until I became older. Slowly, I began to read more about other types of fisheries which made me realize that large scale fisheries are not the center of the world's fishing industry. In fact, if we talk about fisheries broadly, we soon realize that the vast majority of the fishers in the world work in small-scale fisheries and, a big proportion of the world's population depends on small-scale fisheries in one way or another (Allison 2001; Berkes 2003; Hauck 2007). The complexity of small-scale fisheries is also fascinating since they are much more dependent on social institutions and the surrounding community as compared to large scale fisheries. This factor makes policy making for small-scale fisheries more challenging (Berkes et al. 2001).

In recent decades, it has become apparent that fish is not a boundless resource that we can utilize freely without depletion. While government agencies have been the dominant actors in managing fisheries, state dominated governance systems for fisheries have not succeeded in reversing depletion (McGoodwin 1990; Jentoft, McCay and Wilson 1998). Statistics from Food and Agriculture Organization of the United Nations illustrate quite well the failure of the state governance of the fish resource. According to FAO (2012) 57.4% of the world's fish stocks have been already fully exploited and nearly 30% are overexploited while only 12.7% of fish stocks are not fully exploited. On the one hand, these numbers certainly put a limit to the expansion of the fishing industry considerably. On the other hand, these numbers indicate that we should pay particular attention to small-scale fisheries which are often ecologically more sustainable than large scale fisheries because the small-scale fishery harvests at much slower rate (Johnson 2006). One of the reasons for the failure of state-led fisheries governance can be traced to over emphasis on traditional command and control resource management that is more

often not applicable for small-scale fisheries (Berkes 2003; Berkes et al. 2001; Hauck 2007; Johnson 2006).

Many have pointed out that today fisheries management relies too much on biology and economic models but neglects other important aspects of fishing (Berkes 2003; Berkes et al. 2001; Charles 2001; McGoodwin 1990). Berkes et al. (2001), Charles (2001) and McGoodwin (1990) encourage us to collect more information on the social part of the fishery to expand our understanding of the fishery in order to improve fisheries management. Social institutions such as family and community influence the fishery in one way or another (Berkes et al. 2001). Because of this close relationship between social institutions and fishery, changes in the social settings of the fisher can therefore affect the dynamic of the fishery (Charles 2001). This position on smalls-scale fisheries emphasizes the importance of understanding how the social world of the fisher works as that knowledge better equips us to predict the fisher's behavior to changes in regulation and what consequences the future policies could have on the fishers (Charles 2001; McGoodwin 1990).

In this thesis, my focus is on the social reality of the fishers. Berkes et al. (2001) call for an approach that takes into account various aspects of the fisheries such as their economic, social and organizational situation. It has been pointed out elsewhere that well-being methodology that was designed by ESRC Well-being in Developing Countries Research Group (WeD group) suits quite well to collect data on the economic and social reality of a fisher (Coulthard et al. 2011). It has been the tendency of fisheries management to concentrate on external measures of a fishery, for example employing stock assessment (Berkes et al. 2001). However, if we want to gain an understanding of

the social reality of a fisher, that approach is not enough, we need a framework that also focuses on the fisher. The WeD group framework is significantly useful here since the core of the framework is to situate the person as the focal point where the person him or herself evaluates his or her social reality (McGregor 2006; White 2010). Another advantage of the WeD group's methodology is that the three components of a person's well-being cover aspects such as the economic (material well-being), social organizational (relational well-being) and satisfaction of one's position (subjective wellbeing) aspects of the fisher. By applying the well-being methodology, we can get an insight into how the fishers themselves define a good life, what they need to be able to live the good life and how they can pursue those aspirations (Coulthard et al. 2011). The fisher evaluates whether he has reached his goal, or whether something else is constraining him from doing so (White 2010). The fisher evaluation is therefore an indication whether policy is working for the fisher or not. The rate of fisher's satisfaction with his or her life or satisfaction with other social institutions will give us a hint whether the current policy is working or not. If a fisher thinks some of his or her social relationships are constraining him or her to achieve what he or she wants to achieve, is certainly an indication that not everything is fine. While the well-being framework has pre-dominantly been applied to poor societies, it is relevant for wealthier countries as well, as shown by Britton and Coulthard (2012). I will therefore follow Britton and Coulthard's (2012) path and apply the WeD group's methodology to the fishing industry in a western society, with the added wrinkle of focusing on an inland fishery.

Lake Winnipeg presents an under examined, yet very interesting case. Through the decades, it has been left out for scientific purposes, especially compared to other great lakes in Canada (Ayles & Rosenberg 2004; Wassenaar & Rao 2012). Moreover, Lake Winnipeg supports a small scale inland fishery and like other small scale fisheries, the Lake Winnipeg fishery is relatively poorly represented in the academic literature and our knowledge on the dynamics of the fishery is limited (Franzin et al. 2003). The lack of interest in inland fisheries such as Lake Winnipeg is understandable in that inland waters furnish only 11.8% of world capture production, of which inland waters in North America accounted for 1.9% of world capture production (FAO 2012). There has been some work done in order to enhance our understanding on Lake Winnipeg fishery. L.C. Hewson (1960) made a few studies on the whitefish fisheries of Lake Winnipeg, but most of his publications had more to do with the biology and economics of the fishery. Gislason et al. (1982) did an economic analysis on the Manitoba commercial freshwater fishery, and a big proportion of their work was concentrated on Lake Winnipeg. Scaife (1991) and Gislason (1999) did some work on the Quota Entitlement system on Lake Winnipeg where they mostly described the genesis of the system. Lastly, Maclean (2010) studied local knowledge among fishers on Lake Winnipeg and what role their knowledge had in the decision-making process.

At present, the fishery on Lake Winnipeg is producing at record high level and, the fishery has been strong for two decades (Lake Winnipeg Task Force 2011; Manitoba Water Stewardship 2009). Historically, however, conditions were considerable worse. There were significant fluctuations in catches and for a long period of time the economic organization of the fishery created an unjust distribution of returns for the fishers. The condition of Lake Winnipeg fishery was in such bad a shape that the Canadian Federal government and the Province of Manitoba made crucial social organizational changes

during the period 1968 – 1972 in the hope of reversing the trend. The Provincial Government implemented the Quota Entitlement system and the Federal Government established the Freshwater Fish Marketing Corporation (FFMC). The FFMC was intended to increase fishers' returns from inland fisheries in Canada (Gislason et al. 1982; Gislason 1999). This unconventional combination of institutions changed the Lake Winnipeg fishery dramatically and continues to be very important to the present day fishery.

Small-scale fisheries are much more dependent on social organizations, particularly family and community, than are large scale fisheries (Berkes et al. 2001; Berkes 2003; Johnson 2006). Through the investigation of well-being among fishers in Gimli on the South Basin of Lake Winnipeg, I will show that family plays a significant part in fishers' well-being. Moreover, the study will also show that Freshwater Fish Marketing Corporation and the Quota system affect the well-being of the fishers, not only by providing a social safety net. The importance of these organizations, however, goes beyond monetary value. Additionally, my well-being analysis will also demonstrate how the history of the fishery has affected how the fishers today perceive their relationships with these organizations.

Overall, this thesis represents an examination of the social realities of fishers in Gimli on Lake Winnipeg with particular attention to the social and ecological determinants of well-being. The results of this thesis will hopefully enhance our understanding of the dynamics of Lake Winnipeg fishery. Moreover, the knowledge generated by this analysis can be seen as a contribution to expanding the information that we have on small-scale fisheries that policy makers can utilize to improve small-scale

fishing in the future as McGoodwin (1990), Charles (2001) and Berkes et al. (2001) encourage us to do.

The thesis is divided into six chapters. Following this introduction, the second chapter opens up with the discussion of the theory and methodology on which this research is based. We will travel back in time in chapter three to get an insight into how the contemporary commercial fishery on Lake Winnipeg. In chapter four I will describe my experience with the Lake Winnipeg fishery and its social context. Chapter five presents the core of the research, where we discuss the well-being of the fishers in Gimli and how they pursue their well-being at present. The sixth and last chapter will be on the future of the fishery of Lake Winnipeg and what the findings of the research can offer policy makers of the Lake Winnipeg fishery.

#### 2.0. Theory and Methodology

I have always believed that I had been very fortunate that I was raised in a fishing family that truly had a fishing tradition. I thought it was a privilege to live close to the ocean and be able to go out and fish, even though it was often just with my fishing rod in the company of my father. I maybe did not know back then how lucky I was being able to spend so much time close to nature. No computers, no tablets and no more than two television channels to choose from. You were supposed to go out and play! I always loved when I got the chance to go out with my father on a summer evening down to the harbor to fish. Today, some harbors are closed due to the fact that harbor authorities are afraid that children might hurt themselves playing or other people try damage something valuable. However, there was one thing that I was taught early on during all the trips to the harbor with my father; which not many children learn until they become older and go to school. My father taught me that I should always take good care of the ocean and if I did that, the ocean would take good care of us. From an early age, I was taught that I should always respect the ocean; the ocean was technically not a place to have too much fun. When we were fishing, we had one rule; always release the fish that my father thought were too small or too young to be caught. They have to be mature enough to be able reproduce he often told me. At that time I did not completely understand what he meant but at the young age I followed his advice and it was imprinted on my mind that it was bad for fishing to catch too small a fish. This was probably my first lesson in the biology of fisheries and ever since I have never taken any warnings from biologists lightly. However, over time I became aware that biology is not the only variable on which we should concentrate in order to make fisheries sustainable.

For decades, biology and economics have been the dominant influences on methods in fisheries management (McGoodwin 1990). This concentration of biology and economics in fisheries management can probably be traced to the fact that the large scale fisheries have been the focal point among policy makers (Allison and Ellis 2001; Berkes 2003; Hauck 2007; Berkes et al. 2001). Large scale and small-scale fisheries are very different, which provides various challenges to the policy makers. Large scale fishery usually depends only on one big stock whereas small scale fishery depends on multiple but much smaller stocks which make management of the small-scale fishery more difficult (Berkes et al. 2001). Moreover, it is the complexity of the small-scale fishery that is often the thorn in the policy maker's side, especially, when it comes down to policy making (Johnson 2006). "Ecosystems are not only more complex than we think, they are more complex than we can think" (Berkes et al. 2001; 23) which is especially true if we accept recent challenges to the clear distinction between nature and culture (McGoodwin 1990; Pálsson 2006; Jentoft and Chuenpagdee 2009). A significant failure of policy making through the years is that it has not accounted for other important aspects of fishing, like society which is heavily interlinked with small-scale fisheries (Berkes et al. 2001). Social institutions like families or social norms influence fisheries just as much as the biology of the fish because access to the resource is allocated culturally (Charles 2001; Berkes et al. 2001). Since small-scale fisheries are heavily interlinked culturally, McGoodwin (1990), Charles (2001) and Berkes et al. (2001) have pointed out that traditional resource management that is solely based on biology or economic models is not applicable for small-scale fisheries management.

"Fisheries systems are intrinsically diverse, complex and dynamic. As such, they confront governors with a daunting task where no simple solution may be found and where no single management tool will suffice" (Jentoft and Chuenpagdee 2009: 553). Gradually, we have come to the conclusion that one dimensional thinking is not good enough in resource management, especially when it comes down to small-scale fisheries. Berkes et al. (2001) encourage all of us to collect more data on the social aspect of fisheries along with biology in order to understand the complex human-ecological systems that are fisheries. In order to do so, we have to shift our attention to the human behavior of fishers and their social interactions with governance institutions. In other words, we have to gain an understanding of how fishers "feel, think and aspire to achieve through their choices and how they perceive their social structure or institutions which they interact with on a daily basis" (Coulthard et al. 2011: 459). In order to collect the data on economic, social and organizational environment of the fisher, as called for by Berkes et al. (2001), we need a framework that situates the person in the middle where the focus is on the fisher and how they perceive their encompassing social structure. In essence, we need a framework that analyzes the person "of flesh and blood... in her particular circumstances" (Rojas 2004: 3).

#### 2.1. The Well being Framework

Yet the Gross National Product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile.

(Robert Kennedy, March 18, 1968)

This quote above from Robert Kennedy is probably one of my favorite for the simple reason that with his words, he reminds us that economic indicators do not account for everything. Economic indicators like Gross Domestic Product or Gross National Income are certainly good indicators to the extent that they can give us an insight on how the economy is doing but they leave everything else out of the equation; such as the accessibility of medical care or how difficult it can be for children to pursue education (Mankiw 2006). The other message that Kennedy was trying to convey is that the human life is more complex than a one dimensional indicator makes it out to be. Life is not only about material possessions! The life of a human being should not be only a number in an Excel document; it is so much more. A person lives their life in an increasingly diverse, complicated and dynamic world with other human beings. Academics and policy makers need to take that fact into account.

The UN declaration on the right of development in 1986 did make it clear that life is not only one dimensional. It stated that;

Development is a comprehensive economic, social, cultural, and political process that aims at the constant improvement of the well-being of the entire population and of individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting there from (United Nations, 1986).

Nonetheless, when I think about issues such as development and living a good life, my mind starts to roam towards the work of Amartya Sen (1999), for the simple reason that he made me and probably many others realize that a major issue like poverty cannot be considered only as lack of money but moreover as a deprivation of what you can do in order to live the life you consider worthwhile living. Amartya Sen (1999) did not design the well-being framework or the methodology of well-being analysis in

development. However, he emphasized that poverty has more dimensions than just lack of money and he suggested that to reduce poverty we should also focus on other components of poverty (Gough 2004). Sen (1999) suggested that we should no longer emphasize only on what a person has but rather shift our attention to what a person can claim and what the person can do (Gough, 2004; White, 2009).

The work of Amartya Sen (1999), Partha Dasgupta (1993; 2001) and Martha Nussbaum (2000) was one of the triggers for other scholars to design an analytical tool kit for the well-being framework. Well-being situates the person as the focal point of the research (McGregor 2006). Well-being analysis shifts focus from the external circumstances of the person to how the person them self perceives their own life (McGregor 2006; White 2010).

A key concern with using well-being analysis is the definition of well-being. Well-being can easily be defined in a very simplistic way (White 2010). As Seel (1997) points out, a broad definition of the concept can feeling good or a moment of joy. The broader the definition of the concept is, the harder it will be to employ it in policy making and in academic research. As White (2009: 15) stated "if well-being is too generally defined it can comprise everything or nothing". To define well-being is not as simple as it might sound. Well-being, like all other analytical tools, needs to take many components of life into account. There have been numerous projects in development studies that have taken on the difficult task to both define the concept and design a proper methodology for studying well-being (White, 2009). There have been a few pitfalls that well-being researchers have tried to avoid when defining well-being and the design of its associated methodology. First of all, as stated above, there has been criticism that researchers have

only concentrated on one dimension of well-being, that is, material well-being; hence, what a person has, such as income, assets and standard of living (White 2010). As Rojas (2004) stated rightfully, there is certainly more than just one dimension of the well-being of a person that deserves attention as well in order to gain an understanding of a person's well-being. Secondly, there is the risk that the well-being framework might affirm individualism or individualistic ideology, especially in western countries (White 2010). Well-being might be perceived entirely as ego-centered with insufficient attention to collective relationships (White 2009). Moreover, as McGregor (2004; 2006) emphasizes, the person lives in a complex social world where the interactions with other people or institutions are crucial. These can either constrain or enhance people's ability to live well. The fact that people are social beings is sometimes forgotten by researchers and, when using well-being for analysis, we ought to take the social part of the human being into account (White 2010; McGregor 2007). Sarah White (2009) affirms this by stating, "people become who and what they are in and through relatedness to others" (9).

However, most importantly when defining well-being is that we want to leave a room for local understandings of well-being. It is critical to keep in mind that social organization may differ between societies and can differ greatly in shaping a person's well-being (McGregor 2007; White 2010).

The projects that have sought to design well-being frameworks have slightly different definitions of well-being (Weeratunge et al. 2013) and most of them have in common that they try to capture the dimensions of human life related to living a good life and functioning well in the society (White 2009). However, this research is based on the ESRC Wellbeing in Developing Research Group (WeD group) definition of well-being

and associated methodology. The WeD group's definition of well-being comprises three important terms; (1) What a person has (2) what they are enabled to do with what they have and (3) their perception of what they have and can do (McGregor 2006). The definition of well-being according to the WeD group is;

The state of being with others, where human needs are met, where one can act meaningfully to pursue one's goals and where one enjoys a satisfactory quality of life (McGregor, 2008; 1).

The definition does not mention what constitutes a good life nor has any fixed understanding of what is a good life. Rather, it emphasizes that a satisfactory life can only be accomplished when the needs of the person have been met in a relationship with others. According to the definition, it is the person him or herself who evaluates whether his or her needs have been met in his or her particular context. The definition therefore allows space for a local understanding of well-being (WeD Group 2007). It does not matter, therefore, whether the person is from a very poor country or from an affluent society. The person only assesses whether their needs have been met in her or his particular location (White 2010). Moreover, as indicated, the definition emphasizes the importance of social relationships. Those relationships shape our ideas of a good life and the path that we can choose to meet our goals (Gough 2004; White 2009). The WeD group definition expands the horizon to multidimensional well-being when talking about a person. It is not only material well-being (income, assets and standard of living) that the WeD group focuses on but two other dimensions as well (McGregor et al. 2007). The WeD group adds the subjective dimension: a person's perception of their life so far and an assessment of their standard of living (e.g. whether the person has met their goal). The third dimension is relational, which can be divided into two aspects: objective (e.g.

relationship with Government agencies and access to resources) and a subjective one (judgment or perception on accessibility to those resources) (White 2010). Most important when applying the WeD well-being methodology is to keep in mind that it is extremely hard to separate all the three dimensions of well-being. Many aspects of person's life could comprise elements of all three dimensions (White 2010). In fact, the three dimensions interpenetrate each other and often one dimension can and often will shape the outcome and the process of the other ones (White 2010).

#### 2.2. Applying well being to fisheries

The main objective of the ESRC Research Group in designing the well-being framework was to "develop a conceptual and methodological approach for understanding the social and cultural construction of wellbeing in developing countries" (Wed Group 2007). The reason behind the importance of understanding the social and cultural construction of well-being is to gain a better understand of poverty in order to help policy makers to design a better and more efficient strategies to eradicate poverty (McGregor 2008).

A similar idea lies behind the application of the well-being methodology to fisheries. We want to gain a better understanding of the social realities of the fishers in order to implement more suitable policies for small-scale fisheries (Coulthard et al. 2011). As was mentioned briefly, small-scale fisheries are intrinsically interlinked with society and social institutions (Berkes et al. 2001). "Fishing is a way of life" is a widespread phrase among marine anthropologists when describing how fishers perceive their occupation (McGoodwin 1990; Coulthard et al. 2011). Since there is no fixed

content to what elements comprise well-being according to the WeD definition, the well-being methodology is therefore just as applicable for a wealthy society as it is for a poor one (White 2010). The foundation of the WeD methodology is to allow the person them self-evaluate their own social reality (McGregor 2007; White 2010). The well-being methodology therefore enables us the chance to explore what elements come together to constitute a good life among fishers. The methodology should help us gain an understanding not only of the social and ecological determinants of a fisher's well-being but moreover, it will tell us whether the current policy is working or not for the fishers.

## 2.3. Methodology

The methodology of this research is derived from the work of the ESRC Wellbeing in Developing countries Research Group (WeD Group) and the work of Sarah Coulthard et al. (work in progress). The WeD group designed a tool kit which has six components and those components are intended for the collection of quantitative and qualitative data on well-being. The six components on which the WeD Group methodology is based are as follows; (1) Community Profiles, (2) RANQ: The resources and needs questionnaire, (3) IES: Income and Expenditure survey, (4) Qol: Quality of life, (5) Process research, and (6) Structures and regimes (WeD Group 2005).

However, due to the short span of the research, only three of the components were applied to the Lake Winnipeg fishery, that is (1) Community profile, (2) RANQ: the resources and needs questionnaire and (4) Qol: Quality of life. Britton and Coulthard (2012) and Sarah Coulthard et al. (work in progress) have transformed few of these components for fisheries in particularly. To these they added two new instruments: the Person Generated Index and the Governance Relationship Assessment. I decided to apply these two instruments to the Lake Winnipeg fishery since both of these mechanisms deal

with relational well-being and subjective well-being in ways that are pertinent to my research interest.

#### 2.3.1. Community Profile

According to the WeD Group (2007), the community profile is a very important step in the well-being methodology since it describes the social settings in which people live (WeD Group 2007). As the WeD definition of well-being emphasizes, humans are extremely social beings who construct social settings that shape our goals and aspirations and which also influence our choices to reach those same goals. The community profile is supposed to provide us glimpses of the social realities of our subjects, especially regarding the economic, cultural and political traits of their community. As Berkes et al. (2001) pointed out, years of participant observation have given us important information on how fisheries work. On the basis of these arguments I chose to live in the community of Gimli and experience local routines for several months in order to get a sense of the social realities of the fishers and other people there.

I lived in Gimli for 3 months in the fall of 2012 and a month in the winter of 2013. The rural Municipality of Gimli is a small town on the western shore of Lake Winnipeg where approximately 5,845 people live (Statistics Canada 2012). I moved originally to Gimli on September 1<sup>st</sup> 2012 and I stayed there until November 30<sup>th</sup>. I moved back to Gimli at the end of January and stayed there for the whole month of February to participate in ice fishing. Furthermore, to experience all the seasons I decided to spend three weeks in May 2013 to witness the transition in the town between winter and spring.

To get a sense of the social world of the fishers, it is also important to get to know the locals who either had some relations with the fishing industry or not. Fortunately for me, hundreds of Icelanders settled in the area in the 1870s and therefore a big proportion of the population has some Icelandic roots. Those people with Icelandic heritage were very helpful in my research. They helped me to gain information on the history of the place and helped me to understand the social setting in the municipality. Moreover, they helped me to acquire needed connections to the fishing industry, as most of these people knew someone in the industry. To understand the social setting of the fishery, I talked to two people from the government side, one in the supply management of Inland fisheries (Federal Government) and one from the Provincial side of the fishery. Moreover, to shed better light on the fishing industry on Lake Winnipeg today, I conducted informal interviews with couple of retired fishers.

However, gradually, with the help of the locals I got to know more fishers and they got to know me better as well. To get a fisher's perception of their own social settings, I conducted structural interviews with 20 fishers in the Gimli area. The sample demography of my sample can be found in Table 1 below:

**Table 1: Participants in Numbers – Fishers** 

Participants in numbers –		
Fishers (n=20)		
Gender		
Male 95%	Female 5%	
Age and Fishing experience		
Average age 56.5	Youngest fisher 34	Oldest fisher 80
Average no. years in fishing 30,41	Most no. Years in fishing 60	Least no. Years in fishing 3
Fishers under 50 years 30%	Fishers over 50 years 70%	
Job Status		
Boat owner 100%	Full-time 80%	Part-time 20%
Daily income from fishing		
Income primarily from fishing	Income primarily from other	0 - \$1,000 - 65%
60%	sources 40%	
Over \$1,000 28%		

Most of the interviews were around 30 - 40 minutes long but couple of interviews even lasted longer than an hour; that was, however, an exception rather than the rule. It is

not enough to live in the same community as the fisher to get an insight into their social worlds and that is why it important to both interview the fishers and to go out fishing with them. All my interviews with the fishers touched upon all the three dimensions of well-being (material, subjective and relational) as I employed questionnaires that were centered on three components designed by WeD group and Sarah Coulthard et al. (work in progress). Each of these components will be elaborated in the next section.

Lastly, it was vital to go out with couple of the fishers to fish in the fall and winter season as that gave me an opportunity to put my interviews into context. More often, my participation in fishing shed a better light on what the fishers had go through on a daily basis and it allowed them to explain the industry in more detail than in the interviews.

## 2.3.2. Resource and Needs Questionnaire (RANQ)

The Resource and Needs Questionnaire (RANQ) was developed by the WeD Group in order to collect data on material well-being. The focus of the RANQ is on what resources people need (i.e. income and assets) and the access that people have to those resources (WeD Group 2006; McGregor et al. 2007). The WeD Group developed a very detailed RANQ questionnaire and Sarah Coulthard et al. (work in progress) have adapted it to the context of fishing. Because of the short span of the research I could not use the whole RANQ questionnaire nor did I use all questions that Sarah Coulthard et al. (work in progress) had adapted towards the fishing context. Nonetheless, during my interviews with the fishers I concentrated on a few questions on material well-being and on people's access to resources. In the fishery on Lake Winnipeg, the quota system sets certain limits on the access to the fishing industry and therefore I asked the fishers how they entered the fishing and how they acquired a quota. Most of my questions regarding the material well-

being were focused on income and I was also interested in see if there were any possible seasonal variations in income. On the one hand, I asked questions like "in which months do you earn the most income?" and "what would be a typical good daily income for that period?" On the other hand, I also asked my informants "in which months do you earn the least income from fishing?" and "what would be a typical low income for that period?" Those questions are supposed to give us an idea of seasonal variations in income in the fishing industry on Lake Winnipeg. It was not only the income side of the fishing that was under scrutiny, but also the expenditure side of the fishing. I asked my informants what was the biggest expenditure in their operation today. Together, those questions were thought as an opportunity to get us a rough estimate of gross income from fishing.

#### 2.3.3. Generated Person Index

The Generated Person Index should enable us to gain an insight into how fishers perceive their own life, which is how they experience and evaluate it (WeD Group 2007). The Generated Person Index is a combination of open ended questions, scoring and point allocations, and this mixture of questions should give us insight into satisfaction with the particular areas of life that are most important to a fisher (Britton & Coulthard 2012). It is a good indication of whether the fishers have reached their goals that they set for themselves. The Generated Person Index divides the question on subjective well-being into three parts. The first part of the question asks the fishers to name five things that they need to have, needed to be, or need to be able to do in order to live well. The fishers had the most difficult time identifying these five things. They usually paused for a few minutes and often they made a remark by saying, "This is really difficult question" or "I have never thought about this before". In the second part of the question I asked the

fishers to rate how satisfied they were with those areas using scale from 1 to 5 where 1 is the worst you could imagine and 5 is exactly as you would like it to be. For the last part of the question I asked the fishers which of these areas they would like to change by allocating 10 points overall on areas that they felt the most important to change.

For the first two or three interviews I just asked them these questions and I filled the areas according to their answers. However, soon I realized by doing that I was slowing the rhythm of the interview down since they were often asking me questions like "what do you mean?" and so on. Later on, I allowed my participants to read the questions by themselves and let them fill the areas as well. When the participants had filled in all the areas, I asked them in more detail why these areas were important to them and what they would like to change. To increase the rhythm of the question we talk about what it means to live well and how they would describe or define a good life before I asked them to fill out the questionnaire regarding quality of life.

#### 2.3.4. Governance Relationship Assessment

As stated above, humans are very social beings and we interact with various people or institutions on our way to meet our goals or aspirations. These relationships influence the choices we make as we try to achieve our goals. As the name indicates, the Governance Relationship Assessment is an evaluation on the relationships that fishers need to deal with on a daily basis (Coulthard and Britton 2012). This instrument was not part of the WeD Group methodology but it was developed by Sarah Coulthard et al. (work in progress) and it was, I believe applied for the first time by Britton and Coulthard (2012) for Northern Ireland fisheries.

As the name of the instrument indicates, the Governance Relationship Assessment deals with how people perceive the state or state agencies and how it can shape a fisher's

well-being (Britton and Coulthard 2012). Sharma and Gupta (2006) define the state as "clearly bounded institution that is distinct from the society and it is often portrayed as unitary autonomous actor that possesses the supreme authority to regulate population within its territory (8)". The Governance Relationship Assessment suggests a different, more contextually relative understanding of the state. In case of Lake Winnipeg, it is particularly appropriate for understanding how fishers perceive a hybrid institution such as Freshwater Fish Marketing Corporation, which is at once a crown corporation and a kind of fishers' company. The Governance Relationship Assessment will also shed light on how fishers perceive the provincial quota system.

Like the Generated Person Index, it is possible to split the Governance Relationship Assessment into three sections. First of all, I asked all of my interviewees to name three relationships that they believe are most influential on their fishing behavior. That turned out to be the most difficult part of the question for the fishers. Many of them took a few minutes to reflect on the question and most of them had a very hard time thinking about social relationships and did not exactly know what meant by social relationships. When I saw a fisher think about social relationships for a few minutes, I handed them a guide, or a social-landscape diagram to help them to think about relationships. The social landscape diagram had a suggestion on possible relationships that could shape the fisher's well-being. When the fishers had identified the three most significant relationships, I asked them to rank these relationships in order of importance and then I asked them to score how satisfied they are with those relationships on the scale from 1 to 5 where 1 was very dissatisfied and 5 was very satisfied. Finally, when they had

ranked the relationships, I asked them which of these relationships they would like to change the most and why.

#### The Quota system

It has been pointed out earlier that policy makers have favored large scale fisheries at the expense of small scale fisheries in recent years (Allison 2001; Allison and Ellis 2001 and Berkes et al. 2001). This favoritism towards large scale fisheries has been accompanied by a focus in biology and economics on approaches to reverse the trend of declining catches (McGoodwin 1990; Charles 2001). In fact, it has been the trend in recent years to perceive the problems of the fishing industry through the lens of economics (Dewees 2008: Carothers 2008). The problem is no longer just declining catches, but it is the inefficiency of the fleet that worries policy makers the most. As Carothers (2008) argues "that is, inefficient fisherman, once eliminated from fishing, would more productively serve society by finding employment in other occupations (60)". That is how some have seen the problem today, and that is what many policy makers have tried to do, that is, eliminate inefficiency in fishing.

One solution that has been employed to make fishing more efficient is to limit entry to fishing and to make fishing a property right by implementing quota systems. Countries such as Canada, Iceland, New Zealand, Norway and USA have implemented varying forms of quota systems, including individual transferable quota systems, in order to make fishing more efficient (Apostle et al. 2002; Carothers 2008; Dewees 2008; Hersoug 2002; Hersoug 2005; Karlsdóttir 2008; Langdon 2008; Pálsson 2006). A few of the reported advantages of quota systems is that they make catches more stable (Karlsdóttir 2008), eliminate the race for fish (Apostle et al. 2002) and maximize

financial returns (Bennet 2005). However, quota systems develop side effects that affect not only fishers' opportunities to work but also how they perceive themselves in relation to others (Carothers 2008). Case studies have shown that quotas tend to accumulate into fewer hands (Dewees 2008; Pálsson 2006; Karlsdóttir 2008; Apostle et al. 2002), make it harder for new people to enter the business due to financial obstacles (Dewees 2008; Carothers 2008; 2010) and result in other social problems that affects fishers' well-being.

Lake Winnipeg was one of the first cases in Canada where a limited entry quota system was adopted due to the diminishing returns and catches of the 1960s (Gislason 1999). It is therefore interesting to see how the fishers themselves on Lake Winnipeg perceive the quota system for their relational and subjective well-being and whether the quota system of Lake Winnipeg has developed the same side effects that have been described briefly above.

## 2.3.5. Historical aspect of fishing

In well-being analysis, time is considered a critical part of the framework. The well being of a person is not something fixed, but rather, it is a process (White 2009). Moreover, the past will vary in its effect on how different people evaluate their future and people will as well differ in how they visualize time (White 2009). Some people will only think about their own lifetime when other people might think about time bearing their ancestors and even the unborn in mind (White 2009).

These concerns with regard to time and well-being are evident among fishers in Gimli. How people visualize time and the impact of the past did, indeed, play a big role in how fishers perceive their own well-being. Initially, the history of the commercial fisheries on Lake Winnipeg was not supposed to be a part of the research. However, the

longer I stayed in Gimli the more I realized how much impact history has had on the fishing industry today. Furthermore, the past has shaped in one way or another how fishers understand their well-being and, especially, how they perceive some of their social relationships.

The history aspect of the research is only supposed to give the reader an idea of how the fishing industry worked in the past and to help us understand how some fishers constructed their perceptions towards some of their social relationships and the impact it had on their well-being. Settlement along the shore of Lake Winnipeg and fishing in the lake can be traced back almost 8,000 years. The Cree and Ojibwe settlements certainly have enormous history, regarding the use of Lake Winnipeg (Russell 2000). However, the space for the history chapter is limited and to do an extensive historical background of fishing on Lake Winnipeg is both beyond the scope of the research and could easily fill a book. I chose to begin my history background in the 1870s when the first Icelanders settled along the shore of Lake Winnipeg. There are a few reasons behind that date. First of all, many have pointed out that the arrival of the Icelanders was a turning point in development of commercial fisheries on Lake Winnipeg. The Icelanders, many of whom were fairly experienced fishers, arrived on the shore of Lake Winnipeg at a time when North America was growing fast and the demand for whitefish was increasing (Tough 1984). The arrival of the Icelanders was well timed since they had the expertise in fishing and their arrival addressed the labour shortages for commercial fishers that become clear as demand for fish increased (Mochoruk 1957; Tough 1984). Or, as others have pointed out: "With settlement of Icelandic immigrants at Gimli in 1875, the foundation of Manitoba's commercial net fishing industry was established (Manitoba Conservation and

Water Stewardship 1999: 31). Regardless, many of my informants were Icelandic descendants and they were aware of the experience of their fathers and grandfathers in the industry. That awareness has shaped their perceptions of well-being. Access to written sources has also played a significant part for Gimli fishers as well. There are many documents (books and papers) that deal with the first days of the Icelanders in the new land and inevitably they capture as well the infancy of the commercial fishing industry on Lake Winnipeg.

The main sources that I used to capture the historical background of the commercial fisheries on Lake Winnipeg were Icelandic books, Old Icelandic newspapers and government documents. Moreover, I interviewed a couple, now retired fishers who still remember how the fisheries were prior to the establishments of the Freshwater Fish Marketing Corporation and the Quota Entitlement system. I also asked older, still active fishers about the past.

## 2.3.6. Analyzing the data

The last step of the methodology process was to analyze all the data that I had gathered after the months in the field. The first thing I did was to listen to all the interviews that I conducted which I recorded on my audio recorder and transcribe them as well as I possibly could. Simultaneously, I read all of my field notes to get a better sense of my interviews and the social context of my informants before rewriting the field notes. I then used coding to help me to identify themes from my field notes and from the interviews. When I had categorized the themes I began to analyze the questionnaires.

The first questionnaires that I analyzed were the Resource and Need questionnaires where I categorized the fishers by which months they earned the most income and the least income. Moreover, I calculated the average "good" and "bad" daily

income among my sample. We still have to be cautious to generalize from that data since a few of them had a difficult time pinpointing a good or bad daily income. Secondly, I examined the Person Generated Index where I found out which aspects of life fishers said were most important to them to live a good life. I calculated how big a proportion of the fishers mentioned certain aspects and then I calculated how satisfied the fishers were on average on that particular domain before calculating how many points on average the fishers wanted to spend on that particular area that they thought were most important to change. Finally, I examined what social relationships fishers considered to be the most important for their fishing and then I calculated how satisfied the fishers were with that particular relationship on average. I also developed coding to help me to identify themes in the area of relationships they wanted to change and the reason behind they sought change.

I felt it reasonable to expect that my data analysis should give a good understanding of the social realities of fishers, especially on the social and ecological determinants of well-being among fishers in Gimli. Nonetheless, it is necessary to raise a voice of caution here as well. I will mention it here and I will bring it up again later, but it is important to note that we cannot generalize the results of this research to the whole lake. Lake Winnipeg is a big lake, and the fishers on the North Basin of the lake have different needs and a different reality than the fishers on the South Basin. Therefore, I need to emphasize that we can only generalize the information that is presented later on the study sample itself.

# 3. 0. Realization at the Pioneer Cemetery: Historical Background to the Gimli Fishery

I was on my way to meet my first informant and I could feel how the snowball was about to roll down the hill. The fisher lived about fifteen minutes away from my place. On the way I read over my questions and I imagined how the conversation might develop in my mind. When I finally arrived at his home, he greeted me in Icelandic by saying "blessaður"; I was pleasantly surprised to hear him speak Icelandic a little bit. Despite being surprised I managed to bounce back and greeted him as well by saying "sæll". He invited me into his house and offered me a seat on his couch in the living room. As I said, I played the upcoming conversation with him many times in my head, and I knew exactly what questions I wanted to ask but all this planning was in the end not necessary, the conversation went in a completely different direction than planned.

He sat down in his chair, and he had his cat on his lap. He looked at me for a moment and then asked me "What is it about Lake Winnipeg that you like to know about?" I told him that I wanted to know how fishers on Lake Winnipeg pursue their social well-being and what factors can affect their well-being. He looked at me again and said "Well…there is a lot of things that you need to understand about Lake Winnipeg, and I can tell you that it isn't easy. So, where do you want to begin?" I had all my questions ready in front of me but before I could ask my first question he began to talk passionately about his first step and the history of the fisheries.

Well when I was younger, I remember that my afi [grandfather] and my father went among other men up north fishing. The men left here on the May 24<sup>th</sup> and they did not come back until fourth of August. Then, they left again in October and some of them didn't return until March. They had a fish station there and it was sure difficult work. The story there during summer was whitefish in the winter time however it was Tulibees. The Tulibees came later in the fall and everybody went to the channel and the Tulibees would come, down from north. The fish was

then packed in big boxes, 135 pounds in an each box, and they were frozen separately and then it was shipped out.

The old fisher talked so passionately about the past and his experience with his afi and father that I did not want to bring his reflections to an end, even though I thought that it was irrelevant to what I wanted to know. He kept on going for nearly 30 minutes, telling me that the whitefish was the "king" at the time and how the lake was there for the first Icelandic settlers. Suddenly he realized that his lunch time was over but he did invite me to his shed, his work place, a place where he can process his fish and store some proportion of it, if necessary. As soon as he stepped in to his shed, he started to prepare for his return to the lake. Despite talking to me about the fishing industry in the world, he filled a few boxes with ice, stating that the ice slows the decomposition of the fish so he needed a lot of ice. Before he returned to the lake, he looked at me for a moment and asked "Do you know why I told you so much about the past?" I looked at him, surprised and I was not sure how to answer that question. He clearly saw that my mind was wandering around looking for the "right" answer. He finally looked at me with a smile on his face and said:

Look, Lake Winnipeg is a complicated system and if you want to understand the fisheries, you have to understand the history of it. I only gave you the slightest fraction of it. You have to understand how hard fishermen had to fight for the infrastructure that is in place today and why they were established in the first time. And as you know, the history tends to repeat itself.

He told me to wait a minute while he went to his car to get something, because he wanted to lend me something. He returned a minute later with a CD in his hand. He handed me Sol Sigurdson's album, "One More Season". He told me that Solli, like he was called, was a local artist who recorded songs about the fisheries in Lake Winnipeg in the past. I asked him "why do you want to lend me this album?" He replied very quickly

and said that he hoped that if I would listen to the album I would get a better sense of the Lake Winnipeg fishery. Then he said goodbye to me and took off to the lake again.

I had a lot to think about after this conversation with the old fisher. The conversation did not go as I had planned but his words about the importance of knowing the history of the Lake Winnipeg fishery echoed in my mind on my way home. For no reason I decided to walk along the highway 9 back home. When I had walked about 20 minutes I noticed a relatively big sign on the side on the road which read "Gimli Icelandic Pioneer Cemetery". I was intrigued and I decided to take a closer look at it. When I approached the cemetery I saw a large gravestone with a lot of Icelandic names written on it and I started to read;

Thorgrímur G. Thorgrímsson Age 2 Kristín S. Arnardóttir Age 40 Lilja Hjálmsdóttir Age 24 Árni Arnason Age 12 Jóhann Jónsson Age 44

I read every single name, all one hundred on that stone. They were names of Icelandic settlers whose ages ranged from 60 years old to just a couple of months old. While I read the names of these Icelandic pioneers and held an album of songs by Sol Sigurdson in my hand, I suddenly felt a sort of belonging and closeness to this place, even though I had only been here for a couple of days and had only met one person. I also felt an obligation to these people and their descendants to do my work properly to show them the respect that they deserved. The words of the old fisher still echoed in my mind while I was reading the names, how important it is to know the history, that thought made me feel ashamed as well. When I was younger in elementary school, we never learned much about the people who emigrated from Iceland to North America. The only thing

that I knew about these people was that they moved to another continent looking for a better life due to the hardships in Iceland.

Now I was in the middle of "New Iceland", but unfortunately my knowledge of how the people that settled along the west shore of Lake Winnipeg survived in the new country was very limited. I did not know enough about the first years of the Icelandic settlements in "New Iceland", especially, I wanted to know how big of a role Lake Winnipeg played for their survival in the new country and how important it was for their descendants.

## 3.1. Background Information

For centuries, the life of the Icelandic people was characterized by hardship on this small island in the North Atlantic Ocean. The vast majority of the people depended on farming for their livelihood where sheep raising was the backbone of the industry (Arngrímsson 1997; Kristjanson 1965; Matthíasson 1976; Porsteinsson 1945). Fishing was only supplementary, and it was conducted on open fishing boats near the shore (Kristjanson 1965). In fact, farming was considered the only real occupation in the country. The people did not have much money and the majority of their production was mostly for home consumption except for the fish that they caught which was their only limited source of income (Arngrímsson 1997; 41; Benediktson 1907). The Icelandic people at the time lived in an extreme poverty which was influenced by both the political system of the country and events that were beyond their control.

All the natural disasters that contributed to the poverty of the Icelandic people were listed in an article in *Framfari* in 1878 (Houser 1986). The history of the country had been shaped by earthquakes, eruptions and harsh sub-arctic climate. The 19<sup>th</sup> century was no exception. In its own way, Icelandic nature was especially harsh in the 19<sup>th</sup>

century; the eruptions of Mount Askja in 1875 and Mount Dyngja in 1876, winters of heavy snow resulted a major loss of the sheep livestock which was a big shock for the poor farmers, many of whom did not have enough capacity to bounce back (Framfari 1878; Gimli Saga 1975; Houser 1986).

The social and political system did not help the poor people of Iceland either. The majority of the Icelandic people were stuck in socially oppressive laws that constrained their social mobility and the ability to seek other occupations besides farming (Grjetarson 1993; Gunnlaugsson 1993). Every 16 year old who either lived on their parent's farm or had their own farm or did not have permission to live by themselves was required to work for a farmer, either locally or in another part of the country, which meant in a few cases that a married couple worked for farmers in a different part of the country (Gerrard 1985; Grjetarson 1993; Gunnlaugsson 1993; Matthíasson 1976). Moreover, Icelandic society at that time was very hierarchal to the extent that only sons of people of substantial means could get a proper education (Gunnlaugsson 1993). The vast majority of the people had therefore no capacity to recover from shocks like natural disasters or loss of livestock. It is possible to say that the old system had trapped the people into poverty (Arngrímsson 1997). Many people therefore perceived their chances to live well diminishing greatly and did not see any future for themselves or their descendants in Iceland. The thought of leaving Iceland became more appealing since many of them might have thought that they did not have anything to lose should they move. A big proportion of the nation showed their courage by moving to an unknown land to pursue a better life: life that the old country was no longer able to provide them.

The period from 1860 – 1890 marked a milestone in Icelandic history. During that time, nearly 14,268 people moved to America, most of them moved to United States (North Dakota and Wisconsin), Canada (Nova Scotia and Kinmount, ON) and even Brazil to look for a better life (Kristinsson 1983). The focus of this chapter is only on the people who moved to Canada. At the beginning, many people settled down in Kinmount, but life in Ontario turned out not to be as pleasant as many had hoped for. Many people got sick or found it difficult to get a job with a decent salary (Arngrímsson 1997). First and foremost the land in Ontario did not impress the settlers. Skapti Arason illustrated that point well in his review when he said that the land was "covered with giant forest, the soil rocky and poor" (Lögberg-Heimskringla 1975: 2). Moreover, there was some disgruntlement among the settlers since many of them wanted to establish an Icelandic colony either in Nebraska or Wisconsin to maintain their identity (Argrímsson 1997: 116; Norðanfari 1880). The government in Ottawa offered the Icelandic settlers land in Manitoba if the Icelanders thought it would be more suitable for them (Arngrímsson 1997). The Icelanders in Kinmount sent a few men to Manitoba to find a suitable location for the colony. At first, the expedition team was not impressed with the land near Winnipeg due to grasshoppers (Arngrímsson 1997). Later on, they found what they thought was a very suitable place for the colony on the western shore of Lake Winnipeg (Arngrímsson 1997). The reason why they explored the western shore of Lake Winnipeg was, according to Skapti Arason, who was on that team that "we were told that the lake produced an abundance of fish of fine quality and great variety, and that the land was good" (Lögberg-Heimskringla 1975). Based on their valuation of the quality of both land and the abundance of fish in the lake, they thought it was the best decision for the

Icelanders to move there and establish their colony. A couple of months later, nearly 250 people moved from Kinmount to Manitoba (Kristjansson 1965).

## 3.2. Lake Winnipeg, the Treasure

Almost every evening I went for a walk in Gimli, I walked around the town but I always headed to Gimli beach, where I found a bench to sit on and usually my mind started to wander. Most of the day, the lake was really beautiful, usually it was just like glass where you could see the moon's reflection on the lake, but when the ice was on the lake, the moon and the stars made everything seems so much brighter. Sometimes when I was walking, it reminded me often of when I went for a walk back home in Iceland, when the sky was clear, you could see the stars dancing and you could actually breathe the fresh air, something that you cannot do in the city. On my walks, I often thought about the people who were so courageous to move to a new country with nothing than their books and hope for a better life. I often thought about the challenges that the people faced in this unknown country and how the Lake Winnipeg helped them to overcome some obstacles in this new environment.

It is hard to imagine the state of mind of the Icelandic settlers when they first reached their new home on October 21<sup>st</sup> 1875. The Icelandic settlers had nothing when they arrived at Willow Point (close to where Gimli is situated today), not even proper winter clothes and the only thing they had were books that they brought from Iceland (Arngrímsson 1997; Gimli Saga 1975). This new land was so different from what they were used to in Iceland. There were no mountains, only a land covered in forest which was new to the Icelandic people (Arngrímsson 1997). Many people even stayed the first weeks in tents. The Icelanders were not used to building houses with wood, which resulted that the permanent houses turned out to be insufficient and did not provide good

enough shelter for the people during the coming winter (Arngrímsson 1997; Kristjansson, 1965; Matthíasson 1976; Porsteinsson 1945). The Icelandic settlers bought food with government loans, which unfortunately did not last for too long due to damage to the food (Arngrímsson 1997).

Many Icelanders had worked on a farm back home in Iceland and the original plan was that the farm was supposed to be the backbone of the new colony, just like in the old country (Arngrímsson 1997). The problem was, however, that the settlers had no experience with grain farming and the soil in Manitoba was completely different from that of Iceland (Porsteinsson 1945). The land in Manitoba was covered with trees and open areas were often grass-covered marshland (Arngrímsson 1997). For these reasons, the first attempts to grow grain were a failure (Porsteinsson 1945; Arngrímsson 1997). Like Björn Pjetursson emphasized in *Framfari* 1878, the Icelandic settlement was in a "child-like a state" during the first years of the colony when he stated;

Here more is needed if we are to succeed. Most of us are like children in this new land, and therefore we need not only to provide ourselves with the necessities of life, but at the same time all the most capable men of our colony need to concentrate their efforts on producing those necessities (Björn Pjetursson 1878; Houser 1986: 134).

Björn Pjetursson pinpointed one of the problems that the Icelanders had during their first years in Manitoba. The Icelanders were in one way children in this new country and they had to learn almost from scratch, because everything was much different from the old country. This difference is illustrated clearly in an editorial article in *Framfari*, which was published in 1877 which had the intention to encourage farmers in the new land to plough their land in the autumn, something that was not necessary in Iceland;

Here there is no necessity to spread manure over the land in the autumn. There is, however, something else which can be done instead which is just as profitable for

farmers here in new Iceland as the spreading of manure in the autumn for farmers at home in the old country. What we are talking about here is ploughing, turning up the soil or cutting furrows in it in the autumn (Houser 1986: 30).

This is just one example of the main differences between farming in Iceland and New Iceland and how the Icelandic farmers needed to change their methods. Another distinctive difference was that there was no sheep raising in the new country but instead cattle raising (Arngrímsson 1997). Many other articles were published in *Framfari* to share the knowledge of farming in the new country. For example, there were articles about how to clear wooded tracts and about the cultivation of grains. Every article related to farming had the only purpose of helping farmers to be more efficient in their cultivation in the new land (Houser 1986). A few people still considered farming as the pillar of the society in New Iceland, despite the difficulties during the first years of the colony (Houser 1986) but many turned instead to fishing as it had a much quicker return than farming. Gradually, more people shifted their efforts from farming to fishing.

It is understandable that many of the pioneers and their descendants referred to the Lake Winnipeg as either a treasure or an "inexhaustible source of food" (Jon Bjarnason, 1878; Guðmundsson 2001; Houser 1986). Like farming, the first attempts at fishing in Lake Winnipeg were a disappointment (Arngrímsson 1997; Porsteinsson 1945). The first settlers who tried to fish in Lake Winnipeg either set their nets too close to the shore or the mesh size of their nets was too big to catch a good amount of fish (Arngrímsson 1997; Gerrard 1985; Kristjansson 1967; Matthíasson 1976; Porsteinsson 1945). As with farming, the Icelanders needed to learn how to fish in the lake. *Framfari* was also a good venue for settlers to share their newly gained knowledge in fishing, and how to be more successful, especially when they used gill nets (Houser 1986). Gradually, they realized

that they needed a different mesh size to target different species and even a different size of twine could make a difference (Th. A. 1878). There were at least three more articles that appeared in *Framfari* that focused only on fishing nets (Houser 1986).

The Icelanders mainly stationary nets, drag nets, lines, hooks and gill nets (Johann Briem 1877; Houser 1986). The boats were open and fishers had to row to the fishing grounds, which meant they had stayed close to the shore. In the winter, they used ox, horse or dog sleds as a transport to and from the fishing ground, and they used fishing lines with a sinker through the ice (Kristjansson 1965). It seems that they only harvested close to Gimli and the catch there fluctuated. There were reports that men set out four nets for the whole of December and they only caught 60 fish, which was considered a low return. Even in the months of January, February and March, they barely caught a fish (Porsteinsson 1945). The fishing industry in the colony did not pick up until a group of Icelanders found a good whitefish ground up north at the Little Grindstone Point and Hecla Island around 1877-8. It was reported that the group had caught "500 fully matured whitefish" in 10 days which at the time was considered a good return (Gerrard 1985; Framfari 1878; Houser 1986). Gradually, more and more men went up north with their nets and stayed there for weeks. Steadily, more and more men shifted their attention to the fisheries, especially during the winter time since most of them were busy working in their farm during the spring and, moreover, they had difficulties keeping the fish fresh during the summer time due to the heat (Arngrímsson 1997). Once they found these fishing grounds north of the Lake, everything was about fishing. In fact fish was the only food that the pioneers could count on but it is said that some people even ate fish for every meal (Kristjansson 1967).

Everybody in the colony depended on fish on a one way or another. The fish was mainly for home consumption and it appeared to help the pioneers through the hard times (Gerrard 1985; Thompson 1976; Kristjansson 1967). The newspaper *Lögberg-Heimskringla* published an excerpt of Sigurður Erlendsson's memoir in 1964 which illustrated well both the difficulties that the pioneers went through their first years in Manitoba. The supply of food was scarce during that time and Sigurður, who built his homestead on Hecla Island for his wife and four children, described his physical condition as "I thought it would be my last days between Christmas and New Year because of a stomach illness" (Lögberg-Heimskringla 1964; 4). He and other Icelanders did not have much food, but the lake provided him plenty of fish that helped him through the difficult times. Despite that he did not describe himself as a "learned fisherman"; he still managed to catch fish once and a while for his family, with only one net which he set close to the shore. Moreover, he described the lake being plentiful with fish which had undoubtedly helped him and other pioneers survive;

Next time I checked my net, I saw I had caught three whitefish. People who know the feeling of an empty stomach can imagine how fast I ate when the fish had been cooked. Ever since then it has been abundance of Whitefish. While the Ice was on the lake, I had plenty of Whitefish which we eat either boiled or fried. I gave those people Whitefish who did not have any (Lögberg-Heimskringla 1964; 4).

Right from the beginning, the whitefish was the main species that the Icelandic settlers targeted. There were reports that the Icelanders ate fish like Mariah [burbot] *Lota lota*, but they tried to avoid species like walleye and goldeye (Guttormsson 1964). The Icelanders called these fish species "ruslfisk" or "junk fish" because of the bones in the goldeye and it was thought to be too much effort to make a fillet out of the walleye due to the dorsal fin on the fish. The walleye was not even thought of being suitable as a food

for dogs (Kristjansson 1965; Guttormsson 1964). As it can be seen here above, the whitefish was often the only source of food for the pioneers. The Icelandic settlers knew the value of the fish, and it became important commodity to exchange for other vital goods, such as wheat (Kristjanson 1965). The Icelanders soon realized that fish was a possible source of income as the Johann Briem (1877) mentioned in his article in *Framfari*;

There are many species, all of which may be considered wholesome and delicious. There can be no doubt that fishing will be not only a source of food for the colonists, but will also provide them with a profitable source of income, whether smoked, salted or fresh, or preserved and transported packed in ice (Briem, Johann 1877; Houser 1986: 53).

However, the Icelanders were relatively slow in developing an organized fishing industry, despite knowing the possibilities that Lake Winnipeg could provide them. There were three main reasons that constrained the development of the fishing industry during the first years of the Icelandic settlement. First of all, fishing was mainly considered a part time occupation, since many people tried to cultivate and work in their homestead for the duration of the spring and summer season (Houser 1986). Secondly, the colony was extremely isolated from other communities within the same province<sup>1</sup>. There was no good transportation to and from Gimli which meant that the Icelanders did not mingled much with other people that possibly had some practical knowledge of the new land. There are however reports on interactions between the Icelanders and the natives during the first years of the colony but the relationship between the groups were volatile in the beginning. As Guttormsson (1975) mentioned, the natives were not too fond of the Icelandic settlers to begin with. This resentment towards the new settlers was

<sup>&</sup>lt;sup>1</sup> When New Iceland was founded it was under the Jurisdiction of District of Keewatin. However, the boundaries of the Province of Manitoba were expanded in 1881, which meant that New Iceland fell under the new territory of Manitoba (Kristjansson 1965).

understandable; especially when the natives saw the new settlers and other outside operators exploit the resources that they probably perceived as rightfully theirs. However, the natives did not necessary want to close the lake for the Icelandic settlers but as Frank Tough (1997) argued "Indians were willing to share, but they also wanted to maintain local control over a resource by excluding external operators" (238). The natives were probably more dissatisfied with the government for not granting them control of the water resource that their ancestors had utilized for hundreds of years (Guttormsson 1975; Tough 1997). Nonetheless, there was one native, John Ramsay, who Icelanders rated very highly because he taught many of them to hunt and fish through the ice. However, later on, the relationships between the groups improved (Eyford 2006; Friðriksson 2007; Guttormsson 1975; Gunnarsdóttir 2010). Regardless, the Icelanders knew how important a railway connection to Gimli would be in order to expand their networks but, despite many petitions to the Federal Government, the Icelanders did not get their railway connection until 1905 (Houser 1986; Porsteinsson, 1945). This isolation meant that the Icelanders did not have easy access to the closest important market of Winnipeg and it also reduced their access to cash. Prior to their arrival to the new land, the Icelanders were very poor and they remained poor during their first years in the colony. No one in the colony had the financial capacity to invest heavily in the fishing industry (Houser 1986). However, there was only one merchant in the colony who bought whitefish, for only 8 cents per fish, a price that some settlers found unsatisfactory (Reykjalín 1877; Arngrímsson 1997; Houser 1986). The reason for the low price of the fish was the high cost of sending the fish to Winnipeg (Friðriksson 1878; Houser 1986). A discussion arose in Framfari among a few men on how to improve the trade of fish in the colony. What

was really interesting about those discussions was the ideas that were put forth in the articles. The contributors seemed to realize that they needed someone to establish trading posts around the lake and someone who could build storage facilities (Houser 1986). It is interesting to note that there were two ideas on how to establish the business. One idea was to encourage men who were interested in the fishing industry to establish a company together or, as Straumfjörd put it, "organize a legalized trading association" (Houser 1986: 100), which in a sense meant that Straumfjörd wanted to establish a Cooperative. The other alternative that both Straumfjörd and Pjetursson (1878) mentioned was to attract someone wealthy to invest in the industry:

... Their officers should prevail upon the most capable men to write on this subject to the newspapers in Manitoba, and in addition try with every means at their disposal to interest some man of means to establish a fish processing plant here (Houser 1986: 135).

# 3.3. If you were not whitefishing, you were nothing!

To do fishing is a full time job; to do farming is a full time job, these are very difficult jobs, you know. However, like I always say, you don't chase two rabbits; you simply cannot catch two rabbits at the same time. You cannot put it in other way. I have told many people that you cannot do it, you cannot chase two rabbits and expect to catch both of them (A03)

The quote above is from an old fisher that I was talking to in Gimli when we were reflecting on the fishing industry on Lake Winnipeg in the past and present. A few fishers remember when their afi or other members of their family tried to support their families by both fishing and farming. It can be said that the quotation above demonstrates quite well the decision that the Icelandic settlers made in the end of the 18<sup>th</sup> century and beginning of the 19<sup>th</sup>. Almost every farmer in the Icelandic colony utilized Lake Winnipeg to some extent, especially when returns on farming were low (Þorsteinsson

1945). Even though the farmers wanted to concentrate on farming, their children sometimes decided to go out and fish to support the family (Matthíasson 1976; Landneminn 1892). Gradually, more and more Icelandic settlers realized that they could not chase two rabbits and catch them both. They knew that neither industry would blossom if everyone was trying to master them both. Many people began to see that fishing gave a much quicker return and, moreover, access to the cash market (Porsteinsson 1945; 189). As more and more people entered the fishing industry, they realized that the fishing industry had changed after 1881 and that the dynamic of the lake and who controlled the lake was completely different from the first days of the colony. The industry changed very quickly when outside investment began to enter it.

Prior to 1880, a few fishers in the colony did manage to sell their fish to Winnipeg and there were also reports that men from Winnipeg would come to the colony to buy fish (Arngrímsson 1997; Gerrard 1985). One of the advantages of fishing on Lake Winnipeg was that there were no regulations, the fishers could use any gears they liked, they could fish as much as they wanted and set their net anywhere on the lake they preferred (Guttormsson 1964: 4; Mochoruk 1957). In the 1880s, North America was growing rapidly, especially in the United States and demand for food amplified accordingly (Mochoruk 1957). More and more companies in the United States were looking for new sources of supply to meet the increasing demand. Lake Winnipeg became one of possible resources to utilize, and companies began to shift their attention there, especially when the railway connection to Selkirk and Winnipeg Beach was established in the 1880s (Tough 1984; Mochoruk 1957). Reid and Clark from Ontario began fishing commercially on the lake around 1881 (Gerrard 1985; Thompson 1976) and in subsequent year more

companies such as William Robinson & co, G.W. Guthier & co, William Overton Company, Dominion Fish Company and Ewing and Fryer began to establish a presence on the lake (Gerrard 1985; Thompson 1976). The majority of these companies had financial support from American companies such as the Booth Fisheries (Gerrard 1985; Mochoruk 1957; Thompson 1976). With better transport routes to and from Lake Winnipeg, and the financial capacity to invest in freight boats, sailboats and other fishing equipment, these companies were able to exploit Lake Winnipeg like never before (Hewson 1960; Mochoruk 1957).

The development of the fishing industry around Lake Winnipeg was rapid. Many companies set up stations around the lake and invested in steam and sailboats, freight boats and other equipment for fishing, which enabled them to go further in the open water than the Icelandic pioneers had done in the 1870s (L.C. Hewson 1960). By 1885 there were already 65 sailboats and 5 steam tugs on Lake Winnipeg (L.C. Hewson 1960). The steam tugs were used to tug sailboats to the fishing grounds when there was no wind but the sailboats never went too far from shore, maybe 15 miles offshore (L.C. Hewson 1960). Most of the fishers went up north on Lake Winnipeg, close to Reindeer Island or even further north to Grindstone Point, on the whitefish grounds, and all the men stayed up north for weeks. The lake was abundant with whitefish to the point that sometimes the boats did not even have enough capacity for all that fish and had to discard perfectly healthy fish (Guttormsson 1964). It appeared that some companies did not even bring enough ice with them to the fishing grounds leading to significant waste (Mochoruk 1957). The most important word during that time in the fishing industry was whitefish.

The production of whitefish was more than most of the Icelandic settlers had ever seen during their first years in Canada.

The production of whitefish rose rapidly, especially during the period from 1883 to 1904. The production in 1883 was estimated to be 33,121 kg (72,867 lb) but 21 years later, the production of whitefish hit its peak when it reached to 3,409,091 kg (7,500,000 lbs.) (Hewson 1960; Lake Winnipeg Task Force 2011; Manitoba Conservation and Water Stewardship, fisheries branch 2012). This sudden rise of productivity of whitefish made many fishers afraid that the companies might be over-exploiting Lake Winnipeg and, in fact, fishers had raised concerns regarding the issue as early as 1890 (Heimskringla 1888). They were afraid that whitefish did not have enough time to spawn and they wanted to shorten the fishing seasons. At that time, the only closed season of the lake was in October. Some fishers wanted to make that closed season for whitefish longer since they believed that the whitefish spawned sooner in the north end of the lake. They suggested that the closed season should be from August to October (Eyjólfsson 1890). The Icelanders sent a petition to the Federal Government in 1897 to request an extension of the closed season for walleye and whitefish and asked them to stop issuing fishing licenses to the fishing companies (Heimskringla 1897). Fishers requested that the open season for whitefish be from May 15 to July 31, with the closed season from August 1 to November 15. For walleye, they wanted the closed season to last from April 15 until June 15. Additionally, fishers requested that the Federal Government only issue fishing licenses to those people who lived by the lake (Heimskringla 1897; 2).

On October 17<sup>th</sup> 1898, the Fisherman's Protective Union of Lake Winnipeg was founded and it main purpose was to help its members to sell their fish to gain a fair return

for their products (Bergmálið 1898). Moreover, the Union was supposed to represent its members and send petitions to the Federal Government on behalf of them regarding regulations on Lake Winnipeg (Bergmálið 1898). During the time that the Fisherman's Protective Union of Lake Winnipeg operated, it was very vocal, especially regarding conservation of walleye and whitefish. The union sent a few petitions to the Federal Government, requesting an extension of the closed season for both walleye and whitefish. Moreover, the Union encouraged the Federal Government to establish fish hatcheries (Baldur 1906). However, the Federal Government did not do much despite these efforts to protect fish during the spawning period and to allow sufficient time for fish to reach maturity (Heimskringla 1909). Later on, the Federal and then the Provincial Government did set a few regulations such as limiting the yards of net that each boat could use and setting a summer limit on how much boat could harvest, but none of the regulations seemed to be specifically targeted to protect the spawning season of the fish (Hewson 1960).

Everything was about whitefish during this time and in fact the fishery on the lake was characterized as whitefish fishery until 1970s. This period was memorable for many of the older fishers that I talked to and, as one of my informants put it so well, the lake at that time was indeed like "...a highway. There were so many boats on the lake that you would not believe me. Probably around 150 whitefish boats" (B02). This period in Lake Winnipeg fishery was not only characterized by the boat traffic, but mainly by the fishing camps that were established in the north end of the lake. A big proportion of the fishers went up north on May 24<sup>th</sup> and came back on August 4<sup>th</sup> and then they returned north in

October and did not come home until March. Everyone was chasing the whitefish, which was considered the king among the fish as one of my informants put it:

At a very young age, I became a captain on my old whitefish boat, because at that time, there were around 150 whitefish boats on Lake Winnipeg, fishing whitefish. All this stands back to the whitefish being king. In 1891 when my Afi went out on the winter time as a young kid, really, what they was fishing for then was whitefish, pickerel and goldeye. Whitefish became the king because as the Europeans moved, they ate the fish that was here and the Great Lakes system, which did not have pickerel, it had whitefish, so this was what they knew, was whitefish. If you were not whitefishing, you were nothing! If you came to Gimli for 1st July and gone down to the harbour, you would not seen nothing. There might be a sailboat tied up, but all the men would have been up north end of Lake Winnipeg, fishing whitefish!" (A03)

The atmosphere at the fishing camps and back home in towns was really special according to the fishers. At the fishing camps, the fishers stayed together for a few weeks each season in a very tight space, which meant that they had to show each other great patience. As one old fisher who went whitefishing in the 1950s and 1960s recalled, they even stayed in the boats during the open season:

We just lived in the boats. There was not a lot of room [The crew was three men]. There was just a single plywood on the house on the boat and you had to have rum in there during the night when it was cold. We had a gas stove to get some heat in there, just pump the tank for maybe 30 minutes or so, warm the place up and then you just fall asleep (B04)

The work in the fishing camps was very intensive as well. Fishers woke up very early each morning, around 4:30, went out to the fishing grounds and stayed there for few hours until they went back to the camps to process the fish before sending it for packing. Sometimes they had to stay up longer to fix their nets and so on, and often they did not go back to bed until midnight. During this period, many fishers even brought their dogs with them to the camps to help them haul in the nets, especially during the winter fishery as one of my informants described for me;

And in the winter time and the summer time, all over here you heard the dogs howling, because they needed the dogs to pull the tulibees in, because they would set on the first ice, that's when the tulibees were there, and you have to get the tulibees of the ice, because if you put them there, the weight of them all would plod, and you all freeze in. They had the dogs because, you couldn't pull the nets by hand, and they would pull it up to the land, and pile it up. That's why the all the dogs were there. And when the guys went out whitefishing, a lot of them would bring the dogs with them, and when they were up north they fed them, all the summer there. They would be tied up and howling all night long, there were houses there and everybody had the same problem. (A03).

However, even though the atmosphere was very special in these camps or in the towns during this time, there were tensions between the fishers and the companies on the lake where the fishers tried to fight for their share fair of the pie.

### 3.4. Between rock and a hard place

There are not a lot of fishermen left that remember the time when the American companies controlled the fishing industry at Lake Winnipeg. I met older fishers that either worked in the fishing industry when the companies operated or remember it how it was when their father and afi worked on the lake trying to support their family by fishing. I saw a mixture of pain, anger and frustration when I looked them in the eyes when they were thinking about the companies' reign on Lake Winnipeg a few decades ago. Voices of some of them changed as well when they described this period by using words like "cheated", "fixing" and "lying". The period from 1940 – 1968 is still stuck in many of the fishers' minds, especially among older ones. The fisher's life was far from being easy and supporting their families was a major challenge for many fishers during that time.

American companies entered Lake Winnipeg through their subsidiary companies in the 1880s. Most of these companies had much deeper pockets than the people who were fishing in Lake Winnipeg before and the latter simply could not compete with the companies. The American companies did not set up their own stations on the lake but

rather gave financial support to entrepreneurs who were interested in entering the industry by providing loans and other equipment to them. In exchange, the American companies would buy all the fish (Gerrard 1985; Thompson 1976). The American companies did make a big effort to eliminate any possible competition, by any means (Mochoruk 1957).

From the beginning of the 1880s, people were unhappy with the American companies, especially since they felt they were over-exploiting their treasure and destroying the whitefish fisheries as well (Eyjólfsson 1890; Heimskringla 1897; Bergmálið 1898; Heimskringla 1909). A few people were also frustrated that the Icelanders did not end up on top in the fishing trade, since it was supposed to be the Icelanders' heritage (J.P.S. 1909). One of the editors of the newspaper *Baldur* did not blame the lack of capital among Icelanders this failure, but instead he blamed "skepticism" among Icelanders, stating that they were too afraid of the unknown and were not mentally mature enough to rise to the occasion (J.P.S. 1909).

It illustrated quite well the political strength of the companies that the Federal Government did not act when the Icelanders raised their concerns in the 1890s for the whitefish stocks. There were three more examples that showed the strength of the companies in Lake Winnipeg. First of all, the Federal Government sent one of their agents to estimate the whitefish fishery on the lake when the Icelanders raised their concerns regarding depleted whitefish stocks in the end of 1880s and beginning of 1890s. Instead of restricting the companies to harvest in the North Basin as many of the Icelanders had hoped for, the government banned the fishery on the South Basin where most of it was for home consumption. The government however, allowed the companies

to continue to harvest in the North Basin (Heimskringla 1900; Gerrard 1985)! Moreover, it surprised many fishers and people along the west shore of Lake Winnipeg when they heard that the Federal Government had banned steamboats on Lake Manitoba and Lake Winnipegosis where most of the fisheries were fishing for their own consumption but they allowed the companies on Lake Winnipeg to keep using the steam boats in 1900. The writer of the *Heimskringla* newspaper concluded that this was another indication that the Federal Government had decided to take good care of foreign fish companies at the expense of the settlers (Heimskringla 1900). At last, when someone made the suggestion to close the lake for fishing, the companies went straight to the Federal Government to show them how much money they had invested in the fishing industry. Fishers requested the Federal Government to shorten the season rather than closing the lake because they were sure that the government would side with the companies against the lake's closure (E.Ó. 1906).

A few lines of the Sol Sigurdson's song, "The Talkin' Channel Blues" read; "Many send some money home to the cook, Get a few more stamps in the unemployment book And if you're lucky, you might have some money left over For smokes and maybe a beer or two (Sigurdson 2000)".. The lines capture the difficulties that the fishers had to deal with during this time. The fishers were not well paid and the fishing was not as good as it was in the 1890s and beginning of 1900s. The companies along the shore of Lake Winnipeg were collectively very powerful; especially the American import companies that in fact were in control (Gerrard 1985; Thompson 1976; Tough 1997). The financial capacity of the American companies enabled them to keep the price that the fishers received for their product extremely low. Even though there were many companies

around the lake, they were only seen as an extension of the American importers or, as the McIvor (1966) committee argued, "many Canadian exporters of round or dressed fish are, in effect, agents of the importers in Chicago and Detroit and retain little independence (92)".

To make things worse, these American companies held almost all the bargaining power in the market at the time (McIvor 1966). The fishing license was the only leverage that the fishers had on the companies but, unfortunately, it was not enough since the companies had the financial capacity which enabled many fishers to fish on the lake (L.C. Hewson 1960). In many cases, the companies owned the boats, nets and all the other equipment that the companies rented to the fishers and were thus monopoly buyers from the fishers (Gerrard 1985; Heimskringla 1921; L.C. Hewson 1960; Matthíasson1976; McIvor 1966; Thompson 1976). This meant that many fishers became indebted to the companies, especially when there was a downturn in the fishing (Gerrard 1985; Thompson 1976).

This arrangement meant that fishers could do little except accepting what they were offered since many of them were in debt to the companies and lacked the infrastructure to sell their own fish, such as sufficient storage space and ice (Heimskringla 1921; Gerrard 1985; McIvor 1966; Thompson 1975). To illustrate how unfairly the pie was divided, the newspaper *Heimskringla* reported in 1909 that for every dollar in export earnings for fish, fishers received only 3 cents while the companies received 97 cents (Heimskringla 1909; Kristjansson 1967). It was even reported that the companies sometimes refused to buy fish from the fishers, except at a very low price (Heimskringla 1933).

The fishers established organizations to protect their interests. The Fisherman's Protective Union of Lake Winnipeg was set up in 1898 and then a few years later, Lake Winnipeg Fishermen's Association was founded (Bergmálið 1898; Lögberg 1938). Writers and other people involved in the fishing industry even encouraged fishers to work together instead of competing, because collectively, they believed that fishers could fight the companies (Pétursson 1928; Sveinsson 1928; Jónasson 1934). In fact, a Fishermen's Cooperative in Manitoba was established in 1928 and a few fishers on Lake Winnipeg were members of that Cooperative. Those organizations were though short lived. The Fisherman's Protective Union of Lake Winnipeg only lasted for few years. The union tried to sell and market the fish but it could not compete with the companies that did hold many fishers indentured. Even though the Union tried to raise the price during winter, the companies showed their competitiveness by also raising the price in the winter season until the Union broke up (Thompson 1976; Bergmálið 1898). The Fishermen's Cooperative only lasted for a couple of years since it had a hard time competing against the companies. The members of the cooperative did not always receive payment for their product and few board members tried to find best price for their own fish but not for the cooperative (Heimskringla 1928; Lögberg 1929; Heimskringla 1930).

The power of the companies continued after 1930s and, when fish production declined steadily during the period from 1940 – 1968, the power of the companies was almost unshakable. Even though the companies did buy the fish, the prices they paid were so low as to keep fishers perpetually indebted:

Often you would go out and fish for a company at a price and then at the end of the season when you were going to square up and get paid, the companies would say, "well it has been a tough year, we couldn't sell the fish as much as we wanted to, down in Chicago, Boston, Detroit and down south, we have to pay you less!". And they got further reductions...so it was terrible (B02).

The fishers worked extremely hard, and sometimes they had to be away from their families for a large part of the year, yet making a living from fishing was difficult. It was not just that the companies kept the price low, but there was not enough fish for everybody. "You would be considered lucky if you caught 40 pounds of fish after a day lifting" (B02) one retired fisher told me, and he added that some fishers had nearly 50 -60 nets in open water and 150 nets in the winter. Some people believed that species like whitefish had been eradicated in Lake Winnipeg (Lögberg 1928; Lögberg 1953; Lögberg-Heimskringla 1960). However, others pointed out that the fish did not disappear, but simply it suffered from too many fishers chasing too few fish (Hewson, L.C. 1960; Lögberg 1953). In fact, the condition of the fisheries in Lake Winnipeg became so bad that even fishers in the south basin had to break the law by using nets with smaller mesh size to be able to support their families (Lögberg 1953). It is hard to imagine the state of mind of the fishers who worked so hard but did not see the fruits of their labour. An older fisher tried to describe the atmosphere during this time, when it was extremely difficult to support your family by fishing;

It was very difficult, very difficult. I know, grown men at the end of the year that would fish for four or five months of the year and when they got to settle up and when they realized that they got nothing, they were crying! Grown men! Because they had nothing left after maybe a four or five months of hard work and fishing is a hard work, and it is not an easy trade (B02).

Even though there were a few fish companies around the shores of the lake, the competition between them was minimal since most of them were indebted to the American companies and the fishers themselves became indebted to the companies that rented them the boats and nets. They had a very limited bargaining power (Gerrard 1985;

McIvor 1966; Thompson 1976). It did not matter for whom the fisher fished; it was extremely hard for them to get a better deal somewhere else:

"They actually would meet in the fishing season and they would set the prices, as a group! So it didn't matter for which fish company you worked with, the price was already set" (B02).

A few fishers were fortunate enough to be able to be independent and fish for themselves but most of the fishers became "company men" as my informants put it. It was still a difficult time for those fishers who managed to fish independently. The only thing that separated them from the others was that they owned their own equipment. They faced the same problem, however, when it comes down to finding a good price:

You shipped to any company that you want in Winnipeg, as long as you did not owe them any money... ..It did not, however, matter to whom you shipped your fish to, it was the same [price] anyways (B04).

As stated above, the fishers on Lake Winnipeg were diligent about raising their concerns regarding the well-being of the lake. Early on, they wanted government intervention to protect the spawning of the walleye and whitefish, since they were afraid that the companies could destroy the fisheries within a few years (Eyjólfsson 1890; Baldur 1906; Heimskringla 1909; Lögberg-Heimskringla 1964). Moreover, the fishers and others sometimes called for a minimum price to be set for their product (Lögberg 1938; Lögberg 1953). It was reported that the government had planned to set up a committee to investigate the well-being of the lake and the fishers, but nothing came out of these committees that benefited the fishers (Heimskringla 1933; Lögberg, 1953; Gerrard 1985; Tough 1997). Generally, the companies got their way at the cost of the quality of fishers' livelihoods. This struggle is illustrated well in one of the verses of the *Talkin'Channel Blues* by Sol Sigurdson that shows the inability of the government to help

the fishers: "Like a ship in a sea, the government wanted to change directions / But the Company winds were blowin' hard against them (Sigurdson 2000)".

During the period 1967 – 1972, both Federal Government and the Provincial Government finally realized that something drastic had to be done for inland fisheries in Canada. On the one hand, the Federal Government finally conceded that the inland fisheries in Canada was experiencing a crisis in the organization of freshwater fish marketing which had created a highly unjust distribution of the returns from the fishery. The Federal Government did set up a sub-committee in order to investigate the marketing of the freshwater fish and made recommendations for changes in marketing strategies for freshwater fish (Lamb 1975). On the other hand, a major event occurred that caused both the Provincial Government of Manitoba and the fishers themselves to reflect on the future of the Lake Winnipeg fishery.

These two occurrences at the Federal and Provincial level at the end of 1960s and beginning of the 1970 provided an unorthodox combination of social institutions that shapes not only the fisheries in Lake Winnipeg today but also how the fishers pursue their well-being. We will take better look at these changes in the next chapter and they have affected the fisheries on Lake Winnipeg.

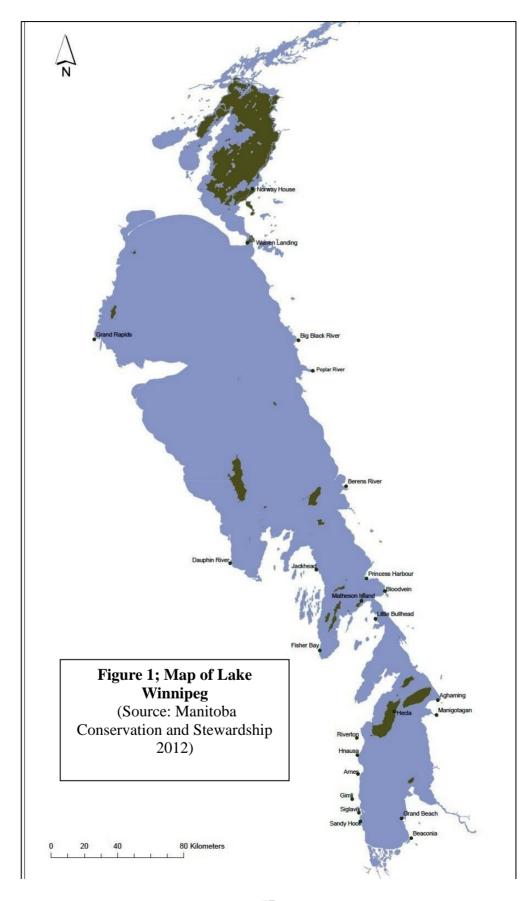
### 4.0. Government institutions and the contemporary practice of fishing from Gimli

One of the advantages of places like Gimli is that it is not too big. Only 5,845 people live in Municipality of Gimli (Statistic Canada 2012). Due to the smallness of the town and closeness to other settlements, many people have relatives or know someone in the fishing industry. As soon as people began to get to know me, the more people introduced me to fishers. Gradually, the more fishers I got to know, the more fascinating the fisheries on Lake Winnipeg became to me.

Lake Winnipeg supports the largest commercial fishery in Manitoba and over the period 2003 to 2010 it produced, on average, 6,428,212 kg annually (Figure 2 - Manitoba Water Stewardship 2012). The lake provides work for nearly 1,000 people in fishing. For example, during the season 2010/11, 867 licensed fishers worked on the lake and 173 people worked as hired hands. The lake is split into three main areas, the South Basin, the Channel Area and the North Basin. The fishers are spread relatively equally among those three areas according to Manitoba Conservation and Water Stewardship, Fisheries Branch (2012): 38% of the fishers are based in the South Basin, 39% in the North Basin and 23% in the Channel area. Most licensed fishers (approximately 150) are, however, located in the Gimli and Winnipeg Beach areas (Manitoba Water Stewardship, 2012). The areawise distribution of total quotas allowed on the lake is presented in Table 2.

Table 2: Licensing Area Profile

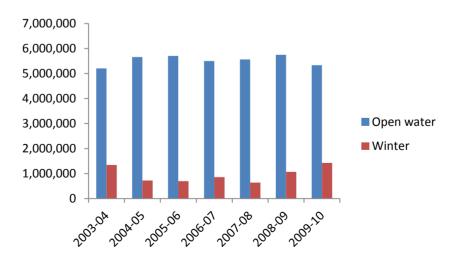
Source: Manitoba Water and Stewardship, Fisheries branch (2011) No. Fishers (excluding **Total Qouta** Part of the Lake No. of QeS retirement quotas) allowed (kg) South Basin 320 610 2,375,170 208 1,454,480 Channel Area 356 272 North Basin 467 2.086.334 Norway House 608,000 52 Total 852 1433 6,523,984



The quota is, however, not distributed equally throughout the lake. The largest proportion of the quota is held by individuals in the South Basin (Selkirk, Gimli, Winnipeg Beach, Riverton, Hecla Island, Wanipigow, Manigotagan, Traverse Bay and Victoria Beach). To see the locations of these places, please see the map above. The South Basin is also the area of the lake that produces the most, especially for local markets, an issue to which we will return later in the thesis.

The fishing year on the Lake Winnipeg is divided into three seasons. The spring season (usually from mid-May – July 10<sup>th</sup>), the fall season (September 1<sup>st</sup> – October 31<sup>st</sup>) and the winter season (December – March 31<sup>st</sup>). The fall and spring season are conducted on open water where fishers either use 20-25 foot open skiffs or 40-60 foot long whitefish boats (only during spring season) but during winter seasons, the fishers harvest through the ice. Gillnets are the only legally allowed net. The two open water seasons (spring and fall) are the most important ones with nearly 85% of the production annually (Manitoba Water Stewardship 2011).

**Figure 2: Commercial Harvest (Round kg) 2003\04 - 2009\10** Source: Manitoba Water Stewardship (2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)



The spring and fall season are almost a mirror image of each other, except for the whitefish fishery in the North Basin during the spring season. The winter season is different for the obvious reason that the fishers harvest through the ice, but also due to the high portion of Lake Whitefish in the total catches (Manitoba Conservation and Water Stewardship 2012).

In the following section, the changes that both Provincial and the Federal Government had to make on the inland fisheries will be explored since those changes have had such an important impact on the fishery. Through the sections 4.4 to 4.6, I will describe the practice of fishing from Gimli as I experienced it. This chapter aims to locate Gimli fishers in their community and to gain an insight on the fisher's social reality during the fishing seasons.

## 4.1. Infrastructural changes

As soon as I got to know more fishers, I heard more stories about the old days and how everything worked in the past. The period from 1967 – 1972 was stuck in many fishers' minds because they or their fathers had experienced the significant changes of that time.

As mentioned in the last chapter, in the mid-1960s the Federal Government finally accepted that the inland fisheries in Canada had a problem in the organization of its freshwater fish marketing. The Federal Government set up a sub-committee in 1965 which was led by George H. McIvor to investigate the marketing organization of freshwater fish in Canada (Lamb 1975). The main finding of the committee was that the organization of the freshwater fish market had created a highly unjust distribution of the returns of the fishery for the fishers (McIvor 1966). The McIvor committee concluded

that there were too many participants in the market which affected the price that the fishers received for their products (McIvor 1966, 88). High number of participants created inefficiencies in the market since no one was big enough to take advantage of economies of scale while it created a challenge for the fishers to bargain and make a living (McIvor 1966). One of the things that the sub-committee pointed out was the unequal bargaining power between participants in the market. The American companies (the importers) did hold the position of power with regard to the pricing of the fish (McIvor 1966). Under normal circumstances, the amount of fish buyers around Lake Winnipeg should have created more opportunities for bargaining over the price by the fishers. However, the condition on Lake Winnipeg before 1969 was not ideal, especially for the fishers. As described earlier, most of the companies and fish buyers on Lake Winnipeg were either agents or subsidiaries of American companies (importers) (Gerrard 1985; McIvor 1966; Thompson 1976). Due to that, the fish buyers and companies on the Lake had limited independence and bargaining power against the American companies. Furthermore, the bargaining power of the fishers was limited as well. Many fishers were dependent on the companies since the companies provided many of the fishers the nets, boats and other important equipment in exchange that they would buy the fish from them (McIvor 1966). Due to the fact that the fishers were dependent on the companies for capital and equipment, many of the fishers became in debt to the companies. The fishers were often in a situation that they only could take what the companies offered them (Gerrard 1985; McIvor 1966). As the McIvor committee stated, the only thing that the companies thought about regarding the fishers' income from fishing was that "the return of the fisherman need not to be higher than just enough to assure his participation in the

fishery" (McIvor 1966; 94). Even independent fishers struggled to get a good deal since the American companies held such a tight grasp of the market (McIvor 1966).

The McIvor committee (1966) emphasized that the majority of fishers had a difficult time supporting themselves by fishing. Moreover, it is interesting to note that the McIvor committee stated that the disgruntlement among the Icelandic fishers was a good indicator that not everything was alright with the commercial freshwater fish industry. As the committee stated "during the public hearings, it was made quite clear that they are not happy, are not content, but are very discouraged" (McIvor 1966; 85). The McIvor committee recommended that the Federal Government should establish a Freshwater Fish Marketing Board that would act as a single desk seller for freshwater fish and fish products produced in Northwestern Ontario, Manitoba, Saskatchewan, Alberta, and the Northwest Territories (McIvor 1966; 2). Most importantly, only fishers were supposed to be the ones who would be able to sell directly to the Freshwater Fish Marketing Corporation, no room was made for middlemen (McIvor, 1966). The McIvor committee's recommendations were enacted into law in 1969 and the Freshwater Fish Marketing Corporation was established (Gislason 1999; Lamb 1975). However, it is important to keep in mind that even though Freshwater Fish Marketing Corporation was a huge step forward for the inland fishery in Canada, it was not a new innovation in supply management in Canada. There was the precedent of single desk selling agency operating in Canada during that time, which was the Canadian Wheat Board. The Federal Government made the Canadian Wheat Board a single selling desk at the end of 1930s to stabilize price for wheat for farmers in western Canada (Schmitz and Furtan 2000). Today, the Freshwater Fish Marketing Corporation (FFMC) works according to the

Freshwater Fish Marketing Act (F-13). As stated by the act, the FFMC is a crown corporation that is supposed to be financially self-sustainable. One of the purposes of the establishment of FFMC was not only to break the monopolistic power of the companies but to stabilize the market for freshwater fish which would enable fishers to increase their return from the fishery (Gislason et al. 1982). However, there is one important pillar in the organization of FFMC which makes the institution so interesting. As a federal Crown Corporation, it is supposed to act on the market more like a cooperative. As maintained by the act in article 22(2), the FFMC is obligated to buy all fish that are offered to it:

All fish lawfully fished by a fisherman and offered by the fisherman for sale to the Corporation for disposal in interprovincial or export trade shall be bought by the Corporation from the fisherman on such terms and conditions and for such price as may be agreed on by the Corporation and the Fishermen subject to any applicable scheme for payment established and operated by the Corporation (Freshwater Fish Marketing Act).

This was a major transition from the old system where the no one was required to buy the fish from the fisher. Previously, buyers purchased fish at their discretion. There are only a few retired or nearly retired fishers who remember the time prior to the FFMC. When I talked to them about the past they sometimes paused when we began to talk about the arrival of the FFMC on the market and the influence it had on the fishery on Lake Winnipeg. One retired fisher describes the arrival of FFMC as "best thing that ever happened. At least, for every season they gave you the price so you knew how much money you could spend and how much profit you got" (B04). Of course not everyone at that time was happy with the arrival of the FFMC. There were a few fishers who had managed to be independent before FFMC and even a couple of them had been relatively successful in their operations and had had a few employees. The arrival of the FFMC changed the market so that it became the sole buyer in the market. Those who had built

their networks did lose some of their buyers as one older fisher described to me "I did not want it when the FFMC came in 1969 because I lost all what I had worked up to that time, my men and everything" (A03). However, he added that the majority of the fishers were happy with the arrival of the FFMC. Moreover, the same old fisher told me that he gradually saw the benefit of the FFMC when he saw that it was the fishers and no one else that benefited from the FFMC. He described to me how things worked before the arrival of the FFMC through the example of a friend who worked on a freight boat:

He was freighting the fish. He made more money hauling the fish, than fishing the fish. The people at the other end made the money. (A03)

That was exactly the problem before the arrival of the FFMC. The people at the other end, the American fish companies, made money from the fishery and not the ones who almost sacrificed their lives to catch the fish (McIvor 1966). To be clear, the FFMC has always been controversial among fishers and they are not always happy with it. As we will see later, the fishers in the Gimli area hold contrary views towards the FFMC. Nonetheless, the main point here is that by creating the FFMC, the Federal Government overhauled the organization of the marketing of freshwater fish and, by doing so, the Federal Government sought to make the distribution of the return from the fishery fairer than before. By establishing the FFMC the Federal Government tried to expand the slice that fishers received for their labour. It of course remains to be seen whether the FFMC is still as important for today's fishers' well-being.

#### 4.1.1. Changes at the Provincial level

Just like the Federal Government, the Manitoba Provincial Government sought solutions to make the fisheries on Lake Winnipeg more sustainable and more profitable

for the fishers (Gislason 1999). The fisheries for two of the most important species in the lake (walleye and whitefish) declined during the 1960s.

The catch for whitefish steadily declined after 1940 and it reached an all-time low in 1969 when only 341, 950 kg was landed. Walleye [pickerel] also declined to a nadir in 1968 when only 354,395 kg was landed (Gislason 1982; 1999; Lake Winnipeg Task Force 2011; Manitoba Conservation and Stewardship, fisheries branch 2011). The catch for sauger fluctuated; sauger had been the pre-dominant species in the South Basin of the lake since the 1930s but in 1969 the catch of sauger went down to 922,761 kg (Lake Winnipeg Task Force 2011; Manitoba Conservation and Stewardship, 2011). These numbers showed the Provincial Government that something was not right in the lake. Additionally, fewer people had the desire to go into fishing due to the combination of low catch and price that they received for the fish. Apparently, some people tried to convince others who were thinking about going into fishing not to do so, like one fisher told me; "my father told me. Do not get into the fishing business! You should go to University he said, get an education, get an office job because there is not any money in it [fishing] and it is hard work" (A02). Around the same time, Gimli leaders started to question the town's economic reliance on fishing and started to look for other alternatives. For example Gimli fought for getting a distillery plant, which opened in 1968 (Howard, 1967).

However, the fact that fishing was declining and more people, especially the young ones, started to look for other opportunities was probably part of the reason that the Provincial Government decided to change its approach in governance for Lake Winnipeg. This picture was complicated in 1970 by the shock of closure of the fishery

due to mercury contamination which is believed to be caused by pulp mill discharge (Gislason 1999). The lake was closed for almost two years, reopening in 1971 for fishing in the North Basin and a year later in the South Basin (Gislason 1999). The closure of the lake during this period shaped the dynamics of the fishing industry on Lake Winnipeg;

Ohh...it was not good [The atmosphere in town] to be honest. The fishermen did not like it, some compensation was paid, and that was what kept many of them going. A lot of fishermen got out of it, went to other trades, depending on their age. Obviously the older guys had to stay; the middle age guys left the industry but generally there was a lot of uncertainty, disgruntlement, and I guess fear (B02).

This is how one retired fisher remembers the time when the lake closed. A few fishers had other alternatives. Some of them got other jobs elsewhere. An old fisher recalled, "It was terrible. I ended up working in Ontario, up north all over. Don't forget at that time I had everything, boats and everything" (A03). The government however tried to step in by offering fishers not only compensation but offered them employment and other training programs (Gislason 1999). Even though the closure of the lake was a shock for the fishers and their families and it did create a hardship for some, it did nonetheless, trigger changes in the governance of Lake Winnipeg.

As Gislason (1999) pointed out, these two years when the lake was closed created a space for both fishers and the government to reflect on the fishing industry and to try to seek solutions to make the fisheries more sustainable while increasing the return for fishers. The access to the lake was unrestricted prior to the closure of the lake. Anybody who bought a fishing license for between \$5 and \$15 could fish on the lake and the lake was closed for fisheries as soon as the lake quota was filled. This open access to the lake created an environment where the fishers had to "work like dogs" to get their share, as one fisher described the days prior to the quota system. Along with the dysfunction in the

marketing organization, the free access to the resource created a condition where a fisher could not get his fair share for his work. The fishers literally had to race for the fish but the problem was that there were simply too many fishers chasing too few fish. It is believed that around 3,000 people were engaged in the fishing annually in the 1950s (Gislason et al. 1982; 166). At the same time, catch for walleye and whitefish declined considerably as stated above. To make thing worse, the price that fishers received for fish was low, for the reasons describe above. This situation led to a state where the fishers, on average, were not catching enough fish to make a decent living (Gislason et al. 1982). The effort that fishers made to catch fish was not therefore always reflected in earnings. One old fisher told me that it was common for fishers at that time set 40 - 50 nets on open water but only catch, maybe 40 pounds of fish! In comparison today, a fisher can catch 200 – 1,000 pounds of walleye in only 5 – 8 nets. The income that was derived from fishing therefore did not always reflect the work and time that the fisher spent on catching the fish. Both the Provincial Government and the fishers themselves therefore realized that something needed to be done to further increase the return of the fishery to the fisher.

In 1972 the Provincial Government and the fishers on Lake Winnipeg made a big transition in governance of the Lake Winnipeg fishery when the non-transferable quota was introduced when the lake reopened in 1972 (Gislason 1999).

Yes [we had something to say when the quota system was implemented], when they open it again they held regional meetings around the lake and they said "this is the system we are proposing, do you go for a quota system where you have individual quotas or do you just want to go for a Lake Quota?" (A14).

This is how one of the older fisher remembered how the quota system was introduced to the fishers by the government in the 1970s and the role the fishers had in

the decision process. As Gislason et al. (1982; 147) pointed out, the main purpose of the quota system was not necessarily to increase the effectiveness of the fishery; rather it was supposed to serve as a social means to distribute the returns of the fishery more equally than before. The quota system was seen as a tool to match the fisher's potential income of fishing to their fishing effort. Previously, to get their shares, the fishers had to spend considerable time on the lake, and even though the fishers spent all of their time on the lake, it was no guarantee that they would make enough income to make a good living. "Nobody was making any money, or really big money. A bigger fisher maybe made a little bit money" (A14). That is how one of the older fishers remembered the old system. That was the biggest problem of the old system in the essence; too few fish in the lake and too many fishers which in the end disabled the majority of the fishers to make a living out of fishing. Especially, when taking the fishing effort and working hours into consideration. The object of the quota system was to make sure that the fishers had a certain amount of fish guaranteed so he could have a more stable income from fishing than before (Gislason et al. 1982). By doing that, the quota system gave those fishers who wanted to fish part time a chance by doing so since they had a certain amount of fish that they were allowed harvest per season and they could almost work as they wanted. "The quota system gave everybody a chance and you could work anyway you wanted. You could finish working in end of March if you wanted" (B04), one old fisher told me. With the quota system, the fisher did not have to race for his share, he had already had it and could therefore fish as slowly or quickly as he wanted (Gislason et al. 1982).

Initially the quota was allocated to those who had a fishing license for the season in 1968 or 1969 or those who had licenses for the season in six of the seven years

before 1968 (Gislason 1999). Not everyone was happy with the new arrangement in 1972 like one fisher recalled:

No [Not everybody was happy with the quota system] a lot of people who had been fishing before wanted or would have liked to come back in a small scale but if you had not been fishing for 5 or 6 years prior to the quota system, you were not granted one. You had to be in the business recently and so there were some people who thought they should have been included or getting quotas. But they were not and became little bit angry about it (A02)

It appears, however, that the majority of the fishers had agreed to go for an individual quota system since they accepted it in the first place. As an old fisher pointed out to me:

There was a lot of consultation done on the lake, and I would say by far, the fishermen did agree with it, I am not saying all (B02).

It seems that in the end, the fishers on the lake had agreed on this change in the governance of the lake. However, there was another thing that bothered the fishers when the quota was initially established:

When they set it up [the quota system] they set the quota too low and it did cause a lot of trouble. Even though they could have increased it couple of thousands of pounds and it would not have been the hardship as it was, because it was indeed a hardship for all (A03).

This is how one old fisher explained his experience during the first steps of the quota system back in the 1970s. The newly established quota system did, indeed, go through trials and tribulations during the first years of its operation on Lake Winnipeg. As Gislason et al. (1982) and Gislason (1999) pointed out, the Provincial Government had to make some adjustments to the system in order to meet the objectives of the system. As the fisher pointed out above, the quota was set low and the fishers could not expand their quotas in order to increase their income since it was non-transferable. Gislason et al. (1982; 145) stressed that the non-transferable quota system benefited more the part time

fishers and made it easier for them to match their potential incomes to their fishing efforts. On the other hand, the non-transferable quota made it harder for full time fishers to make sufficient returns from fishing since the quota system restricted their fishing effort and they could not expand their quota in order to increase their income from fishing (Gislason et al. 1982). Another problem arose when it was realized that the quota system made it almost impossible for new fishers to enter the business. The quota system was based on collecting points that you got for working in the fishery, as a hired hand. As both Gislason et al. (1982) and Scaife (1991) mentioned, it could take a fisher almost a decade to collect an adequate amount of points to get his own fishing license or quota. Lastly and probably not the least factor that made the non-transferable quota inefficient was the fact that the fishers had nothing to sell for their retirement (Gislason 1999). The fishers invested heavily on fishing gear and other equipment but as soon as they retired, the quota they had went straight back to the government and the fishers became stuck with boats and other equipment that were not worth much without the quota (Gislason 1999; 8).

Gradually, the Provincial Government made adjustments to the quota system according to fishers' recommendations (Gislason 1999). In 1986 the Provincial Government finally made the transition to Individual Transferable Quota (ITQ) system, which was at the time, a big step since it was one of the first times that an ITQ system was implemented in Canada (Gislason 1999). The ITQ system meant that the quota became fully transferable. This enabled fishers to purchase more quotas should they want to expand their income capacity from fishing (Gislason 1999). Moreover, it permitted retired fishers to sell their quota for their retirement fund. The Provincial Government

made another important change to the system. Initially the quota was assigned for each season. There were separate quotas for the fall season, winter season and spring season and a fisher could not roll over unfilled quota to the next season. Step by step, the Provincial Government allowed fishers to roll over unfilled season quota to the next one (Gislason 1999). Today however, the fishers have the whole fishing year (Mid May – March 31<sup>st</sup>) to fill their quota (Gislason 1999). To avoid too much accumulation of quota the government placed one restriction on the ownership of the quota and that was that a fisher could not hold more than 4 or 6 quotas depending on the fisher's area. The fishers in the South Basin can hold 6 quota entitlements.

The quota system is still running today, in almost the same framework as it was in 1986 besides a few modifications that were made in the 1990s that will be briefly described in the next section. Just as with the Freshwater Fish Marketing Corporation, the quota system had a major impact on how the fisheries are conducted today on Lake Winnipeg. It can be said that the quota system and the FFMC were based on the same premise, which was to increase the return of the fishery for the fishers or, put another way, to improve the material well-being of fishers on Lake Winnipeg. The purpose of the quota system was also to enable fishers to match their potential income to their fishing effort without competing with other fishers on the lake for a share (Gislason et al. 1982; Gislason 1999). As we will see later on, both the FFMC and the quota system are strongly interlinked with the two other dimensions of well-being, which are subjective and relational.

## 4.2. Lake Winnipeg today

The dynamics of Lake Winnipeg fisheries have gradually changed over the last 50 years. The key word for Lake Winnipeg fishery is not whitefish anymore, the torch of Lake Winnipeg has been passed down to the walleye which has become the new "king" of the lake. The other things that have changed are that many fishers are not "the poorest of the poor" (A02) anymore as one fisher described his childhood. You hear people who have no or little relationship with the fishing industry talk about how well fishers are doing today and even some people go as far as stating that the fishers are the ones who are doing the best in the community. The fisheries on the lake have been fairly good ever since the re-opening of the lake in 1973 and it appears on a first glance that the improvements of the fisheries on the lake have been a straight line. However, taking a closer look at the past 50 years, there have been ups and downs and there have been a few modifications in governance which have resulted in dynamic changes that shape fisheries today.

As noted, whitefish was for a long time a pre-dominant species caught in Lake Winnipeg. Gradually, with arrival of refrigeration technology, the capacity for fishers to harvest other species such as sauger, walleye and perch increased (Gislason et al. 1982). Whitefish had the advantage over other species in that it had higher fat content and was much easier to smoke or salt for preservation than others (Gislason 1999: 2). Despite the fact that other species became commercially valuable; whitefish was still predominant in the North Basin and is still significant for many fishers today. The whitefish fishery, however, has gone through changes in the past 50 years and the whitefish fishery is not as extensive as it was back during the period 1905 to 1925. After 1930 the whitefish stock

was in a bad shape after the first years of commercial fisheries (Mochoruk 1957). In order to protect the whitefish, steam tugs were prohibited and later on the Provincial Government decided to close a big area in the North Basin during fall season that is a known spawning ground for the whitefish (Hewson, 1960; 4). The ecological state of the whitefish cannot be considered as the only reason for declining whitefish fishery on the lake. Gradually the whitefish fishery has become economically unfavorable. Unlike the walleye's fishing ground, the fishers need bigger boats that are more suitable for the



Photo 1: Whitefish Boat and an Open Skiff ©Sölmundur Karl Pálsson

bigger and deeper North Basin where the main whitefish ground is located. A typical whitefish boat is 40 - 60 feet long, with a cabin on it which provides good shelter for

the fishers. Unlike the smaller boats of the

walleye fishery, a whitefish boat usually requires one or two hired hands. The open skiff is smaller in size with an outboard motor and does not have any shelter for the fisher. The open skiff is considered more suitable for shallow fishing grounds. In 1975 to the beginning of the 1980s the cost of fuel increased considerably with the result that fishers began to choose open skiffs rather than whitefish boats and tried to reduce their travel distances (Manitoba Conservation and Water Stewardship 1984). The same trend has been occurring today. The price of gas and equipment has been steadily increasing and just the salary of one hired hand is around \$125 per day. Moreover, the price of whitefish has been decreasing steadily during the past years, especially in comparison to other quota species such as the walleye. The price for walleye has been as much as three times

the price for whitefish (Lake Winnipeg Task Force 2011). The price difference between the species can be seen in Appendix A as well.

Many fishers that had a whitefish fleet quota often got a lot of walleye in their nets and since the price for whitefish was steadily going down and the value for their whitefish quota was decreasing, the fishers wanted to be able to sell the walleye that they caught as a by-catch to cover their loss. In order to help the whitefish fishers to maintain the same income level, the Provincial Government allowed fishers that hold whitefish quotas to harvest certain amounts of walleye or sauger. The tolerance, as they call it, was once 3,200 kg but it was increased to 4,550 kg for each 15,880 kg whitefish Fleet quota in 1999 (Manitoba Conservation and Water Stewardship 1999). However, as one man related to fishery pointed out to me "some guys will take their whitefish boat's quota, all the way to the North Basin, fill the 1/3 portion of the walleye and come all the way back without catching any whitefish!" (B01). That is exactly what the Provincial Government has been worried about in recent years. Because of the price difference between the whitefish and the walleye, the Provincial Government is afraid that it might lead to circumstances where the fishers would rather discard the whitefish and instead concentrate solely on walleye. To encourage fishers to retain their whitefish, the Provincial Government implemented a program, Whitefish Optimization Quota Allocation in 2008. The program is still running but it permits each fisher in the North Basin to harvest 500 kg and each fisher in the South Basin to harvest 200 kg of whitefish without it being deducted from their quota (Manitoba Conservation and Water Stewardship 2009). So far, it is hard to see the benefit of the program because of the undesirability of the whitefish for some fishers, especially when the price for whitefish is

very low compared to walleye. It remains to be seen how successful the program will be, especially when keeping in mind that FFMC is trying to increase the supply of whitefish in order to satisfy newly opened markets such as in Finland, Romania and Russia (FFMC 2012). However, it is unlikely that we will ever witness again the whitefish fishery as it was at the beginning of the 1900s as long as the price of gas keeps increasing and the price of whitefish stays low. As one retired fisher told me when he was reflecting on the whitefish fishery, "Those days are gone when you saw the whitefish boats take off....I do not know if they will ever come back, I doubt it "(B02).

As stated earlier, other species gradually have become commercially important for Lake Winnipeg. Species that once were thought of as "rough fish" and were either discarded or considered only for home consumption are now the ones that the fishers target the most. In recent years walleye has been the backbone of the commercial fishery on Lake Winnipeg, especially in the South Basin.

For a time, however, sauger was one of the most important species of the lake, especially after 1933. Its peak was in 1941 when 4.6 million kg of sauger was landed (Manitoba Conservation and Stewardship 2012). During the period from 1950 to 1995 sauger was alongside walleye as the most important species on the lake. Sauger was predominant in the South Basin during this period as one retired fisher recalled: "In the wintertime around the 1980s it was about 90% of sauger here but after that, the pickerel has come more and took over completely" (B04). Another fisher remembered how hard it was to get walleye in the South Basin, especially when using fishing line:

When growing up here, you never caught a pickerel [walleye] or sauger on a fishing line. You caught Mariah [burbot], and perch but you never caught pickerel, ever! That is as long as I can remember. I started angling as a kid when I was 10 years old in 1956/7 and we never saw sun fish, or other species that were pretty

prevalent, but you could catch them on a line. But, a good quality fish was not in the South Basin, it was a bit in the North Basin (A02).

After the closure of the lake in the 1970s, the fishing for both sauger and walleye picked up and during the period 1972 to 1995, 1,651,731 kg of sauger and 1,636,090 kg of walleye was landed on average annually (Lake Winnipeg Task Force 2011; Manitoba Conservation and Stewardship 2012). The catch for sauger and walleye however began to decline during the period from 1989 to 1997 (Manitoba Conservation and Water Stewardship, 1999; 44). To reverse the trend the Provincial Government implemented another adjustment in the fishing management. After a consultation with fishers, the Provincial Government decided in 1997 that opening dates in the South Basin would be based on 80% completion of spawning walleye. The North Basin and the channel area would open a week later (Manitoba Conservation and Water Stewardship 1999; 2004). In the short run, it seems that the decision to let the spawning of the walleye decide the opening day for the spring season has worked fairly well, for the walleye at least. The catch for walleye has been record high since 1998 contrary to the stock of sauger that has slowly declined (Manitoba Conservation and Water Stewardship 1999; 2004; 2009).

There are a few theories on why the walleye have done well for the past two decades or so. Many fishers attribute it to the decision to allow the walleye to spawn in peace in the spring while others have pointed out that nutrient loading of Lake Winnipeg could be a factor as well. Other fishers identified ecological changes as the basis for the improvement in the walleye stock such as the introduction of the rainbow smelt *Osmerus Mordax* in the 1970s as it appears that the rainbow smelt have become an important food source for the walleye (Manitoba Conservation and Water Stewardship 2009). Not only do some fishers point to the introduction of rainbow smelt for the improvements of the

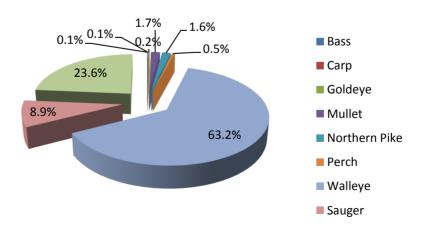
walleye stock but also they credit decreased competition with the walleye for food, like one fisher mentioned:

There was a species that they called Mariah (Burbot), which is a big predator which was eating the fish that the Pickerel feed on as well. Suddenly, the stock of Mariah collapsed and you never saw Mariah again (A02).

Many fishers mentioned as well the good 2001 class of walleye and argued that that class was the basis for the good fishery of recent years.

As stated above, the fisheries in Lake Winnipeg have done extremely well in the past decade and the production of walleye has been at a record high for a few years. For example, during the season 2009/10, approximately 4.2 million kg of walleye was harvested or nearly 63% of the total catches (Manitoba Water Stewardship 2011). However, the same thing cannot be said about the sauger, which has been struggling for the past few years, although for the season 2009/10 approximately 601,313 kg was harvested which was an improvement from the last five seasons. The catch of whitefish has been relatively stable, around 1 million kg per season (Manitoba Water Stewardship 2011).

Figure 3: Commercial Fishing Production 2009/10 Source: Manitoba Water Stewardship (2011)



The importance of these three quota species for Lake Winnipeg is significant as has been emphasized above. The three species comprised nearly 96% of the total catch during the fishing season 2009/10 (Manitoba Water Stewardship 2011) as can be seen in figure 3 above. It would be indeed interesting to discuss in more detail the biology and the sustainability of the stocks on Lake Winnipeg but that is beyond the scope of this thesis. The purpose of this section was mainly to outline the main changes in the fishing industry on Lake Winnipeg after the closure of the lake and how the fishing industry has transformed from being a predominantly whitefish fishery to a predominantly walleye fishery. This transition has been accompanied by a shift to smaller open skiffs and nets with smaller mesh size.

## 4.3. Fall Season

It was 5:00 am on a Saturday morning. I was sitting at the kitchen table, trying to eat breakfast. I was so excited to go fishing on the lake for the first time that I only slept a few hours that night. Anyway, I did not eat much breakfast that morning. I decided to go outside and wait for a new fisher contact named Kobbi to pick me up. When I stepped outside, the excitement for the fishing trip dropped a bit: it was a very cold and windy October morning that was a harsh reminder that the winter was approaching. Kobbi<sup>2</sup> arrived at my place around 5:15 in his pickup truck. I sat in the front seat of the car, and Kobbi said and smiled to me "how are you doing?" The first on the agenda was to make a stop at the gas station to buy coffee and then we hit the road. I was an hour drive to Kobbi's boat. It was still pitch black outside when I stepped out of the car, and it was even hard to distinguish the lake from the dark sky. The lake was almost black. The first

<sup>2</sup> All the names in this thesis are pseudonyms.

thing we had to do was to move a few boxes from the car to the boat. It was still so dark outside that I had trouble seeing anything front of me. Kobbi noticed that I had a little trouble in the darkness and when I was approaching the dock, Kobbi called "the rule number one today for you is, do not fall into the lake". We finally approached the boat; it was a 22 foot long open skiff, grey with a blue stripe around the boat. The first thing we did was to turn on the lights on top of the boat so we could see better what we were doing. We brought few boxes with us from the truck and at least two of them were filled with ice. Kobbi made sure that everything was in order before we took off to the fishing spot. He made sure that we had everything we needed and made sure the motor and the battery worked as well before we set off (you do not want to be without power on the lake). It was much windier than I expected and even though I was really well dressed I still felt the chilly wind shivering down my spine. On the way to the first fishing spot, you could hear how the waves battered hard on the boat. Kobbi knew exactly where his first net was located. When we approached the spot, Kobbi slowed down and told me to go to the stern on the boat to reach the buoys, bring it in to the boat and pull the net in. I was surprised how much effort I had to put in just to bring the buoys in and pull the net in. When I had pulled the line in for a minute I finally saw the net itself. Kobbi then took the buoys and put them back in the lake, just on the other side of the boat and helped me to pull the net in. Right away we saw a couple of walleyes tangled in the net and we both knew that the trip was going to be alright.

My mind started to roam when we were pulling in the nets. I figured it out that he had probably used GPS to help him to locate his net. However, as I was looking around us, I did not see any other fishers close to us. The only creatures that I saw were two

Pelicans swimming around the boat and above us were a few Seagulls circling, waiting for us to throw something back to the lake. When I asked Kobbi how he was so quick to find his spot, he told me that almost every fisher on the lake had his own spot on the lake. He always went to the spots that had been rewarding for him in the past. Kobbi told me that "I just go and sail on the lake until I don't see any nets and then I sail a little bit further and there is where I fish. I don't like to crowd people or try to get on their fish".

Other fishers later told me that the competition for fishing spots was not as fierce as it was in the 50s and 60s when the fishing was bad. Today, there is plenty of fish in the lake and there is enough room for everyone on the large lake. This situation is consistent with one of the stated advantages of ITQ systems: they reduce the competition between fishers (Apostle 2002). The fishers particularly mentioned that they do not have to race to get their share anymore, as one fisher stated, "now I got roughly 20,000 pounds of quota and I can fish as quickly or slowly as I want, so it takes a pressure off me to get a share" (A02). However, when the fishers talked about fishing spots, they always mentioned honor and respect for others. The majority of the fishers that I talked to accepted that a fishing spot was not a property or a "mining claim" as one fisher put it since no one owns the lake. "None of us have any exclusive right in the area, you have to recognize that" (A06). Another fisher told me, however, there is certain kind of an honor system on the lake where everyone has their own spot and some stated that the guys who had fished for a long time were more likely to respect each other's fishing spot than a guy who has not fished for a long time:

In the olden days, if you were fishing in one place, nobody was bothering you. Nowadays, the younger men don't realize that and they just go, and set nets beside you, or alongside you, and in the older day, you never do that! You respected the

men who were doing his fishing there, and there was said that, you can't catch the fish that he got! So, why do you want to try to catch his fish? (A03)

The honor system on the lake is sort of an unwritten rule on the lake. Everybody knows who is fishing where and apparently, you do not have to have a map on you to know where you can fish as one explained to me "You know, you don't have to see a speed sign anywhere in Manitoba to know that you don't drive over 100 km/h....Now, if that is using your head, you don't necessarily have to see the sign, to see what is written on the wall!" (A04). It seems that not every fisher follows these unwritten rules or respects traditional fishing spots and tries not to fish at the same spot as someone else. There are not many things that a fisher can do if someone else decides to take your spot as one fisher pointed out:

You don't [do anything]. You just let him set where he wants to set (his net). The lake is anybody's place to set their net. You can set your net everywhere as you like. So even if a person goes, you know 100 yards away from you and sets his nets, it is nothing you can do about it. You can yell at them, but I mean, what is that going to do? You just have to decide whether you want to act as a jerk or as a nice guy, you know? (A08).

Other fishers have different strategies that they employ if someone else tries to steal their spot. Regulations of course limit what a fisher can do to teach a lesson, especially for the new fishers who are not sure where they should fish. According to article 27.1(1) of the Manitoba Fisheries Act (1996) it is an offence to "remove, damage or in any way interfere with any net or fishing gear set out by any other person for the purpose of catching fish". However, I remember a few fishermen talked about boxing someone out when someone tries to steal their spot as one fisher described "If you put nets right alongside of me or right where I am fishing, I would just put nets on the other side of you and cut you off. You would get out of there eventually!" (A10). That method

is not that common on the lake as another fisher who used this method to remind other fishers where he fishes "A lot of a time you don't have to do that, because where I fish, the people around me know where I fish and do not come to my spot" (A05). Kobbi though had a different plan if someone took his fishing spots. The one good thing about gillnets is that you can be very mobile. It is no problem for you if you want to change your fishing spot since gillnets take a small amount of space in your skiff. That is exactly what Kobbi does when someone takes his spot, he just moves around as he said "It does not bother me. I will just go somewhere else and catch more fish than you if you are in my spot. Then of course I would make it as a goal to catch more fish than that guy who has taken my spot".

Let's go back on the boat again. Kobbi and I were hauling in the net, untangling the fish from the nets, or rather Kobbi was doing all the work at that time. I was sitting on the side on the boat, listening to Kobbi who informed me that he had quit school when he was only 16 years old because he thought he would make a good income as a fisher. Kobbi was also teaching me to recognize different species, but in our nets we got a few jackfish [northern pike], goldeye and even a few whitefish. The majority of the catch was walleye and sauger though, which I had a hard time telling apart. Apparently, walleye has no spot on its dorsal fin and the sauger usually has a slimmer body than the walleye. However, even though Kobbi tried to tell me more than once the difference, I still had problems spotting it. The only thing I remember was that both fish had sharp teeth that I needed to be aware of when pulling the fish out of the net. After Kobbi had filled a few boxes of fish, I noticed that the vast majority of the fish were the same size. I became curious and asked Kobbi where all the big fish were. He smiled and said that he did not

want the big fish or Jubilee as they call the biggest size. Despite the fact the lake was full of big fish; almost nobody wanted to catch them. He told me that the biggest fish were not worth as much as the medium and small size fish. He told me that he would get the most return for a fish that would fit into a pan, and showed me by his hand the length of a fillet between 6 and 8oz. I was surprised how successful he was at targeting the size that he wanted but Kobbi told me that gillnets are very size specific. The larger mesh size you use the larger fish you get and the smaller mesh size you use the smaller fish you get. Kobbi told me that if I wanted to catch the medium size I should use a net with a 3  $^{1}/_{4}$  mesh size.

One of the first things that Kobbi told me before we left that morning was the importance of respecting the lake. It was something that I should not take lightly. In fact, I remember other fishers that I met later mentioned the same thing; you should always respect the lake! Kobbi told me many times that working on the lake was no walk in the park, and you had to be alert all the time. That the lake is unpredictable was a common expression among the fishers;

It can be so mean, the waves are so close to each other, and it is just wicked. It can also be absolutely beautiful. It can be just like glass and it is so beautiful out there you know. Still, in 20 minutes it can turn around and kick up and it can be lethal. I remember when I was on the lake and I saw white things coming along and I was wondering what these white things were, because there was no wind around me. The lake was just like glass and within, I would say, three minutes it was just turbid, you could not see anything. Just wicked! (A08).

This is how one of my informants described one of his "wicked" experiences on Lake Winnipeg. Lake Winnipeg is certainly a very shallow lake, especially in the South Basin where the average depth is only 9 meters (Manitoba Conservation and Water Stewardship 2012). I had heard it before I went on the boat how heavily the wind could

influence the lake but it was hard to imagine it. I had also heard the stories about the "three sisters" and how the waves are so close to each other that in a bad weather it can be deadly, especially for someone inexperienced. Even though the fishers emphasized over and over again how dangerous the lake could be, they still talked about the lake like an old friend or a family member. Many fishers told me how much they miss the lake when they are away as one fisher described "I left and I went to Alberta for three years in the late 90s, early 2000s but I could not stay there, I had to come back!" (A09). Even when they are not working on the lake they were always doing something close to the lake, either swimming in it or just playing in the lake with friends and family. Most of the fishers perceive this unpredictable lake as a family member, as one fisher put it so neatly by comparing the lake with marriage:

It goes back to almost being married, because you can love Lake Winnipeg at the best of times, where it is so calm and pristine, see your reflection in the water, where the hell that it brings afterwards, it is unimaginable where it came from, you don't know. It is unpredictable, but, it's still something to remember, because you remember the days that were nice and you remember the days that were bad, and you hope that the ones who were nicer outnumbered the ones that were bad (A04).

As they say, Lake Winnipeg can be very beautiful on its best days, but it can also be miserable during its bad days. You only need to look back at the history of the lake to see that many lives have been lost on the lake (Russell 2000). Even though you consider the lake as a friend, you still need to respect it otherwise it can end badly!

Despite all the things I have heard, it was still difficult to believe how fierce the lake could be until I finally got a chance to go on the fishing trip. The lake was most of the time just like glass when I sat on the bench on Gimli beach or walked around the

harbor. However, I was always reminded that Lake Winnipeg could be just as fierce as the North Atlantic Ocean.

First of all, I could not imagine how large the lake was when I finally was on the boat with Kobbi. When we were hauling the fish I wanted to help Kobbi to untangle the fish but just the simple task of keeping balance became increasingly challenging. Whenever I stood up I tried to calculate the waves but they were coming one after another. It was hard to adjust my body to the waves and moreover, there was not that much space on the boat. If I lost balance, I would probably go overboard. I tried as I could to help Kobbi by moving the boxes so he could concentrate on filling the boxes with fish. Fortunately, Kobbi is an experienced fisher who was not dependent on my help. This was in the end a fine fishing trip where we, or should I say Kobbi, managed to fill up nearly 14 boxes or so with mostly walleye after lifting only 4 nets. After we unloaded the boat at the dock and loaded the car, we drove to one of the FFMC delivery stations along Lake Winnipeg<sup>3</sup>. This delivery station had a facility where the fisher could dress the fish by removing the heads and guts. This can take a few hours, depending on the catch. However, I noticed one note on one of the walls that I found really interesting which illustrates well the responsibility that falls on fisher's shoulders. I noticed that there were no government officers or anyone who weighed the fish when we returned to the harbor with the catch. However, the note on the wall was to remind the fishers that it was their responsibility to track and monitor their quota, not the FFMC<sup>4</sup>. Anyway, when

<sup>&</sup>lt;sup>3</sup> FFMC has 12 delivery stations along Lake Winnipeg. These 12 delivery stations are located in Selkirk, Riverton, Frog Bay, Plain Dock, Island View, Goodman's Landing, Dauphin River, Grand Rapids, Norway House, Pouphin River, Bareins River and Hallow water. Fishers usually declare when they get their licences where they will deliver their fish (B02).

<sup>&</sup>lt;sup>4</sup> Every month FFMC sends the Manitoba Conservation and Water Stewardship, fisheries branch their sales numbers and how much fish the Corporation bought from each fisher. After the Water Stewardship receive these number they can dectucted that from fishers quota.

Kobbi had dressed all the fish that he needed to dress he wrote a note, stating his name and how many boxes of fish he had and put it on top of one of the boxes and then before we took off, he turned to me and said, "pay days are on Thursdays".

The fall season is from September 1 to October 31. For many of the fishers, the end of September and October is usually the peak time for fishing, or the period when they try to maximize their income. The first two weeks of the fall season are often slow due to the high temperature of the water. The fishers told me that when the water temperature is high the fish tend to stay on the bottom of the lake without moving. Since fishers are required to use gillnets they are actually dependent on fish moving around. The water temperature gradually decreases after the second week of September and fishing begins to pick up again.

The weather is extremely important when fishing on Lake Winnipeg. As emphasized above, the lake can be really rough, especially when it is blowing. The fall of 2012 was especially windy as one fisher mentioned "There seems like there is a few nice days, sort of a perfect wind maybe 10 mile/h. It seems like it is either blowing or it is calm....mostly blowing especially this fall" (A02). If it is blowing too much fishers tend to stay on shore, simply because it is not safe on the lake when it is too windy. As Kobbi would say, it is better to go out sooner rather than wait, because the weather tends to get worse if you wait too long. Each day that fishers need to postpone a fishing trip is difficult, especially when the water temperature is high because if the net stays more than a day or even 12 hours in the lake the fish will spoil very quickly. The wind can also be

 $<sup>^{5}</sup>$  Fishers get paid twice from the FFMC, and the payments are better known as initial and final payment. The initial payment is the price that the fisher receive for the fish. Usually, the price is 80 - 85% of FFMC projected market value for upcoming season/year. If the FFMC make a profit it goes back to the fisher in form of final payment on a kg basis. That is, the fisher gets paid according to his production. All the fish species has a its own pool. So, if fisher concentrate on walleye, he will only receive a payment from the walleye pool (B02).

beneficial for the fishers; a few of them talked about needing a northwest wind to get a fish or the perfect 10 mile an hour wind (15 km/h) to give the fish a little nudge to move around.

As stated earlier the quota is one of the most important factors in maximizing the fisher's income and the amount of quota is a good indicator of potential income. The more quota shares a fisher holds, the more income he can earn from fishing. While fishers with fewer quota entitlements can fill them in the open water, spring and fall seasons, fishers with more quota shares also need to fish during the winter. As we saw in table 3 (page 112), the quota is not distributed equally around the lake since some fishers only want to fish during the open water seasons while others want to fish year round. However, there are of course fishers who want to fish all year round but cannot do so because it is too expensive to buy more quota shares. We will turn to that issue in the next chapter.

Quota composition can sometimes be confusing. The composition of a quota that a fisher holds varies between fishers. As mentioned before, there are 14 fishers in the South Basin who hold whitefish fleet quota out of the 44 such quota allocations existing along the lake. These whitefish fleet quotas are fairly big; each quota is approximately 15,880 kg and we have to keep in mind that those fishers can harvest 4,550 kg of either walleye or sauger along with their whitefish allocation. There are open skiff quotas that can range from 2,270 kg to 7,940 kg. Additionally, are so called retirement quotas that are relatively small, or around 650 kg, that only retired fishers can hold (Coughlin 2006; Manitoba Conservation and Water Stewardship 2011). The amount of quota that a fisher hold can differs between fishers. The reason why the quota differs between fishers can be

traced to the fact that the quota was initially allocated according to fisher's previous production and experience (Gislason 1999). Additionally, quota entitlements have changed hands as well since they became transferable. According to a few fishers, today's rule of thumb is that for almost 3,788 kg of quota (\$45,000 worth of quota) you can guarantee \$9,000 in annual income or \$7,000 after all expenses. The regulations state that each individual fisher cannot hold more than 6 Quota Entitlements, but large amounts of quota may be concentrated in families that have multiple individual quota holders; this is the case for the locally well-known big fishing families in the area. Another rule of thumb is that if a fisher wants to fish full time, he or she needs to hold at least 4 to 5 Quota Entitlements.

It is not only the amount of quota that determines the income of the fisher but how he or she divides his or her quota. Most fishers reported that a good daily income for them after expenses in the peak month could range from \$300 to \$2,000. We have to keep in mind as well that no day is the same; one day can be really good while the next one can be horrible in terms of income. Therefore, the market strategy of fishers and their careful planning of the quota can make the difference. As stated above, the FFMC is required to buy all the fish that are offered to them and many fishers deal solely with the FFMC since the price is guaranteed. However, other fishers have become successful at selling fish by themselves. Fishers are not required to sell their fish to the FFMC but if the fisher prefers to sell his fish directly to a consumer he can do so. The advantage of selling directly to consumers is that the fisher receives a higher price for the fish. The disadvantage is that the fisher needs to fillet fish by him or herself or with a help from his or her family members or hired hand which is more time consuming. In order to sell

directly to a consumer, a fisher needs to give a receipt for the sale and give the Manitoba Conservation and Water Stewardship, fisheries branch a copy so they can deduct that amount from the fisher's quota. Otherwise it would be illegal to sell fish to a consumer. Additionally, to improve potential income for a fisher, the FFMC began to issue a Special Dealer license to fishers in the 1990s which permitted them to sell their fish to restaurants, retailers and hotels within the province (Manitoba Conservation and Water Stewardship 1994). However, not every fisher wants to take advantage of that since they have to be ready to allow the government to look into their books, as one fisher told me "if you are going to sell to resturants and businesses and if you do that, you have to be prepared to have government looking at your books, eh! And I think that discourages many people [to get a special dealer licence]" (A06).

If a fisher wants to maximize his or her income during the quota year that runs from middle of May to end of March, he or she needs to plan how to divides his or her quota very well. Many fishers try therefore to fill their quota during the open season as the fall season is the last chance for fishers to fill their quota before the winter season. As one fisher stated when I asked him how he spread his quota through the season "I fish as quickly as I can" (A12). A few fishers do not want to fish during the winter season since it is more expensive than fishing by themselves during the open season;

I catch as much as I can, it is personal decision. I want to leave as little as possible for the winter because it can be really difficult during the winter time. It is more expensive to catch as well.....You need hired men and more equipment, it is just more difficult. I prefer to do it by my own; I prefer doing it on open water (A10).

Other fishers have so many quota entitlements to fill that they do not have any other option than dividing the quota equally through the three seasons. Other fishers

always try to spread their quota equally to have constant income year round. A few fishers want to have enough fish in stock to be able to serve their customers as best as possible and to keep busy as well like one fisher stressed:

A big part of my business, probably 25% of my business is outside the board [FFMC], where I sell the fish to restaurants, retail stores, hotels and customers directly....I plan really carefully how I am going to manage my quota because it is important to do that because I like to be busy too, I don't like to be done and sitting around, I can't stand that. So yeah, I spend quite a lot of time thinking about what I am going to do, how I am going to harvest it. Sometimes I harvest a lot in a hurry and then I pull up nets and take it easy, maybe fish for fillets (A06).

As stated, how much quota a fisher has and how they divide it makes a difference on how fishers maximize their income. There are always ways to increase their income: they can rent quota from other fishers who cannot fish due to some circumstance. In such cases the profits might be divided 80/20. Another way to increase income is to sell or market other fish species. It is quite common that fishers on Lake Winnipeg take the walleye cheeks either for their own consumption or sell it directly to consumers. Another source of income could be selling species that are not included in the quota system, and some fishers have become good at it and sell some fish to other ethnic groups like one fisher mentioned, "I sell a lot of non-quota species to people, especially in Asian communities, mostly Carp and Bass" (A06). Moreover, fishers have also managed to create a local market for non-quota species such as the Goldeye, as another fisher stated, "Goldeye has very little market value but we have taken it and smoked it and created a local market" (A10). It appears that a fisher can have a good income from harvesting non-quota species, but as one fisher put it, it takes a lot of work to do so:

"My son shipped probably around 1,500 dollars' worth of Jackfish [Northern Pike]. So, he sets for jackfish, which is non-quota fish, you can earn extra if you want to put an effort into it (A02).

As stated above, for some fishers the fall season is the most important season for them since it has good conditions for fishing but also gives them a chance to fill their quota before the most expensive fishing season begins. Discussion of these and other material aspect of the fishery will be discussed further in section 5.1. Some fishers value fishing in different seasons however: "The changes of the seasons. It is winter, spring and fall; it is never the same, all year long. It is challenging but also rewarding" (A04).

## 4.4. Winter season

The fishers work extremely hard during the months of September and October. They work seven days of the week. Despite loving what they do, many of them become very tired after the fall season and many of them need to take a few days off. The fishers on Lake Winnipeg have a defined time to fill their quota and when the season draws to a close, they all become excited:

Have you seen these big horn sheep in the mountains? When these big horn sheep keep butting their heads together hard, and they ask, why did you do that? And they say, because it feels so good when they quit....that is how fishing is sometimes, it feels good when the season is over (A02).

A few fishers take a few days off after a busy fall season for recreational activities and to take their minds off fishing. Others go straight back to work, some related to their business while others do something completely different. I remember when Kobbi and I were once driving home after a fishing trip we started to talk about work. He told me that sometimes he thought about working a "regular job" as he put it, working 8:00 – 16:00. Then after a few minutes he told me that a "regular job" would probably bore him. Kobbi, like other fishers on Lake Winnipeg, does other jobs between seasons. Kobbi for example has a gravel business, and he also does some roofing or anything else to keep

himself busy and to have constant income throughout the year. Others do some landscaping, carpentry and construction. It is also important to keep in mind that a few fishers use the time between the fall and winter season to get their equipment ready for the next season. There are plenty of things they need to do before the next season, fix their nets and get other equipment ready such as the snowmobiles and the Bombardier.

Most of the fishers take their boats out of the harbor only a few days later after the fall season concludes. Suddenly the harbor becomes empty, with not even tourists walking along the harbor to see the murals on the wall. The only thing that is left on the harbor is the research vessel, Namao. It is not only the harbor that empties out during the winter months but the town empties as well. A few businesses close their operation during the winter and have a note on their door that states that they will re-open in the spring. Other people go out of town for a few weeks or even months to escape the winter cold. During November you can see and even hear how the ice shaped itself on the lake and how it locks itself on the harbor as well. In the first days of December fishers are waiting for the ice to become thick enough to get to their spots as soon as possible. Many fishers find it also most rewarding to fish sooner rather than later on the ice, as one fisher put it:

Soon as it gets, like a thin ice, 2-3 inches of ice and you need fish, it is the easiest to catch it and it seems to be most prevalent. When it gets too cold, the fish stop swimming, if they are not swimming, you don't catch them (A02).

Just as on the open water there is some competition for fishing spots during the winter months and that is why it is crucial to be on the ice as soon as possible. As one fisher emphasized, "Yes, you really have to fight for your spots. That is why we have to go on the first ice, put some nets where we want to be, or someone else will be there! That

is the idea of it all" (A03). Unfortunately, I missed when the fishers first went on the ice but I did come back at the end of January 2013 to go ice fishing with Kobbi and his crew. On the one hand, the winter season is generally the time when fishers earn the least amount of income when they are fishing and a bad daily income could range from nothing to \$300. There are days when some fishers only catch enough to pay their expenses such as the gas and maybe a hired hand if a fisher has one. On the other hand, one of the advantages of fishing during the winter season is that you receive a premium price for your fish that you sell to FFMC (Appendix A). FFMC usually increase their prices during the winter by a few cents because usually fish in Lake Winnipeg are competing against fish in Lake Erie. During the winter months, however, there is no fishery on Lake Erie which means that FFMC is in a good position on the market. Nonetheless, we also have to keep in mind that a very good fishing trip during winter can also be very fruitful. The trend on Lake Winnipeg for the past few years has been that only a portion of the fishers on Lake Winnipeg harvest during the winter season due to higher operational costs. As mentioned above, in the winter time you have to use a snowmobile, Bombardier and pay salaries for the hired hand. Despite being more expensive and sometimes very challenging, the winter fishery offers a new experience that makes fishing on the lake so fascinating.

Just like the fall season, you have to wake up around 5 or 6 o'clock am. The only reception that you get when you step out of your door is the biting cold. Unlike the open water seasons it is hard work alone. A few fishers hire 2-3 hired hands for help while others work with other fishers like Kobbi decided to do in the winter of 2013. We always had to drive around 20 to 30 minutes to the spot where the Bombardier, the snowmobiles

and the other equipment were located. The winter season is much more time consuming than both the spring and fall seasons. Just to prepare the fishing trip takes at least 30 or even 40 minutes. You have to start the Bombardier, which is an 18 foot long two tracked snowmobile with an auger attached to its back. We had to allow the Bombardier to warm up for a few minutes because it is an old vehicle, probably manufactured in 1960s. We also cut some wood for the stove oven in the caboose. The caboose is a small shelter that we towed with us to the lake where a fisher can warm up during the cold days and which helps to prevent the fish from freezing. The last task was to put gas in the Bombardier and the two snowmobiles before we could set off. I always enjoyed the ride to the fishing spots and it did not matter whether I was in the Bombardier or driving one of the snowmobiles. The mornings were always quiet and you could enjoy nature and see the sun rise which made you forget the cold that was biting hard on your cheeks and even your fingers. The lake still reminded you to be fully alert but on our way to the fishing ground we always had to stop a few times before crossing any cracks that were in the ice. Kobbi was always the first one who went to the cracks to make sure that it was safe for us to cross. I was on the other hand always nervous. I was often afraid that the ice would suddenly break up under our feet, but Kobbi always told me that my fear was unnecessary since the ice was around 3 to 4 feet thick. "Better to be safe than sorry" Kobbi often told us. We finally reached the fishing spot, a little bit far from the shoreline but as Kobbi emphasized you do not want to put your nets too close to the shore because you want to have enough water beneath the ice. If not, your nets will freeze up on the ice. Once that happens, you will never get your net back. It was a little bit easier to find the fishing spot since beside the fishing holes was a wooden stick which showed the fisher's

number to make it easier for the Natural Resource Officers to see which nets belong to whom and make sure that the fishers are not using nets with an illegal mesh size. I knew that this time around I could help more since it was much easier for me to keep balance on the ice than on open water.

I was told by a retired fisher that in the old days fishers had to travel to their fishing spots during winter by horse teams or even dog sleds. Keeping that history in mind, it is easy to see how great an impact the introduction of the auger, the snowmobiles and the bombardier had on the ice fishing on Lake Winnipeg. Today, it only takes us around 30 minutes to travel to the fishing ground and it is only matter of a few minutes to drill the hole through the ice. Ice fishing has not changed much in the past decades. The fishers are still using the old Bombardier and simple equipment called the jigger that was designed in the late 1890s. I was told by many people how fascinating the jigger is. It was described as very simple but efficient tool to set a net under the ice. I was then a little disappointed when I returned to the lake and I was told that I had missed the opportunity to see how the jigger worked. The fishers tried to describe it to me, but that was not the same. However, one day on the ice we realized that we had made a mistake the day before and due to that mistake we lost one net. Despite having another 49 nets under the ice, the crew decided to set a new one under the ice to give the anthropologist an opportunity to witness how the *jigger* works. I was doubtful about the efficiency of this equipment when I saw that the jigger. The fishers told me "just wait and see". They pushed the jigger under the ice and said that one of us should follow it by listening for the sound of the steel tip attaching itself to the ice. One fisher in the crew started to pull the rope on the jigger and suddenly the equipment was moving and one guy in the crew

started to walk away from us. Every time the fisher pulled the rope the further the guy



who was following the jigger walked away from us. We waited for a few minutes and when the fisher was probably around 100 yards away from us, he yelled "it is here". Kobbi hopped in the Bombardier and drove towards the place where he was told the location of the jigger was.

Kobbi drilled a hole, and guess what, there was the jigger! Meanwhile we attached the new net to the red rope and told them to pull the red rope. Gradually, by pulling the rope, they were placing the new net under the ice and when that was done we could move forward to the next net.

Most of the time when Kobbi had finished drilling the hole through the ice where

the stick was located with the auger, it was then my job to shovel the ice out of the hole to make it easier for us to pull the net up. It was sometimes also my job to pull up the net. To retrieve the net under the ice, I used an old hockey stick [gaffe] that had a long hook Photo 2: Ice fishing on Lake Winnipeg attached to it. To get the net I had to go as deep © Sölmundur Karl Pálsson as possible with the hockey stick into the water and turn the hook towards where approximately the wooden stick was located on the surface of the ice (The piece of wood shows approximately the location of the net under the ice: see the photo on the left side) and then pull when I could not turn the stick further. As soon as I got the line, I pulled it up, but made sure that the net would not get tangled. I then pulled until I got the net so that the work could begin.

We usually pulled around four to five nets before we could take lunch. The goal was always to pull at least 10 nets per day. Catching effort was much more in the winter time than in open season. During the open water seasons fishers are satisfied by filling 16-20 boxes from 4-5 nets but during the winter time, we were satisfied with filling maybe one or one and a half boxes of fish after one net. They tried to pull out all their 50 nets during Monday to Friday to allow them to spend some time with their families during the weekends. Sometimes it worked but it of course happened that they had to work on the weekends. The one advantage of the winter season is that it gives the fisher more flexibility to decide when he or she wants to haul in their nets. In the fall and spring season they need to go out on the lake every day to haul in their nets since one extra day in the lake can damage your fish considerably. For the period of the winter season, however, the fisher has a little bit more ability to recover from postponing a fishing trip compared to the fall/spring season. Kobbi told me that he usually tries to avoid postponing a fishing trip, regardless of his health or the weather. He always tries to go out on the lake and do his job, no matter what. However, sometimes you have to postpone a fishing trip, and sometimes it is beyond your control. We had canceled a fishing trip once because the Bombardier would not start. When I asked them if they were not worried about their catch, they told me that since the water is so cold during the winter, they could leave the nets unattended for almost 14 days without any problem with the fish.

It was surprising when you concentrate on untangling the fish out of the net how quickly you forget about the cold. The temperature can easily go below -30°c but when you are working hard, and the caboose and the Bombardier provide certain shelter from the wind you forget the cold, except when you touch your cheeks and feel how cold they

are. Another thing that is different from fishing open water is the company that you get from the other fishers. Even though everyone concentrates on their work, they still try to talk. The winter fishing is all about team work as one fisher on the crew pointed out to me. I was often frustrated how much slower I was untangling the fish compared to the other ones and sometimes the other ones had a bad day too. As the fisher told me "This is team work! When one is slacking, the other ones work a little bit harder instead". This is different from the open season when most of fishers only need to rely on themselves to work hard.

The winter fishing days can be very long. You often go to work around 6 or 7 am and you do not return home until 7:30pm. However, you very quickly lose track of time because you are working hard but at the same time you enjoy being outside in the fresh air. Before you know it, the fishers have almost filled their year's quota and it is time to take all the nets out of the lake and get ready for the next season. The fishers still have one month or two to recover from the intensity of winter fishing. Some fishers, however, do not take much time to recover. Just like in the end of the fall season, some of them go and work at whatever they were doing before the season. Others take a few days off or go on a holiday with their families. Others are already beginning to get the nets, boats and motors ready for the spring season.

## 4.5. Spring season

You know it is spring when you see tourists walking around the harbor and you see a few fishers working hard in getting their whitefish boats ready by painting them and making sure that everything is in order before the season. Suddenly there is life on the dock again. The spring gave me a chance to realize that the fishing industry is still

significant for the local community and many people are still interested in this old but well established industry.

I decided to come back to Gimli for three weeks in the spring of 2013. The town was a little bit different than last time I was there in the winter. A few businesses had reopened and suddenly I could see people walking around town. I wanted to spend a few weeks in Gimli to get to know the town better and to get to know more people as well. Just like in the fall, I walked around the town a lot. During these long walks around this beautiful place, I noticed that the fishing industry still had its place in the hearts of the community. Economically, the fishing industry is not the largest sector in the community anymore. Today, sectors like sales and services provide many jobs for the locals, and are the biggest sectors in the community (The Manitoba Bureau of Statistics, 2006). A town like Gimli has become more of a tourist town but the difference between winter and summer in Gimli is staggering. A few companies close their operations during the winter months. As one business owner told me, many businesses are dependent on people from Winnipeg coming to town and, apparently, that only occurs during the summer months. There are also a lot of cottages in the area that shape the community. The people who own the cottages along the lake do not visit their summer houses until the end of April, or the beginning of May when the snow has retreated. You always see more and more tourists in town around May which makes the town livelier. The other thing that shapes Gimli is the age composition of the locals. According to Statistics Canada (2012) the median age of the Rural Municipality of Gimli is 56.2 years compared to 38.4 years within the province. Many of the older people escape the cold in January and February and often travel to warmer places such as Arizona or California, which makes the town even emptier. Moreover, you see people between the ages 19 - 30 years old rarely as most of these people have left the town to educate themselves elsewhere. As a young man told me, "you can always find work here, if you are ready to work hard". He noted though that many of young people want to seek other occupations.

The fisheries in Gimli still generate approximately \$15 million in revenue annually (Lake Friendly, 2012; Manitoba Conservation and Water Stewardship 2012). Despite not being as significant for the local economy as they were before, the fisheries still continue to contribute to the community which gives the fishers themselves a sense of an importance in the community. As one fisher stated:

I think as far as people go, in the town itself or in the Rural Municipality it is the main industry that is non-governmental. You look at the hospital or the schools, they are a little bigger but they are government run operations. We are probably the biggest private employers or self-employer in the community (A02).

The fishers also pointed out to me that it is not only the job creation of the fishery that is significant for the community, but moreover, they spend considerable a amount of money in the community by buying goods and other fishing equipment:

[The fishing industry is] Very important. There is a lot of job creation and even more it is a lot of money spent in the area, in Gimli and so on... Everything comes locally really... The money comes from the lake and money stays in town, really (A09).

There are though mixed emotions among fishers in town about whether they are appreciated or respected for their contribution to the community. Some fishers sensed that there were truly appreciated while others felt that they were not because people have certain image of fishers or sensed that people were even envious towards them. I remember a few fishers mentioned that some people have a certain image of how fishers are:

They don't understand and I know it for sure, that they don't understand what is involved in fishing and how hard you have to work and how much and well organized you have to be successful at it. I think, they just think we go out there, and you know, after 2 or 3 weeks at the pub we go out for to 2-3 months, make a lot of money and go back to the pub. That is of course the case for some of us, but there is a lot more to than that (A06).

Another fisher said something similar when I asked him if he felt he was respected in the community and whether fishers in general were respected in the community as well:

Myself, personally, yes! There are individuals in every aspect of life, in every type of employment. There are different individuals, and there are a lot of fishers that are not respected because they go out and work, make some money and go get drunk or whatever. There are those types of fishers and then it is fishers in the community that work hard and make it a business, take pride in it, and I am one of those (A10).

However, I noticed during my stay that it shaped people's perception of fishers if they had any ties with fishers. People who tended to know someone in the fishing industry appeared to know more about the fishing industry than others. They knew more about the fishers' way of life in the community, and they knew that every fisher is different and not every fisher has a really high income or are drinkers. On the contrary, there were also people who have little or no interactions with fishers and they tended to have the perception that since the fishery in Lake Winnipeg have been doing fine in the past decade that most of them were doing well and had a lot of money. One fisher described this attitude towards fishers when he said that many envy fishers, "yeah, people are sometimes envious towards fishermen. I don't know...They think fishermen are all millionaires but that is far from it "(A07).

Overall, during my stay I sensed that the fishers in the community are respected, that people are still very interested in fishing and that the industry still has its place in the

community's heart. One of the things that illustrates well that fisheries are still in the heart of the community was that many streets in Gimli are named "Lady of the Lake", "Goldfield", "Keenora" and "Colville" after the old freight boats that transported the fish to the market or to the closest harbor from the 1910s to 1960s. People in Gimli are still interested in the industry as a "unique way of life" as one fisher told me. It probably showed best in the spring of 2013 when both the fishers and people were waiting for the ice to retreat from the lake after a long and hard winter. Fishers became anxious because it was the beginning of May and the ice was still covering the lake. The year before they began fishing in middle of May and usually the spring season opens around May 20<sup>th</sup>. In 2013, however, the fishers knew that they would not begin until at least the beginning of June, because they also had to wait for the walleye to spawn. The fishers had to accept that they had lost a few weeks of fishing and therefore they knew that the spring season would be very short this year. During the winter, the ice had been very thick and, as one fisher told me, they have not had any south wind to push the ice away. The anticipation in the community rose every day. Even people I thought did not have a remote interest in fishing began to ask when the season would start and if this late opening of the season would hurt the fishers. I could sense that many people in the community had a genuine interest in fishing and that fishers felt this same interest from people in the community:

Anytime when I and my wife go to the hardware store to buy stuff and people start talking and ask how the fishing is going, everyone wants to know about it and has some interest in it as well (A09).

Another one told me that people are always interested in fishing and even some people go as far to ask the fishers if they can go out fishing with them:

I got a lot of questions and I got a lot of requests as well. People want to come and spend a day with me, experience it, right! (A10)

You also know that the spring season is approaching when the FFMC holds a meeting with the fishers where the corporation announces to the fishers their prices for the year and the fishers get a chance to ask the FFMC representatives about various issues regarding the marketing side of the operation of the FFMC. Moreover, it is also a chance for the Natural Resource Officers to tell the fishers if there are any new regulations or what they will be emphasizing for the season and to remind the fishers to issue receipts if they sell their fish directly. The anticipation among the fishers rises even more when they know that the biologists at the Manitoba Conservation and Water Stewardship, fisheries branch are beginning their spawning test program. The Provincial Government allows fishers to keep track of the spawning by calling an answering machine where the status of the spawning completion is announced. While the fishers are waiting for the 80% completion they work extremely hard to get their boats ready for the season. Suddenly, the Gimli harbor is full of open skiffs and whitefish boats. When the spawning of 80% of the walleye has been reached, the news spreads quickly because two days later the lake will reopen for the fishery.

As soon as the season opens you see a lot of fishers going on the lake on their open skiffs and a few of the whitefish boat owners decide to go north since this is the only season that they can use the whitefish boats. Many whitefish boats however, are still tied on the dock and won't go anywhere this season. Contrary to the fall season, the spring season has an explosive start because, as the fishers emphasized, the water at the beginning of spring season is usually cool enough that the fish swim around.

Just like the fall season, this is a season that many of the fishers try to fish as much as possible, as quickly as they can. Like the fall season, a good daily income for an

individual fisher can range from \$300 - \$2,000 after expanses. Again, it depends on how much quota a fisher holds, what types of fish they are targeting (mostly walleye but those who went North will have bigger portion of whitefish in their catch) and what size of fish they get. The spring season is usually fruitful for many fishers. Later on, around the end of June when water temperatures become high, fishing effort changes. The fishers then have to go out twice a day because of the accelerated decay of fish. Catches also decrease later in the season since the warm water becomes makes the fish stay at the bottom, out of the reach of the fishers. When there is a late opening, this season for many fishers goes very fast and it is soon time again to either switch work or take some time off before the next season starts in September.

#### **5.0.** Wellbeing among fishers

As mentioned before in the methodology chapter, the WeD group definition of well-being of a person goes beyond the traditional definition of well-being, which is often simply just feeling good. The WeD group takes more holistic approach to well-being where more than one dimension of life is being taken into account. According to the WeD group, the well-being of a person depends on whether the person's need have been met in relationship with others (White 2009; 2010). Or in other words;

Wellbeing is a state of being with others, where human needs are met, where one can act meaningfully to pursue one's goals and where one enjoys a satisfactory quality of life (McGregor 2008: 1).

According to the WeD group definition, the well-being of a person is three dimensional. First, does the person have the resources or capacity to do what she wants to do (material well-being)? Secondly, are the person's needs being met? In other words, is the person able to do things that the person them self believes are important to life a satisfactory life (Subjective well-being)? Last but not least, do the relationships with others in the community either constrain or enhance the person's ability to do what the person aspires to do to live a good life (Relational well-being)? It is however, vital to keep in mind that the three dimensions of well-being are not supposed to be separate components. Rather, the dimensions are seen as complimentary with each other and they interpenetrate each other (White 2010). The nature of the well-being framework makes it hard to separate the dimensions from each other since one component of a person's life can easily influence all three dimensions of person's life (White 2010). The three dimensions are a useful heuristic way to analyze the well-being of a person. It also enables us to explore what components of person's life are the main drivers in that

particular person's life. Insights into well-being at the individual level also allow us to extrapolate to the determinants of well-being in the group.

For Lake Winnipeg fishers, we will see how hard it is to separate each dimension. It is also apparent that the dimensions of well-being for fishers on Lake Winnipeg reflect the larger institutional environment as is the case in other small-scale fisheries (cf. Berkes et al. 2001; Berkes 2003; Johnson 2006). As we saw in the previous chapter, social institutions like family, the FFMC and the quota system are prominent in the daily life of fishers. In the following sections, arguments will be made stating that these institutions shape fisher's well-being. They not only influence the relational well-being of fishers but they also have impacts on the two other dimensions of well-being.

The chapter is divided into four sections. The first three treat material, subjective and relational well-being. The fourth section considers a couple of influences that can have impacts on fishers' well-being but which are beyond their control.

### **5.1.** Material Well-being

One good day in the fall of 2012 I had a meeting with one fisher in Gimli. It was very nice weather outside. When I had concluded the meeting with the fisher I had planned to go to the Sobeys to buy some groceries. I walked a few meters but on my way to the store I stumbled into another fisher, who was driving through the town on his way to the fishing ground for the second time that day. He offered me a ride to the store which I gratefully accepted, since I felt kind of drained after the day's work. On our way we talked about jobs and making an income as a fisher. He also told me that his son was not interested in fishing; he wanted to do something else. "He is really into the movie industry and he wants to be famous" the fisher told me. He looked at the road for a

second and then he turned to me again and said "I do not need to be famous – that is something that my son wants. I do not seek to be famous because you cannot eat it or survive off it".

The expression "there is no such thing as free lunch" that Milton Friedman popularized in economics in the 1970s has certainly some truth in it, especially in today's societies where you have to have access to some resources to support yourself because there are few things that you can get for free. As stated earlier, we cannot concentrate solely on the material well-being of the person, but we cannot reject the importance of it either. We also need to be aware of how material well-being affects both the process and the outcome of the other two dimensions of well-being. The phrase, "vou have to spend money to make money" is widely used in the business world and has resonance for entry into the fishing industry on Lake Winnipeg. First of all, we will review the financial challenges that face fishers who want to enter the fishing industry on Lake Winnipeg but, as we will see, startup costs today are substantial. Then we will shift our attention to the income side of the industry and explore both seasonal income variations in fishing and the estimation of income. Lastly, the concentration will be on expenditures. These are important since fishers are self-employed and have to bear the material costs of their work.

My interviewees and informants in Gimli are from the population that has chosen fishing as a strategy to support themselves and their families. If a person in Gimli or the surrounding areas chooses fishing as a support strategy, he or she has two options. First, the person can work in the fishing industry as a hired hand or employee for a fisher. It is usually a young person who chooses that path to accumulate savings for their education.

It is common that those people only work in the fishing for a few seasons and then they leave for other occupations. However, not every fisher needs a hired hand, because many of them can fill their quota without help or they only harvest during the open water season which reduces their need for help. As one young man who worked one season as a hired hand told me, "if you are willing to work hard, you should be able to get a job as a hired man". This young man told me as well that he only worked as a hired man to have an income while he was deciding what he wanted to do next.

Secondly, you can become a fisher on Lake Winnipeg, either part or full time. In order to do so, you have to own nets, a car (a pickup truck is preferred), have access to a shed or other working place, and own a boat, either a whitefish boat or open skiff. As discussed briefly earlier, an open skiff is preferred since it is cheaper to run and you can use it for both spring and fall season. Additionally, if a fisher wants to harvest during the winter, he needs to have a Bombardier (which was described in the previous chapter), snowmobiles and an auger. A fisher needs to have some kind of financial capacity in order to acquire all the needed equipment. Just an open skiff can cost \$35,000, plus outboard motors that could range between \$10,000 and \$25,000 (depending on the quality). Moreover, many of the fishers, but not all, own a pickup with a truck cap to increase the capacity of the truck to store fishing boxes from the fishing ground. Certainly, the startup cost to acquire all of these valuable assets to begin fishing on Lake Winnipeg is substantial, but they are not enough alone. A Lake Winnipeg fisher's most important asset is his or her Quota Entitlement since it gives them an access to the resource for their benefit.

As was described earlier, the Quota Entitlement system of the lake was established in 1972 when the lake re-opened after mercury contamination (Gislason 1999). The system was modified in 1986 when it became a transferable quota in order to increase the flexibility of the system and enable fishers to match their income from fishing with their fishing effort (Gislason 1999). As stated earlier, the quota on Lake Winnipeg is a multi-species quota which includes walleye, sauger and whitefish. One open skiff's Quota Entitlement can range from 2,270 kg to 7,940 kg (Coughlin 2006). Moreover, there are the 44 whitefish fleet quotas, approximately 15,880 kg per quota and those who hold one whitefish fleet quota can harvest 4,550 kg of walleye or sauger (Manitoba Conservation and Water stewardship 2012). Each fisher in the South Basin can hold a maximum of 6 Quota Entitlements, but the amount that a fisher can fish can vary due to the different mix of quotas they hold. However, there are both formal and informal restrictions on who can hold a Quota Entitlement (Manitoba Fisheries Act 1996).

Formally, a fisher needs to hold a commercial fishing license or a retirement license and a commercial operator's license and an experimental license to engage in commercial fishing (Manitoba Fisheries Act 1996). Quota Entitlements may only be purchased by individuals who hold a commercial fishing license. Therefore, inexperienced fishers cannot just buy a quota and jump into the industry. A person need to hold at least two helper's permits for each season or work as a hired hand for almost two years to be eligible to buy a quota. The Manitoba Fisheries Act (C.C.S.M. c.F90) states that quota can only be held by owner-operators. No company can therefore buy a quota since the quota is supposed to be tied to the fisher's commercial license. Moreover, an individual fisher needs to have residency in the area.

An informal restriction on fishing on the lake regards the financial capacity of the fisher. One of the consequences of commodification of fishing rights (the ability to sell and buy quota) is that over time getting into the industry tends to get more expensive (Carothers 2008: 2010; Langdon 2008). This seems to be the case in Lake Winnipeg, particularly in the South Basin. Today, it is expensive to buy quotas, and a fisher has to have strong financial capacity to do so because the price for quota is \$6 per pound (0.45) kg) which means that, for example, 3,788 kg would cost approximately \$45,000, which is a substantial amount of money for many people. Most of the fishers stated that quota was a good investment despite being expensive. The importance of having quota is just as important as a taxi driver's license in New York City as one fisher remarked, "By buying a quota, you are buying a job, and you know that you are getting... Well, a certain amount of money for your fish, but it of course changes [how much you get for the fish] (A12). There are a couple of rules of thumb for current circumstances in the fishery regarding how much income the quota system can provide, as was briefly mentioned earlier. Fishers estimate that according to today's price of fish, 4,091 kg of quota could guarantee almost \$9,000 in gross income per year. As with everything else, the quota is not distributed equally among fishers. Some fishers or families hold more quota shares than others. The quota system, however, provides certain flexibility to fishers. If a fisher wants to increase his income from fishing, he can buy more quota entitlements but, again, it is expensive to do so. The other possibility for a fisher to acquire more quotas is to rent someone else's quota, usually from an older fisher who is on the verge of retirement. The two parties negotiate how the income should be divided, maybe 80/20, but of course the split varies

between cases. Nonetheless, this arrangement seems to work well for both parties as one fisher stated:

They are getting older and stuff and they don't want to sell and it is a system that works well. The younger guys can make a little more and the older guys can hold their quota longer and it is sort of a pension (A13).

The fishers on Lake Winnipeg have limited time to fill their quotas and maximize their income. As been described in the previous chapter, the three seasons on Lake Winnipeg have their charm but also have the potential to constrain fishers' income. The spring and fall open water seasons are when most of my sample makes most of their income. Nearly 75% of my informants stated that the three first weeks in the spring season and the last three weeks in the fall are the most productive lucrative. Fifty-five percent of my informants reported that a good daily income for an individual fisher after expenses during the first three weeks of spring season and last three weeks of fall season could range from \$300 to \$1,000. Fifteen percent of my sample reported even higher income per day during that period, from \$2,000 to \$5,000. The winter season however, seems to be the leanest fishing season. A few fishers in my sample do not fish during the winter and therefore do not make any income from fishing during that time. A bad daily income during the winter season could range from 0 to \$100. As one fisher mentioned, you do not make much money during winter time, "2-3 boxes of fish would be around \$200 - \$300, just enough to pay your hired hand if you have one. So, you don't make a lot of money then" (A06). Like many of my informants emphasized, no two seasons are the same, "seasonal income is more what a fisherman does and a yearly income as well. Two years will never be the same; two seasons will never be the same" (A03). Another one reminded me that income can even fluctuate between weeks "Fishing varies so much that

you can't pinpoint it per day, you can get a poor fishing for a week and then be terrific for two weeks" (A14). However, some fishers hold so many quotas that variations between seasons are not as significant. They have to fish all year round anyway as one fisher mentioned:

I think it is any peak [season], really. Fall, summer, winter, it doesn't make any difference because we fish all seasons. The winter used to be the time to pay your bills, and keep even and then you make money in the summer and the fall (A03).

We also have to keep in mind that the fishers do not make any income from fishing during the off season (April, July and August) and, as mentioned earlier, many fishers work at something else between seasons.

A few fishers had a hard time to pinpoint how much income they made from fishing per day by stating that they only do yearly income. The yearly income from fishing depends on how much quota a fisher holds. As has been stated before, the rule of thumb for Lake Winnipeg is that for almost 3,788 kg of quota (Almost \$45,000 worth of quota) you can guarantee \$9,000 in income or \$7,000 after all expenses. The other rule of thumb is that if a fisher wants to fish full time, he needs to hold at least 4 to 5 Quota Entitlements. A few fishers reported that a fisher could earn gross income of around \$30,000 in the spring and approximately \$45,000 in the fall. One fisher stated that a fisher who holds a fair amount of quota (50,000 – 60,000 pounds) could generate \$75,000 in gross income. As it has been seen (table 2) the Quota Entitlements are not distributed fairly on Lake Winnipeg which means that yearly income varies by fisher. Manitoba Conservation and Water Stewardship (2012) estimated that the average income per licensed fisher was approximately \$18,754 on Lake Winnipeg for the 2010/11 season but for the past 10 years it has been around \$22,554. These numbers give us a good

indication on yearly income of the average fisher on Lake Winnipeg. Again, we have to keep in mind the unequal distribution of the quotas around the lake. As was seen in table 2, a big proportion of the total quota is concentrated on the South Basin. Table 3 gives more detail on distribution of the quota around the lake. The table shows the number of the Quota Entitlements (yearly open skiff quotas) in each community and then a column that shows how many kilograms fishers in each community can fish (including open skiff quotas, retirement quotas and whitefish fleet quotas).

**Table 3: Community licensing area profile**Source: Manitoba Conservation and Stewardship, fisheries branch (2012)

Area	Community	No. of Fishers (excluding	No. Of combined	Total Quota allowed (Kg).
		retirement quotas)	S/F/W Quota	
			Entitlements	
1	Selkirk/Winnipeg	27 [3.2%]	52 [3.6%]	180,440 [2.7%]
2	Gimli/Winnipeg Beach	150 [17.9%]	325 [22.6%]	1,389,604
				[21.2%]
3	Riverton/Hecla	71 [8.5%]	135 [9.4%]	482,980 [7.4%]
4	Koostatak/Jackhead	114 [13.6%]	174 [12.1%]	773,270 [11.8%]
5	Pine Dock/Matheson Island	70 [7.4%]	144 [10%]	550,840 [8.4%]
6	Dauphin	62 [7.4%]	126 [8.7%]	587,470 [9%]
	River/Gypsumville			
7	Grand Rapids	99 [11.8%]	155 [10.8%]	671,350 [10.2%]
8	Poplar River	40 [4.7%]	65 [4.5%]	297,890 [4.5%]
9	Berens River	65 [7.7%]	117 [8.1%]	488,530 [7.4%]
10	Princess	21 [2.5%]	39 [2.7%]	147,940 [2.2%]
	Harbour/Bloodvein			
11	Wanipigow/Manigotagan	48 [5.7%]	76 [5.3%]	260,990 [4%]
12	Traverse Bay/Victoria	19 [2.2%]	27 [1.8%]	87,870 [1.3%]
	Beach		- <b>-</b>	
	Norway House/Mossy Bay	52 [6.2%]	0	608,000 [9.3%]
	Total	838	1,435	6,527,174

As can be seen in the table 3, fishers in Gimli and Winnipeg Beach hold the largest single share of quotas of any area around the lake or 22.6% of total open skiff quotas and 21.2% of yearly total quota allowed. With table in mind, we can assume that many fishers in the Winnipeg Beach and Gimli area are better off than those in other areas.

The more quotas a fisher holds the more income he or she can get from fishing but, as was mentioned in the fall season section earlier, the fisher's market strategy is also very important in maximizing their income from fishing. This is especially true for some fishers in Gimli who sell their products locally. Given the additional effort required to engage in direct sales to customers, fishers have to decide whether the activity is worthwhile. As mentioned above, some fishers sell directly to consumers to increase their workloads and diversify and increase their incomes. As can be seen in the Table 4, it is mainly the fishers in the South Basin (Gimli, Hecla Island, Riverton, Traverse Bay, Victoria Beach, and Winnipeg Beach) who do not only sell their product to FFMC but process by themselves, probably to sell the fish locally.

**Table 4: Production analysis (Excluding non quota species) Round kg**Source: Manitoba Conservation and Stewardship, Fisheries branch (2012)

Community	Sales to FFMC	Private Production	Total
Winnipeg Beach/Gimli/Traverse Bay/Victoria	1,184,350.97	185,473.00	1,369,823.97
Beach			
Riverton/Hecla Island	390,245.68	30,641	420,886.68
Koostatak/Jackhead	718,780.80	0	718,780.80
Pine Dock/Matheson Island	556,550.98	18,128	574,678.98
Dauphin River/ Gypsumville	295,195.85	0	295,195.85
Grand Rapids	507,244.64	0	507,244.64
Big Black/Poplar River	347,575.38	0	347,575.38
Berens River	540,716.38	0	540,716.38
Princess Harbour/Bloodvein	132,427.30	774	133,201.30
Winipigow/Manigotagan	229,690.76	2,551	232,241.76
Total	4,902,778.74	237,567	5,140,345.74

The possible reason for this difference in private production is probably the proximity of communities such as Gimli to bigger markets when compared to communities at the north end of the lake. The table clearly shows the importance of the Freshwater Fish Marketing Corporation for the fishers on Lake Winnipeg. Non-quota species such as the popular Goldeye are excluded from the table, however, which means

that the private sales are probably slightly higher than shown. A fisher's income depends on how much quota he or she holds and their market strategy.

We cannot however only focus on income when discussing the material well-being of fishers on Lake Winnipeg. As mentioned, the start-up costs of fishing are relatively high, as are buying quotas and other equipment. Operational costs are also a significant factor on Lake Winnipeg. "The biggest thing in fishing is cost! To keep cost down. I know other fishers might not believe it. I don't care if you are running a whiskey factory or something else, you have to save pennies to make money" (A04), one fisher stated. Nets and gasoline were frequently mentioned as the biggest operational costs.

Circumstances have changed as an older fisher recalled when talking about costs in fishing, "Nets, and gas [The biggest expenditures], without a doubt. Nets today cost nothing compared [to the nets in the old days] when the men in the past used to knit them by themselves! My grandfather spent part of his winter in his basement when fishing was done, mending his summer nets" (A01). I asked another fisher what was one of the most important things in fishing, he underlined the importance of the net when he replied, "nets, nets and nets". The quality of the nets may not be the difference when there is a lot of fish in the lake but during lean times, the old fisher mentioned to me that they make a huge difference. Nets cost around \$100 each. That cost of nets quickly accumulates when a fisher needs to renew his nets every year or two and he or she uses 10 to 30 nets per season. Like everything else, the price of nets seems to rise every year. As a fisher pointed out, "I have to buy a new net every year or second year and the price of nets is going up. It used to be \$30 but now it is around \$100 a net" (A05).

Gasoline was the most common expense that the fishers mentioned as a biggest expenditure of their business. As one of my informants put it neatly, "That is what everybody is talking about now is Gas! Gasoline, gasoline, gasoline, the blood of the world is still gas and without it, we don't run" (A04). That is particularly true for the fishers. They need gasoline, not only for their boats, but their snowmobiles, their Bombardiers and their trucks. Lake Winnipeg is a big lake and the location of a fisher's fishing spot can affect their gas bill. Some fishers like to go further north from Gimli while others like stay near Gimli or even close to Winnipeg Beach to fish. The further fishers have to go to their fishing spots, the more gasoline they need for their trucks. Moreover, the seasons affect the gas bill as well. Some fishers prefer to fish from different spots between seasons as one fisher stressed:

It vary a lot. During the summer I fish a lot further north on the Lake and I drive then a lot back and forth in my truck so I use more gas on my truck than I do with my boats. It varies so much because it depends on where you are fishing (A06).

Another fisher articulated the same point by stating "I don't know how much it costs in the winter time, it is monstrous. We travel 60 miles to where we fish, so the trucks get pounded to pieces" (A03). There are also costs related to the delivery of fish. The closest delivery station to Gimli is in Selkirk, which is 40 miles south and many of them deliver their catch there. A few of them, however, fish further north and take their catch to Riverton or even further. The delivery station to which they take their fish influences the cost of fuel for fishers. Due to these variables that have been mentioned above makes it difficult to pinpoint an exact percentage or a number that fishers spent on gasoline. A few fishers however stated fuel as around 20% of their production cost while others only stated they spent few thousand dollars on gas per year.

There are a few others expenditures that fishers mentioned as well. The expense of hired hand was one of these. A few fishers have so much quota that they need to hire employees to help them during both the open water season and the winter season. Others only needed to hire employees during the winter season while the rest never have to hire a worker since they fill their quota during the open water seasons. Those who had hired hands on their payroll stated that it was the biggest expense in the fishing, even higher than gas. It was said that the cost of a hired hand was about \$100 - \$150 per day, inexperienced or not. Another thing that was mentioned was payments for loans. A few fishers needed to borrow money to be able to buy quota and other equipment. Today, fishers can use their quota as collateral for loans at a bank but there is also a Fisherman's Loan Program where a fisher can get a loan and use the quota as collateral. We will return to this topic little bit later in the chapter.

Fishers have different strategies on how to maximize their income from fishing as was described earlier. Because of the nature of the fisheries on Lake Winnipeg where the quota is not equally distributed, 35% of my informants had some kind of another income (Work during off season, partner's income etc.) to support their fishing. The percentage of fishers that need another source of income would probably be higher for the whole lake. One of the rules of thumb is that a fisher has to hold at least 4-6 quotas entitlements to be able to make a good living out of it. However, roughly 30% of my informants do not hold that many quotas and it is expensive to enter the fishing. As one fisher mentioned, "It is hard to get in to it, and just to make your payments, just fishing; you might have to get out and subsidize your fishing" (A11). Thirty percent of my interviewees reported that they had other sources of income, such as the jobs of their life

partners. As well, as it was stressed in the last chapter, many fishers go out and work somewhere else during the off season. Some fishers do carpentry, graveling or landscaping to have a constant income all year round. Such options are available for fishers in or near towns but the fishers further north do not have that opportunity. The seasonality of fishing creates challenges for fishers to find off-season work:

You are not going to hire someone who says, here is my fishing business, you can have me for six weeks in the spring and six weeks in the winter. No! We don't want you for six weeks here and there; that is the only time I have. The rest of the time I am working in fishing. I can work for a day here and there. But I am not driving. I am not going to drive three hours a day, not at my age. Nobody is going to hire me. Many guys are in the same situation (A15).

Therefore it is important for the fishers on Lake Winnipeg to have other job alternatives either to subsidize their fishing or simply as insurance in case fishing might drop and become economically insufficient. Overall, most of the fishers reported that they were doing well at the moment since there is still a lot of fish in the lake. However, a frustration among the fishers seems to be gradually growing regarding income and other aspects of the fishing that will be described in more depth in the next sections.

### 5.2. Subjective well-being

"I will tell you a little story" one retired fisher told me shortly after we had ordered a two egg breakfast at one of the Salisbury House Restaurants in Winnipeg on a beautiful spring day:

I was sitting on the porch with my father and we had this incredible view of the lake. The lake was just beautiful that day. Just like glass. I looked at my father and I asked him "Hadn't you wished that our family had rather settled in Dakota, where it is much better conditions for farming than here? The old man took a long pause. Looked at the lake and said "Do you see that?" I would not trade that, even for a million dollars (B02).

By telling me this story in the beginning of our breakfast, he was emphasizing how much Lake Winnipeg meant to him and his family. His story not only helped me understand how important the lake is for many of the fishing families along the shore of Lake Winnipeg but moreover, it reminded me that there is more than just one aspect of person's well-being. We tend to concentrate only on the material well-being of a person, and sometimes we forget that there are more aspects that matter to a person in order to live the life that they believe is good.

The question remains, what is a good life? There is, however, no single answer available; the life of a human being is much more complicated that we can just answer an intricate question with a simple answer. There are many variables that need to be considered in our quest to understand the well-being of a person. Each person has different aspirations, hopes and dreams that are influenced by the society and place that the person lives in (Gough 2004; White 2009). Those settings also provide different resources that a person can utilize in order to support themselves (McGregor 2007; White 2010).

The quest to understand definitions of a good life among different people is exciting but difficult task. One of the reasons why I chose the ESCR Well-being for Developing countries working group approach was that it takes more aspects than the material into account. Additionally, their definition allows a space for a different individual's understanding of well-being. Moreover, their research tools such as the Generated Person Index enable fishers themselves to define what the good life is and to evaluate whether their needs and goals have been met.

I met with 20 fishers in the Gimli area and asked them to mention what they needed to have, to be or able to do, in order to live well in their community. The results can be found in the table 5 here below:

**Table 5: Result of Generated Person Index** 

Domain	(%) fishers who	Satisfaction with	Average points
	cite this domain.	the Domain Scale	spent on areas
		1 to 5.	fishers want to
			improve.
Family	85	4.0	1.75
Work	45	4.6	1
Financial security	40	3.6	2.17
Honesty	30	4.7	1
Independence	25	4.25	1
Health	25	3.5	1.75
Recreation time	20	4.6	2
Self-respect	15	5	1
Freedom	15	4.5	5
Love	15	4	3
Interaction/communication	15	3.6	1
Acceptance	15	4	1
Happiness	15	4	1
Participants	5	3.5	1
Good neighbors	5	5	1
Hope	5	3	4
Security	5	3	3
Solitude	5	3	2
Respect	5	4	2
Shelter	5	4	1
Opportunity to grow	5	4	1

The table above gives us some ideas about what constitutes a good life among fishers on Lake Winnipeg. The fishers wrote down many different domains that they thought were essential for them. As can be seen, family, work and financial security were the dominant ones mentioned. Most noticeable in the table, however, is how happy the fishers seem to be with their domains in their life. In fact, it seems that the fishers are very content with the domains because they were very reluctant to allocate points to the domains that they believed needed to be changed to improve their lives. I will elaborate

the most important domains according to the fishers in more depth in the following section.

#### **5.2.1. Family and Close relationships**

Usually, when fishers had thought for a while about what matters the most to them in order to have a good life they invariably wrote family or other close relationships down first on the paper. Before the research began, I had a sense that family might be the one of the main domains that the fishers might consider to matter the most to them as Coulthard and Britton (2012) found that family and close relationships were a predominant domain among fishers' households in their well being analysis of Northern Ireland fisheries. In their case, approximately 96% of their sample stated family and close relationships being important to live a good life (7). In the case of Gimli fisheries, 85% of the sample stated family and close relationships as being important to be able to live a good life. In order to do so, they frequently stated that they needed to be around their loved ones, spend time with them, and be in touch with them on a daily basis:

"I want to have my family around me, and I do, so I am lucky" (A06).

Family is important because you want to keep in touch with all of your siblings, your children and all of that stuff......I have a computer and I can get a hold of them any time I need, and give them messages any time I need, by e-mail and texting, and stuff. I remember when I was a kid and my mom had to get a hold of me, she did not have a chance of finding me. I was in Winnipeg, no cell phones back then, you know (A05).

Fishers said that during the fishing season they do not have time for anything else other than fishing and other fishing related tasks. During a season they often work seven days a week for a 50 - 60 days period. During this period, the fishers do not have much spare time to spend with their family or friends. However, when their hands are beat up

after a hard season, some choose to take a few days off to spend time with their families and do things that they like other than fishing.

I often asked my informants why family and other close relationships were so important to them. Most of the time, they looked at me like I had asked them why the sky is blue; the answer in their mind was that obvious and often a self-explanatory in their opinion.

As long as most things are good. You will have problems but that is not big deal if you got a family and enjoy your work and you have family that surrounds you and they love you. You have some friends, that is a good life (A13).

That is how one of my informants responded when I asked him about the importance of the family. A few others mentioned that they and their family were defined as a fishing family, since many of their relatives had been in the fishing industry as well:

My father, grandfather worked on the lake. My uncles as well, on my father's side were four and on my mother's side, well everybody was a fisherman at that time. My aunts on my father side all married to fishermen (A01).

That was how a fisher described his family history, full of fishers, which was common among the fishers. However, the importance of the family according to fishers is not only that their families and friends show them unconditional love but the fact that they support them in their fishing business, in one way or another. Sometimes the supports are in the form of bookkeeping, helping out with fishing or filleting the fish, or just tolerating them during the peak season. I remember how quick one of the older fishers replied when I asked him what he needed in order to live well. He looked at me for a second and said "marriage. That is it!" He talked about this strength and the support that he receives from his wife which, according to him, was the key to a successful fishing business:

First of all, you must be married, and must be together, and work together in your business that you are doing. Or there is no business! That's the most successful way if you want to make anything! I show you any family here in town, which is successful, their wife work alongside their husbands, in what they do. For example, my wife does all my books, everything that goes through here, or you come here, from eight o'clock, she goes end to end (A03).

As we shall see later on, family does play a significant part in the other aspects of a fisher's well-being. It is no exaggeration to say that fishing on Lake Winnipeg revolves around the fisher's family.

#### 5.2.2. Work

Work was the second domain that many fishers felt matters the most to them in order to live well. "Everywhere you work, and I work all the time, work is important. A person needs to work, it is essential" (A12) one fisher told me. "Work, that is how I pay my bills, I have to work (A05)" another one told me. Work plays a significant role for the fishers in order to live well but 45% of my respondents stated that domain as important for them. "Work is my way to support my family" was another expression that was commonly used among my informants. There is a large literature in maritime anthropology that has shown that fishing is not only work but it has a deeper meaning for the fisher (Pollnac and Poggie 2006; Pollnac, Pomeroy and Harkes 2001; Pollnac and Poggie 1988). For some fishers in Gimli work contributed to self-worth and pride:

It can contribute to self-worth. It is good to work; everyone should work, it is important to work (A16).

I want rather people to say that I am a good, hardworking guy, so yeah, pride is a good one (A09).

However, work is not always the same as work. Many fishers certainly see fishing as a vocation. Max Weber described two ways to make politics a vocation, that is, one can live for it but also off of it (Gerth and Mills 1946). Weber's idea of vocation can

easily translated how fishers perceive fishing as a vocation. The fishers talked about it as a source of income and a way to pay their bills but they also live for fishing as well. This is the main point of the literature on job satisfaction among fishers. They cherish the nature of the job and the identity-affirming aspects of the job (Pollnac and Poggie 2006; 1988). Fishers in the Gimli area stressed that it is important to work not only for economic benefits, but also that their lives would not be considered good unless they enjoy their work:

I love fishing. I just work a fair bit and by fishing, that is a way you support your family and it is important to like your work. Some people don't like their work, and they are just unhappy and cannot wait for a time off. I look forward to the fishing season, even though I enjoy my time off when I got chance to spend more time with my family and friends. But even then in my off seasons I still work [in fishing] (A13).

The quotation above demonstrates well the importance of enjoying their work among the fishers. I remember one day during the winter season, I met one fisher in Gimli in his shed where he was processing his fish. I told him about my research. He listened to me carefully and asked me more questions regarding my research and about my background. He finally agreed to let me interview him for my research and then he looked at me and said "do you know the difference between a dog and a fisherman?" I paused for a minute to think cautiously on my answer but soon I just gave up and asked him "what is the difference?" He looked at me with a smile on his face and said "The dog stops whining when you let him in to your house!" He added though that despite the fact that fishers might complain a lot, they would never complain about their work. The work of Pollnac and Poggie (1988; 2006) supports that theory but they have found that fishers have relatively high job satisfaction. Table 4 reinforces that idea as the fishers in Gimli tend to be really satisfied with their work and, on average, they rate their

satisfaction with their work as 4.25 on a scale from 1 to 5. For many of them, enjoying their work was very important and they emphasized that they enjoy fishing for two main reasons: being their own bosses and being independent. As couple of fishers stated,

The lake is just right there, it is not very far to go to work. When I go to work, I am my own boss, which is important for me. As opposed to somebody phoning me, saying that I have to be there at a certain time to do this and that for certain time. I know what has to be done and I know exactly how it has to be done, so that is why it is important. It is so important to me to work. Fishing is a very good way of life. You make as much money as you want. The harder you work, the more money you will make (A05).

I really didn't enjoy it [the construction industry], like fishing. Fishing is something... We look forward to every season (A07).

As we shall see later, being independent was also a significant domain according to the fishers themselves to live well. Working in the fishing industry was not only important because it is a good way to support your family or be your own boss. For some fishers, it meant something more; it brought them closer to their own family as well. As has been mentioned, many families in Gimli have a long history of working in the fishery. A few families have been involved in it for 100 years. For someone to come into a family with such a long history in the industry, fishing can be an opportunity to get closer to that family as one fisher pointed out:

There is one other thing about fishing that is family. That is probably the strongest reason. Because my wife's family is a fishing family and in order to be in the family, it helps if you fish here. To me, I wanted to relate to her family, because I am here in Gimli. I don't have much family left, other than in Winnipeg, so for me to relate to my wife's family and it is easier for me to relate from the fishing perspective than it is from other perspectives (A15).

The material satisfactions of work in fishing are also very interlinked with the next domain of financial security. As one fisher stated, "Work equals money".

# **5.2.3. Financial Security**

Nearly 40% of my informants stated that financial security, money, income or financial freedom as one of the five things that they needed to be able to live a good life.

I remember Kobbi told me once on one of our fishing trips during the winter season how stressful fishing can be. "When we are not doing well, we become stressed that we are not fishing enough. However, when we are actually doing very well, we become worried that we might be fishing too much. You can never relax in this job". There is always something that you are worried about, whether it is fishing, mortgages or something else. I remember Kobbi also told me a story that when he was younger he was required to work with his father on the lake every time he had a day off in school to get more income so they would not lose their house. Kobbi told me that he was still working today to pay the mortgages of his house. In fact, it was one of the main concerns of many of my informants to be able to earn enough money to pay the bills and support their families:

Just have enough money so my family and I can do things that we want to do. It is not so much for me now, but when I was younger, I wanted my children to be able to get an education. I wanted to be able to provide food for them. Just those basic needs (A06)

As Kobbi mentioned to me more than once, the fishing industry can be very stressful for the fisher and not least for their families as well since there are always some fluctuations in fishing. A few fishers stated the importance of having a good enough income or the financial security to ease the stress to some extent and enable them to provide their families the basic needs:

That financial security can put a lot of stress on the whole nine yards when you just don't have enough money to get around, whatever, like pay your bills and that sort of stuff, and that just puts stress on everything (A11).

The importance of financial security shows also in other aspects that fishers mentioned as being important. A few of them stated the importance of recreational time as we will see later, and spending time with their families and as one stated "if you do not have the money to do what you want to do, then you will not be able to do it" (A02). Moreover, a good income would also make it possible to accumulate savings when there are lean periods in fishing or to expand their operations by buying more quotas. We have to keep in mind that the fishers have no job security. If the fish were to suddenly disappear, they would have to find new jobs. Furthermore, fishers on Lake Winnipeg have no pension plans either, and that is why it is important for them to have a good income to enable them to accumulate savings. Even though fishers did not spend many points on average on the areas that they wanted to improve in order to live the lives they want; a couple of them allocated a few points on the financial security aspect by stating for example:

I would like to see what I do worth more money than it is today. It is not worth enough today, it should be worth more, like the price for our fish should be up (A09).

I do not mind, everybody has to get a little piece of the pie, whatever, but right now it is a time when we are not getting our fair share of it (A11).

More dollars for my fish. Accumulate savings for the future. They say money can't buy happiness....you have to pay bills and we are not getting enough for our fish. There is not always going to be fish here, things can change drastically and then I would have to do something else that I don't want to (A15).

This is, indeed, is a good indication that there is developing a gap between fisher's ideal situation and the actual reality of their financial security. We will touch on this growing gap in more detail later since this is intrinsically interlinked with the fisher's relational well being.

### **5.2.4.** Honesty

Honesty was the domain that surprised me the most that fishers talked about as being important for them to live a good life. In fact, many fishers talked about the importance of how they should act towards others in the community. A few of them stated that being respectful was important because as soon as you respect others, you will get respect in return. The same idea was behind stating honesty as important; if they were honest, others would act the same way in return. On the Person Generated Index questionnaire, 30% of my informants stated honesty or integrity as being important to them and that was a type of a person that they wanted to be, as one fisher stressed:

Well...I think it is important that you, that people trust you and you have a good reputation in the community, that people can look at you and say you are pretty ethical, you know. Just kind of a person you are or want to be. It is important to me, to have that integrity. I don't want people to look at me and say I am dishonest, or just not worthy (A06).

This point of view about honesty is understandable. For those fishers who sell their product directly to customers, in order to gain trust and keep making sales, they have to be honest and make sure they can meet their obligations towards them. Fishers also argued that honesty was essential to get self-respect, trust and acceptance among others in the community. As couple of fishers pointed out:

Honesty, I believe that runs in my family. My afi was said to be very honest man, and a very well read man. Overall, a very nice person, a viruous person. That means quite a bit. Like some people, I don't know how they can lie to you (A07).

I think if you are not an honest person you would not have self-respect, and probably have a bad conscience. I have a nice and clear conscience, I don't have any enemies and don't have anybody after me for anything. I think I am fairly respected in the area and especially among other fishers (A14).

The fishers that stated honesty or integrity as important aspects for them wanted their community be based on mutual honesty. Honesty, of course is important for them in

terms of their business since many of them deal directly with consumers. A few of them, however, perceived honesty for their own good as one another fisher pointed out neatly, "If you are honest, you can sleep at night. No worries (A16)."

# 5.2.5. Independence

In the literature, fishers have often been perceived as hard working, independent and self-reliant individuals (McGoodwin, 1990; 76). My informants in Gimli seem to fit into that model, or at least the fishers themselves believe it is important to be independent in order to live well. Being independent or self-reliant was mentioned by 25% of my informants as an important aspect for a good life. As previously stated, the fishers liked their work in part because they could be independent and did not have anyone else to tell them what to do. They are not talking about getting independence from their family, but independence from bosses so that they can plan their own time "I do not take orders, I give orders, which is my job! I can look at something, understand it and tell you what to do" (A15) as one fisher told me. Moreover, a few more fishers had an experience of working for someone else in other professions, which made them realize how good it was working by themselves in fishing:

I like the independence. I like being my own boss and for me it is especially true because I spent 30 years working for other people, you know. It is a wonderful thing. I feel really priviledged to do it actually, and I enjoy it a lot (A06).

When you are totally in control of what you do. I don't have to have someone older to tell you how hard to work. You set your own hours. That's a real benefit of fishing (A02).

It is not surprising that many fishers talked about how much they like being their own boss and being independent. Considering the degree to which fishers were dependent on companies in the past, it is no surprise that they value independence.

Fishers sometimes made reference to the past even though many of them started work after that period. They did, however, have relatives that went through that experience. Contemporary fishers often described the fishers in the past as being dependent on the companies. They often remarked that it was something that was not an appealing idea:

We grew up where we were so poor; they [the fishers] were absolutely indentured to these fish companies (A02).

The companies owned them. They owned all the stations, boats and equipment and the fishers were just pawns basically (A14).

Even though only 25% of the my informants stated independence as an important aspect of living a good life, most of my interviewees mentioned how much they liked to be their own bosses and be independent. One fisher illustrated that point by emphasizing, "I like working for myself, I don't have a boss or an employee, I am a one man show, I work for myself, by myself. I like that" (A10).

### 5.2.6 Other domains

There were a few more domains that the fishers mentioned as being important to them. "We all would like to look like Charles Atlas, eh!" as one fisher told me when he stated that health was one of the things that matter to him the most in order to live a good life. He was not the only one but 25% of my sample mentioned health as an important requirement of living well. The main reason that they gave for mentioning health was often related to the other domains. They stated that they need to stay healthy to be able to continue to support their families. Interestingly they saw fishing as a means to keep healthy:

You are out in the fresh air, it is a healthy atmosphere that you work in, you are not breathing any chemicals, or working in a plant, on your feet all day, you spend some time on your feet in your shed, but you feel healthy doing it (A02).

Another domain that many fishers stated that they felt was important for a good life was time for recreational pursuits. A few of them stated that they want to take their mind off fishing during the off season and do whatever they like to do; for example, spending time with their family, golfing, skiing or hunting. A few of the fishers hinted that the recreational time is sort of a prevention for burnout and as a way to prepare for their retirement. As one fisher pointed out,

I know a lot of fishermen that do not do anything else than fish, they work and work. When they are too tired and beat up to work, they die! A lot of people retire, and you drop dead since the work was the only thing that kept you going. Fishing is great, but there are other things in life (A02).

Self-respect and freedom are certainly close to independence and these two domains were relatively prominent for fishers. Fifteen percent of the fishers stated that both self-respect and freedom are important to them. Self-respect includes various acts like being honest but also working for oneself and not relying on anyone else, which again relates to independence. Freedom was also mentioned a few times as well, but as one fisher asked, "What is freedom? You always need some boundaries; I have been told I need boundaries". Fishers did not want to do everything they wanted, they knew they had some kind of boundaries but the freedom that they described was more related to being your own boss, the freedom of living by your own decisions. These attributes were very close to the idea of independence:

The freedom is like...if there is more room I want to have freedom to do everything I want to do. It is nice to be able to do what you want to do, and you don't have to have someone to tell you what to do. It is nice to do what a person wants to do (A09).

Once you go and work for an employer, it feels like prison to me. No matter how many different, I tried 3 or 4 different careers and all of them did not feel like I had the freedom to spend my time wisely or efficiently (A10).

The importance of community was mentioned a few times as important to what is needed to live well. Aspects such as communications and interactions, good neighbors and community acceptance were mentioned a couple of times as being important. Those aspects go, to some extent, hand in hand with other domains. As we saw earlier, honesty was perceived as important to being accepted by the wider community. Acceptance from the community was on top of a few fishers' minds but like one fisher pointed out "They [the community] are part of your life you know. Without them, I mean if you are not accepted in some place, in a community, that must be terrible" (A08). But to get community acceptance, a few of them stated the importance of participating in social events and interacting with other people in the community. There is a phrase that says it takes a community to raise a child. Some of the fishers had that phrase in their mind and just as the family, the community is supposed to be a support network. As one fisher argued,

We are still social animals, and we still have to get out and that is just such an important thing, you know. It is not always just about the mightly dollar, I don't need to be THE richest guy or whatever, but it is nice to be comfortable (A11).

However, as one fisher perceived it, the acceptance of the community is not only something personal, but it is also important in order to have strong fisheries:

It is kind of important, even with the fellow fishermen you want to feel like in order to have a strong fishery; you want everybody to get along. That is kind of important that the community accepts us as fishers "(A17).

According to the Generated Person Index, the fishers on Lake Winnipeg are relatively happy with their lives, at least with the domains that they believe are important to them. This happiness with the aspects of their lives was reflected well when the fishers showed reluctance to spent points on areas that they thought were important to change to

improve overall quality of life. As we have also seen, most of the domains that the fishers cited as important are closely linked to each other. Domains such as family, work and financial security are interlinked. Fishers say that the first two domains were important in order to support their families. Fishers also connected work with other important domains such as independence, freedom and self respect. They connected those attributes to work or, in other words, the work provided them independence, freedom and self-respect since they could work for themselves without interference from a boss. Another issue that is worth mentioning is the role of social organizations or institutions in the subjective wellbeing of fishers. The vast majority of fishers mentioned family as an important domain in their lives. They stated that they get the support from their families and that their businesses revolve around family. Fishers stated how important it is to be honest and to be accepted in the community, in order to have strong community. Those social relationships are also reflected in the financial security domain since they have to deal with FFMC and customers in their jobs. Even though fishers were not willing to spent many points on areas that they liked to change, some of them did spend some points on the financial security domain, hoping for some change. That tells us that there is a gap between the ideal situation for the fisher and the reality. Additionally, as we will see in next section, the relationship with social institutions play a crucial role in the subjective well-being among the fishers, especially regarding fishers' financial security.

### 5.3 Relational well-being

The essence of the WeD group definition of well-being is that humans are social beings and that interactions with others influence a person's path to meet his or her

aspirations or goals. As one fisher pointed out to me "Nothing is more regulated than the fishing business, nothing!" (A03).

It is hard to assert that fishing is the most regulated industry; nonetheless, social institutions have been developed in the fishing industry in order to avoid the "tragedy of the commons" and to make sure that the fishery runs smoothly or, as Svein Jentoft (2005; 147) puts it, "They introduce structure, order and predictability into human relations". In general, humans are extremely social. We interact with various social actors and institutions that shape not only our ideas and aspirations but also what we can do with what we have (Gough, 2004; White, 2009). In order to get an insight into the dynamics of the fishery and who shapes the fisher's path to meet their aspirations, I asked the fishers to mention and evaluate their three most important relationships for their fishing in terms of how strongly they influence their fishing behavior.

**Table 6: Governance Relationship Assessment Results** 

Relationship	(%) Fishers who cite	Satisfaction with	(%) Fishers who
(Ranked in order of	this relationship as	Relationship scale 1	fish to change this
influence)	being important	to 5	relationship
Freshwater Fish	65	2.91	55
Marketing			
Corporation			
Provincial	45	2.63	15
Government			
Family	35	5	0
Crew	25	4.75	0
Other fishers	25	4.4	0
Banks	10	3.5	0
Natural officers	10	1.5	5
Competing users	5	2	0
Customers	5	5	0
Federal Government	5	1	5

As can be seen in Table 6, social institutions such as the FFMC, the Provincial Government and the family were prevalent in the Governance Relationship Assessment.

The fishers seem to be relatively happy with their relationships. However, unlike subjective well-being, the fishers were not reluctant to wish for changes in their relationships with those institutions. As Table 6 indicates, more than a half of my sample wanted to change their relationship with the FFMC and one quarter wanted to see some changes at the provincial level. The most important relationships according to the fishers will be reviewed in the following sections and the reasons for wanting changes will be elaborated as well.

# 5.3.1. The Freshwater Fish Marketing Corporation

The Freshwater Fish Marketing Corporation was one of the first things that I heard about when I began my research on Lake Winnipeg. As described earlier, the FFMC is a Crown Corporation which was established to maximize fisher's returns from fishing. The corporation is mandated to buy all the fish that are offered to them. The FFMC is thus the biggest fish buyer on Lake Winnipeg. Due to its role in the market, the FFMC has a great effect on fishers' material well-being since it sets the annual prices for fish it buys<sup>6</sup> Since most fishers deal with the FFMC on an almost daily basis, the corporation influences heavily what species the fishers target, what mesh size they use and where they may fish.

The FFMC has been operating for the past 45 years and most fishers have a positive relationship with it. The FFMC was established to maximize fisher's return on fishing and it can be thought of as their company since they get the profit from its fish sales in the form of the final payment. I heard a few fishers state that FFMC was "the

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<sup>&</sup>lt;sup>6</sup> These prices vary by species and by size of fish – see Appendix A.

best thing that ever happened on Lake Winnipeg" and that FFMC provided predictability or stability in the pricing of fish:

It [FFMC] enhances us to live well. Absolutely, it provides certain stability. You know what is coming and what is being paid for (A03).

I would say enhance it [To live well]. Well, because of the reliability of it, the pricing, because it allows me to plan, and I think that is to me the key. I know what I am going to get paid... I know when I start fishing for the season that I am going to get paid a certain amount for a certain grade of fish, so if I want to pursue that grade of fish, that I can and I know I will get paid for it. So, that's for me is the biggest thing with it and I also know that the cheque will never bounce from the FFMC, it is reliable, it is established (A06).

I would say enhance it [the ability to live well]. Because you know, they will buy your fish! You don't have to be worried that somebody else is paying more for the fish, you know (A02).

These quotations illustrate the continued awareness among fishers that they are no longer dependent on arbitrary decisions by fish buyers as they were in the past. Today, fishers on Lake Winnipeg know that the FFMC will buy their fish, regardless of market conditions. Furthermore, everyone who deals with the FFMC is guaranteed that they will receive the same price for the same species. Some fishers also value that the FFMC provides the added possibility of permit direct sale to customers through the special dealer's license. Many fishers stressed that they are happy with the FFMC since they have a steady paycheque and a guaranteed buyer of their fish. As was shown in the last section, financial security is important to fishers, and the FFMC contributes to that goal.

Nevertheless, there is some disgruntlement among fishers towards the FFMC which is highlighted in Table 4. The Governance Relation Assessment score of 2.91 shows that fishers were relatively satisfied with their relationship with the FFMC. Nonetheless, 55% of the fishers stated that they would like to see some changes in their relationship with the FFMC. One older fisher on Lake Winnipeg told me once, "It is not

the amount the fish that you catch, but it is the amount of money that you can get for it!" and that is exactly what concerns many of the fishers today. Fishers are increasingly seeing the declining prices that they receive from the FFMC as a threat to their financial security. Fishers pointed out to me that the final payment that they have received from FFMC has steadily gone down through the years:

Yeah, it has provided a certain stability. The stability is however, not there when they are offering you 80 cents a pound for a fish, that 12 years ago used to be over \$2 a pound. That's life. Our quota used to be worth \$21,000 but now it is worth \$8,200! (A05).

When they first started we got a final payment, and the first final payment I got was \$56,000 for the year, the next year it was \$38,000, then \$24,000, \$16,000, down to \$5,000 and down to zero. This year, I get around \$2,500 which is almost nothing! (A01).

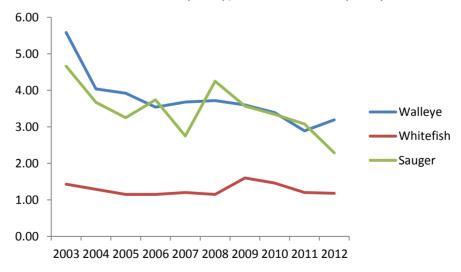
The more fishers I talked to, the more I became aware of their concerns regarding the influence that FFMC has on their material wellbeing. "I don't need much money to live a good life, but just enough to pay my bills and everything. If I cannot do that, then it is a problem" (A13) one fisher told me. As we saw in the subjective well-being section, family and financial security are very important to the fishers but when the price is going steadily down, it is understandable that disgruntlement rises among the fishers. Not every fisher complained about the prices they were getting, but you still sensed the frustration among many of them that the prices they receive had either declined or remained the same. Irritation regarding price arose even more when the fishers read the news about how the FAO fish price index had doubled between 1990 and 2012 (The Economist 2013). Frustration is exacerbated by the high price for fillets of walleye in retail and grocery stores. As one fisher stressed, "the price. It is so hard when you see the end price being so high, and then what we are getting" (A11). In fact, even though world prices of

fish have increased, the cost of living has done so as well (The Economist 2013). The fishers on Lake Winnipeg have experienced a rise of cost of living especially regarding the fuel, as one fisher pointed out:

When I was growing up in the North a barrel of diesel was \$65, last year when I was up there, the same barrel cost \$300 (A01).

Price data show that as the cost of living has increased, the price of the fish has been steadily declining. According to the FFMC (2012), the average nominal price for a walleye that fishers received after the initial and the final payment in 2003 was \$4.65. However, eleven years later the nominal price was down to \$3.19. A similar trend has taken place with the price for the sauger. In 2003 the fishers received \$3.88 but in 2012 the price had declined to \$2.29. The price of the whitefish has, however, declined proportionately less, going from \$1.19 in 2003 to \$1.18 in 2012. Price trends are more extreme when we convert prices into constant 2012 dollars.

Figure 4: Average price for Walleye, Whitefish and Sauger in Constant \$ (2012) Source: FFMC (2012); Bank of Canada (2012)



As can be seen in Figure 4, the average price after the initial and the final payment for walleye has declined by approximately 48% from \$5.58 in 2012 constant dollars to

\$3.19. The same trend is apparent in the price of sauger which has declined by 54%, from \$5.01 in 2012 constant dollars to \$2.29 as Figure 5 shows. The decrease of price for whitefish has, however, only decreased by 13% from\$1.36 in 2012 constant dollars in 2000 to to \$1.18 in 2012 as shown in figure 4.

Fishers had a couple of opinions on why prices have declined for the past few years. A couple of them mentioned the condition of the global economy as a factor, especially the decline of the US market. As one fisher remarked,

You know how the economy in the States or in Europe is in recession as well, just like in Iceland. The things are not very good there, no money. The US is our biggest customer, and you see what is going on down there. Not too good (A05).

Many of them, however, pointed out that the corporation had become inefficient or much too bureaucratic for their opinion. They believed that this inefficiency was one of the reasons for declining prices; "It costs too much money to operate that place [FFMC], which is the problem with them" (A01). Another fisher underlined his dissatisfaction with the FFMC by stating, "We used to get a piece of the pie, full pie, we used to get 3 quarters of it, then smaller, smaller and smaller and now we are getting one third of it, you know!" (A07). A few other fishers mentioned issues that the media has raised regarding the FFMC. The Interlake Spectator (King 2012) and other newspapers reported that the executives of the FFMC had been caught making suspicious expenses when they were on business trips abroad marketing the fish. Fishers pointed to that particular news item for their support and a few of them remarked something like:

The price for the fish in the last 10 years has been going steadily down, and yet, people are eating more fish, so you don't know what is going on. So the concern is, is the infrastructure in Winnipeg eating up a lot what it should be fishermen's income? That might be a valid concern, I believe it is (A12).

There is a lot of room for them to make a lot of improvements and give us a better price for our fish, like any other Corporation. There is room for them to clean up, spending and so on. They've got to remember where they get their fish from! (A17)

No doubt, the establishment of the FFMC was based on a social ideology rather than increasing efficiency in productivity. The ultimate goal was to maximize fishers' return from the fishery as was described earlier. It is therefore interesting to note that a few of my informants mentioned that the FFMC was today too much like a government run business and there were too many "middle" men within the corporation, that in their opinion were taking too much of their share of the price:

I am a Freshwater guy [a supporter of FFMC], I am not against the Freshwater. But I don't need three suits coming out and tell me what one suit could do. They are so important to us, and the concept is right, but they have to change the times, they have forgotten who they are working for (A11).

Government tends to run things very inefficiently. They usually pay too many employees; they don't make them work hard enough. The incentive is not there. If somebody owns the company, they make sure that everything runs smoothly and I think their biggest problem is the government bureaucracy (A13).

I am guaranteed that they will accept all of my fish but there are constraints. Because of their, what I consider their inefficiency, especially in the marketing area, lost their efficiency in their structure, their inability to function as the private sector company should function (A15).

What a one man used to do at FFMC, takes now two to do. The wages that they are taking off the pie right now is just phenomenal. That I would change, but the FFMC has to be there. It is very important for us (A08).

It might be easy to think that the fishers on Lake Winnipeg would like to get rid of the FFMC since many of them talked about how it should be run more like a private company and they believe that the FFMC is taking too much of the pie. There are, indeed, debates among the fishers whether it is the right step to throw this fishery into an open market again. There are actors that are trying to convince the fishers in Gimli and surrounding areas to encourage the province to withdraw from the FFMC by offering the fishers a really good price for the fish. The fishers on Lake Winnipeg are well aware of the possibility that the FFMC might suffer the same fate as the Canadian Wheat Board. The Canadian Wheat Board had a similar role to the FFMC as the single large-scale buyer of Canadian wheat and barley. In 2012, the Wheat Board's monopoly on the purchase of wheat and barley was ended by the Federal Government and farmers can now sell to whichever company they choose (Rabson 2011; Economist 2011; Martin 2012). Many of my informants were not thrilled by the idea of opening up the market for fish in this way. Even though someone may offer to double the prices that they are receiving for the fish today, they are not convinced that their interests in market stability would be met by the end of the FFMC's monopoly. As one fisher underscored, "anybody can say that, the proof is in the pudding and you don't really know that until it is too late" (A06). The fisher's perception of their relationship with the FFMC crystallizes the contrary view that they hold about the state. On one hand, they see it as a constraint, due to what they see as its inefficiency and bureaucracy. On the other hand, it has been a basis for their own independence and freedom. As we saw earlier, there are developing gaps in the fisher's aspirations for financial security yet, despite declining prices, many of them still want to hang on to the FFMC:

Some people are talking about FFMC [possible closure] and they think, they will get a better deal from someone else, but you have to give your head a shake, because, they [other companies] are not there for you, they are there for them! Meaning that they [the new companies] will have to pay you something to keep you going. We grew up, where we were so poor that they [the fishers] were absolutely indentured to these fish companies (A02).

The importance of the FFMC cannot be underestimated, as one of my informants stated, "It could be better but without them [FFMC] we would not have any fishing

industry here, I think"(A07). My informants' relationship with the FFFMC goes beyond steady paychecks, stability and financial security. It can be argued that the relationship with the FFMC provides the fishers a secure environment where they can be independent and allow them to concentrate solely on what they like most to do; that is fishing and spending time with their families. This positive perception balances the concerns that the fishers have with the FFMC. The history of the fishery, however, comes also strongly into play when debating the role of the FFMC, especially regarding independence. In the past, the fishers on Lake Winnipeg were often dependent on fish buyers, and they were practically working for them. The image of the injustice of marketing arrangements in the past strengthens the fishers' belief that the FFMC is important to them to maintain their independence:

You never made money, you were always broke, you were always owing money, the fishermen borrowed money for this and that equipment. The companies owned the nets, boats and everything. You were not independent, you were essentially run by them! (A08).

I think it is ours [the FFMC], it gives us a real stake in the fisheries that I think we wouldn't have it if the fish companies came back. There were fish companies here before, we would lose a lot of our independence. A lot of people think they will be free under the fish companies but I think it just will be the opposite. I think the fish companies are going to simply take over our businesses (A06).

If you throw this fishery wide open to the open market, you are going to get all the exploiters coming in and take advantage of the fishers. Those in the remote areas, the fishers are not well educated, so it would be fairly easy, which is the system we used to have, where the buyers would come in and buy the fish. They manipulate the fishers (A14).

The importance of the FFMC regarding the fisher's independence is not the only thing that was on their mind. The FFMC not only provides the fishers independence, but also the freedom to concentrate only on fishing and nothing else. One of the advantages of the FFMC is that they do not have to fulfill any quota for each day or meet a demand

for an order. Moreover, they do not have to worry that the customers suddenly do not want any more fish. As stated before, they know FFMC will buy their fish:

The way it is set up now, allows me complete freedom to go out when the fishing season is on and catch all the fish I want, as fast as I want. Like the question that you asked earlier, when do I fish? I fish when I want! The corporation is the only reason that I can do that (A10).

That is this freedom that some fishers stated that their relationship with the FFMC provides them. In the past, fishers did not have the infrastructure or even the skills to sell the fish by themselves. That is even true for many of today's fishers. Not every fisher has the infrastructure, the skill, or the interest to sell their fish by themselves. Additionally, the local market is not big enough for everyone to sell locally without fierce competition. However, as many of them stated, their relationships with the FFMC makes their lives a little bit easier for the reason that they do not have to market their own fish and instead they can completely concentrate on the work that they enjoy so much, that is fishing:

They help it [enhance the ability to live well], because we don't have to deal with the brokers and fish buyers. We don't have the time to sell our fish. When we fish, we fish til 8 or 9 pm, then we go out to the shed, and I just don't have the time, or the desire to hire someone else to do the work. That would take a lot of time from fishing and our family as well (A17).

No, it enhances your chances [To live well], I believe so. Well, it is pretty much stress free, you know. We just go fishing and we deliver a quality product and they buy it from me and paydays are on Thursdays! If they were not here, I would have to market my own fish, and that would take more time than it would to catch the fish (A09).

This freedom that the relationship with the FFMC provides enables the fishers to spend more time fishing and spend time with their families instead of marketing their own fish. The relationship with the FFMC also minimizes the competition between fishers, As one fisher pointed out, "they are marketing our fish and they try to get as good price for it as they can. Without them, this would be a circus, really (A09)". A few

fishers have expanded their operations and sell a big proportion of their product directly to local customers, and even to Winnipeg. Others have decided to solely sell to the FFMC since their operation is not that big, or because they either do not have enough quotas or do not have enough storage capacity. When you go further north, it is harder for fishers to sell outside the FFMC since they are too far from the market. A few fishers said that that they might benefit if the FFMC's monopoly was removed, since they make a lot of private sales. However, not everybody is located close to the market or is as equipped to do everything by themselves:

However, those in remote areas, if you are a fish buyer, coming in and buying fish you are not going to drive any further than you have to. If you are going to drive to Gimli a truck load of fish, you are not going to drive another 250 miles to the north end of the lake (A14).

Additionally, the fishers do not have to compete with each other for sales while the FFMC is still in operation as was pointed out:

Everybody wants to make more, everybody wants to earn more money but the single desk marketing is the best way for us to approach the world market because there is enough competitors out there that we don't need to compete among ourselves (A10).

#### 5.3.2. Government

The second most important relationship that affects what the fishers on Lake Winnipeg can do with what they have, according to the fishers themselves, is the Government, both on the Federal and Provincial level. Canada is a special case since the Federal and the Provincial governments share the responsibility for the governance of the fisheries in inland waters (Manitoba Conservation and Water Stewardship 2009). Responsibility is divided such that the Federal Government has jurisdiction over conservation while the provincial government has the authority concerning the use and

allocation of the fish resources (Manitoba Conservation and Water Stewardship 2009). However, the responsibility of the Federal Government, especially its day to day management, has more or less been transferred to the provincial level (Manitoba Conservation and Water Stewardship 2009).

Forty-five percentages of fishers mentioned the Provincial Government as one of the most influential actors for their fishing. The Manitoba Ministry of Conservation and Water Stewardship (MCW), Fisheries Branch, handles the day to day management of the lakes within the province of Manitoba, including Lake Winnipeg. The main role of the MCW, fisheries branch is managing the fish stocks, setting the amount of fish that can be taken out of the lake, setting the dates when the fishing season begins and concludes, setting the regulations on mesh size and amount of gear and finally handling all transfers of quota. The opening date for the fall season is always fixed on September 1<sup>st</sup>. The opening date of the winter season depends on the ice and when the fishers believe it is safe to go out on the ice. The spring season is a special case here, since the opening date depends on the walleye spawning completion and it is MCW fisheries branch that performs this testing. The Provincial Government thus controls when the fishers can harvest and when they cannot. Within Manitoba, only Lake Winnipeg and Lake Winnipegosis have individual quotas rather than open lake quotas (Manitoba Conservation and Water Stewardship 2009).

Fishers are reasonably happy with the system but, as one fisher pointed out, there is always somebody who thinks "it is too dark outside" or "not too dark", which essentially means, there will always be some proportion of people who will be against everything. Every fisher that I talked to, however, understood that there needed to be

regulation in order to keep the fisheries sustainable. In the old system, prior to the quota system, everyone who had boats and nets could fish as much as he or she wanted by only paying \$5-\$15 dollars for a fishing license. That is the exactly the point that many of my informants emphasized. The quota system turned work in the fishing industry on Lake Winnipeg into something enjoyable, and it gave certain value to it. "It [The quota system] limits how much is taken out of the lake, and it also gives a value to it" (A13), is how one fisher perceived the advantages of the current quota system. When a fisher buys a quota share today, he or she is not only buying access to the resource but, in essence, buying a job. That is where the FFMC comes into play as well. Because of the reliability of the pricing and the fact they have a guaranteed buyer, the fisher knows approximately how much he or she can get for his or her fish and he or she knows how much quota he or she holds and therefore can plan accordingly. This contributes to the financial security aspect, since fishers know approximately how much income they can make from fishing. Furthermore, the quota system re-established the independence of the fisher. As soon as the fisher owns a quota, it is his or hers as long as he or she wants it. All the income that derives from the quota after all expenses goes straight into the fisher's pocket. There is no company or anyone else that takes a share of the income:

I don't have to give any percentage to companies. The quota is mine, and the money that I make from the quota is mine (A05).

And, as someone told me, the power is in the fisher's hand. The fishers themselves decide how fast they want to fill their quotas, how hard they want to work, etc. From that perspective, the quota system gives fishers more control over when they want to make an income. The quota system is also flexible enough that if a fisher wants gets more income from fishing, he can either rent quota or buy more quota. As one fisher

underlined, "It is up to you. You can buy whatever you want, you can assign it to other people's names and go as big as you want" (A07). More importantly, the quota system also provides the fishers a certain financial security, after their fishing days are over. In the past, the fishers did not own any quota, and when they retired they had no pension plan or anything else to sell in order to make their retirement easier. Today, however, the quota system has provided certain flexibility in a way that a retired fisher can, if he or she wants, hold on longer to his or her quota and rent it to someone younger to have a constant income from fishing for a few more years. One of the most important functions of the quota system, however, is that it is an asset that is seen as a retirement fund or an investment to secure a fisher's future:

It is not a concern for me, it is nice to have that, part of your capital, equity of the company, and you got that as an asset to sell when you retire. That really makes the fishing industry, sort of something that you wouldn't mind being in, because it would always be there for you (A02).

Well, it allows me to build an equity in the fisheries, so I have something when I retire to sell, which I wouldn't have before in the old system (A06).

Apart from what has been mentioned above, the quota system gives the fishers some equity, or a stake in the fishery. Fishers invest a considerable amount of money in quotas and other equipment and the more the fisher invests, the more aware he or she becomes of the need to act responsibly to keep the quota valuable:

As you are buying quota, you are investing more and more into the lake, so you do, maybe not own more on the lake but you have a bigger responsibility for the lake (A04).

The second [factor that turned the industry into a business] was the ownership, or individual quotas, they turned it into the ITQ system that allows us to increase our harvest levels to have equity in the fisheries which we didn't have before. It has been fantastic actually (A06).

Again, just like the relationship with the FFMC, the fishers have contrary views on the quota system. On the one hand, as described above, it provides stability and independence but on the other hand it constrains them. The transferable quota system has developed well known side effects. Even though the quota system helps retired fishers to accumulate pension, at the same time it raises the cost of for entering into the industry (Carothers 2008: 2010; Langdon 2008: Karlsdóttir 2008). The price of quota has increased steadily for the past few years, and it is getting to the point that it restricts new people entering the fishing industry. Once, a fisher could buy a quota for \$1 or \$2 a pound but today it is hard to find a price less than \$5 a pound. As many fishers emphasized, a fisher must have some kind of a financial capacity to begin fishing on Lake Winnipeg. "Yeah, you have to have few bucks to get in to it" (A11), as one fisher told me with a smile on his face and then he added "You almost have to have...if your quota cost \$30,000; you have to have \$25,000 in the bank to buy it!" (A11).

As was mentioned earlier, the rule of thumb on Lake Winnipeg is that a fisher needs to hold 4 to 6 Quota Entitlements to be able to support them self and their family solely on fishing. However, it requires a lot of money to be able to reach that level:

You need 5 or 6 quotas, if you are only going to to make a living on fishing, you need 5 or 6 quotas. I paid \$50,000 for my last quota. That is almost a \$300,000 investment [all together], plus \$30,000 for a boat, motor and nets and whatever (A11).

A friend of mine, I talked to him this morning. His son is out east working, wants to come here and buy four quotas but four quotas would be nearly \$200,000! Where is that going to come from? (A03).

As we can see from these statements, the cost of acquiring quota was on the top of many fishers' minds when discussing the quota system in general. Finding quota to buy is not the hardest part, since every year some fishers retire and the only thing that a person

has to do is to be aware of what is going on in the community. As one fisher noted, "Fishers are retiring every year, who are putting quota for sale, if you keep your eyes and ears open, you can find out about it and buy whenever you want" (A10). Even though finding quotas to buy is relatively easy, finding the financial resources to do so is a completely different matter. There is a fishermen's loan program, that has been mentioned before but as one fisher pointed out, it is not suitable for them since many of them have to borrow a lot of money:

No, not really. I did not find it diffucult to find the quota. I found it difficult to get the money. The fisherman loan program is not much used by us because there is a lot money that we need that is not available through them. So, I just found the financing the whole thing difficult. I had to barrow a lot of money to get in to it, well, I thought it was a lot of money but I didn't find it hard to get quotas (A06).

This is the problem that faces young people and other newcomers into the fishery. The implementation of ITQs in other places has led to price inflation of quotas and concentration of quota into fewer hands (Carothers 2008; Dewees 2008; Karlsdóttir 2008; Pálsson 2006). As discussed earlier, a few measures have been taken on lake Winnipeg to prevent too much concentration of quotas. First of all, the quotas are supposed to be tied to the fisher's commercial license which mean that a company cannot buy quota (C.C.S,M. c. F90). Moreover, technically, fishers on Lake Winnipeg in the South Basin cannot hold more than 6 quota entitlements. However, it has slowly become more difficult to get into the business, and some fishers perceived this high cost of the quota as a constraint on meeting their goals.

No, it does not enhance [The ability to live well] it because it is really expensive. It is almost like a monopoly on the quota system now. All the big guys have it and they are not going to give it up and they keep buying more and they are keeping the prices of quotas way up there and they are just controlling it (A09).

I can also see how like some young guys, don't go to college and want to make a living by fishing, he can't! If he has no one to backing him up, that is kind of too bad. It is getting too unaffordable (A16).

I was lucky, I got some quota when I was younger, years ago when they were cheaper, but now they are very expensive. It is tough to get it into this for a young guy, it is tough to become a fisherman on Lake Winnipeg (A12).

That is how a few fisher described to me the difficulties for a fisher to enter the fishing industry. It is surely a difficult task, especially for younger ones to accumulate enough quota to be able to make a living only by fishing. The fishers who are new have to make a lot of sacrifices in order to succeed on Lake Winnipeg, as one fisher described to me:

It was a big [expense] for us. We did a lot of things. We sacrificed a lot to have quotas that we do have. First we had to save and scrimp and save and do without a lot...First we used to live in a two bedroom apartment...so we sacrificed (A17).

Despite the sacrifices that a fisher needs to make to get into the fishing industry, it still is a good investment, at least while the fish price does not drop too much. As they say, you have to work hard and sacrifice, until you get the fruit of your labour. Even then, as a few fishers pointed out, you have to work a few years before making any real financial rewards from fishing:

You have to buy more quotas to keep on. You can buy more quotas, but it is like \$6 per pound, so it would take you 3-4 years to make a profit. But then, your investment is always there. It is a good investment; I would say (A01).

It of course depends on the price you pay, if you pay 5 dollars per pound for quota and it takes you four years to pay off that capital cost, say five with the expenses. I don't know about other businesses, but I would think it's a pretty good investment (A02).

Most of my informants were reluctant to say if they wanted to change the system but a few of them stated that they would like to see whitefish out of the quota, a topic to which we will return shortly. However, a few of them mentioned that they did not want to

see the quota system change in a way that would allow the accumulation of quota in even fewer hands, since the current quota system enhances the fisher's ability to be independent. Some even connected their independence to the existence of FFMC;

This is individual quota entitlements, in individual person's names. This is not an instance that somebody can come – a fishing corporation – and buy up a thousand licences and open up a plant. I don't think that is where we want to go, and that's my fear for the future. I hate to see things like that. It has happened in Alberta, where quotas have gone on the auction block, and now the number of fishermen has decreased to half! (A04).

The quota system is good, it is in the fishermen's hands, and the power is in the fishermen's hands. That is how it has to stay. What I am afraid of is that if we lose the FFMC, the companies will come in and they talk to the politicians and say it is not fair and all of a sudden the companies will buy all the quotas. That has happened everywhere. Somebody might say it is a good thing, but I don't think it is, and then you just become a slave to the companies. (A11).

Despite being relatively satisfied with one of the most important management tools for Lake Winnipeg, the fishers still only rated their satisfaction with the government at 2.63 on a scale from 1-5. Moreover, 15% of the respondents reported that they would like to see some changes in their relationships with the government. Those concerns and the reason for low satisfaction with the government can be traced to their dissatisfaction with their interaction with the governance of the lake. A few of the fishers underlined how important the government was for their fishing and how influential they can be on their fishing decisions. The fishers did, however, complain about not having enough influence or say in the decision making process. They emphasized that the regulations that the government sets regarding the fisheries affect them the most since they invest heavily into the industry. Despite having the Lake Winnipeg Fisheries Co-management Board as a formal participatory process, they still feel that they have no influence on

decisions while others who have almost no personal stake in the fishery hold the reins of power:

I don't think fishermen have as much input as they should have. We are basically controlled by civil servants or by people that don't have a direct connection to the industry, and that is not right (A14).

Those who wanted to change also wanted to see the management of the lake be more collaborative, "I would like to see scientists, fisheries managers, fishers, even other users all together on the table and I think that is the way to do it!" (A06) as one fisher stressed. Another fisher stated that he wanted to see more openness from the government regarding the decision making process or at least see the fisher's input more welcomed by the government:

I would like to see more openness on behalf of our government with regards to setting season dates, setting regulations, looking at the sustainability of the lake, I would like to see more fishers' input, or at least welcomed (A10).

There was another source of dissatisfaction with the Provincial Government: some fishers were not happy with the Manitoba Natural Resource Officers. The main job of a Natural Resource Officer is to make sure that fishers are not "cheating" or using illegal mesh size and that the fishers are following other rules and regulations. Those fishers who mentioned Natural Resource officers usually had had some incidents with them in the past. One fisher described the officers' actions towards fishers as "domineering" while another thought they lacked respect for fishers and believed that they were sometimes unfair.

They try to charge you for very small offensives. If they cannot make out your licence number, if it is a four or nine, just small things like that. Your buoys are marked on both ends, but if they aren't marked properly you can get a fine (A07).

That is how one fisher described his experience with the Natural Resource Officers. Those who wanted to change the relationship with them, stated that many of the Natural Resource Officers were indeed fine. They checked their licence number and how many nets the fishers were being used and so forth. However, they pointed out that a few of the Natural Resource Officers were arbitrary in their decisions according their opinion. The fishers wanted the Natural Resource Officers to view and judge each case on its own merit. A couple of the fishers mentioned instances where a fisher had been fined for very small things when the fishers believed a warning should have been enough. Not everybody had a problem with the Natural Resource Officers and the majority of the fishers have the mindset described by one fisher:

It is much easier to follow the regulations then break them, because you don't have that mental stress or possibility of being caught. It is their job to catch you, and they won't give you any break because you are you! Do it right! And your life will be better (A02).

### **5.3.3. Family**

Just as with subjective well-being, family plays a significant role in the relational aspect of well-being of a fisher. The Governance Relational Assessment reinforces the idea that the Lake Winnipeg fishery is family oriented.

Everything I do with regards to my business, the ultimate reason for it is the well-being of my family. Income and all my decisions regarding on how hard I will work, when I work, it all relates to what I am doing that month, or week or day with my family. So it is clearly the most important one [i.e. dimension of his wellbeing] (A10).

That is how one fisher described the influence of his family on his fishing behavior. According to the Governance Relationship Assessment, 35% of my informants rated family as one of the relationships that influences their fishing the most. As stated before, many of them defined themselves as traditional fishing families, and there are

many families in the area that have been fishing for more than 100 years on the lake. Fathers and sons or daughters work together and eventually the children take over the business and that is how it has been done for decades. Even today, the fisher's family often takes an active part in the fishing industry. In some instances, married couples work together on the lake or other family members help out.

I remember one instance during the winter season that illustrates the importance of the family quite well. One February morning, on our way to the fishing ground, Kobbi and I got the news that two of the fishers that were working with Kobbi were sick and could not go out on the ice with us. Which was of course very unfortunate since we were short handed already. However, in order to go out on the ice, one of the fishers asked his son to step in and help, which he did. Having a family member who is ready to help can be really important. A family member who is ready to work on the lake can relieve the pressure for fishers to seek a hired hand. One fisher illustrated this by saying, "I am fortunate that I got my son so I don't have to look for a hired hand, which can be very heavy [to find a good hired hand] "(A08). As we will see, there has been a problem getting really good hired men, since fewer people are ready for the hard work of fishing as in the past.

The other importance of the family regarding relational well-being on Lake Winnipeg concerns the quota system. The fishers themselves did not explicitly state that family could possibly enhance their chances of acquiring more quotas, or getting into the fishing industry. However, the longer you stay in Gimli or around the South basin of Lake Winnipeg, the more aware you become that family does matter. Obviously, many of my informants are from fishing families. They were raised among fishers and, from a young

age, many of them helped their fathers with fishing. That experience of course helped them gravitate towards fishing. That is how many of them learned the skills that are required in fishing and probably made them better prepared for the job than someone else who was not raised within a fishing family. Aside from this apprenticeship function, family can act to support a young fisher who is eager to start his or her own fishing business. Children of fishers who want to take over the family fishing business still need to buy quota from the quota holder in the senior generation. I remember when I was talking to two fishers and we were discussing the quota system and I asked them whether they would pass the quota to their children. One of the fishers is on the verge of retirement and told me that he would pass his quota to his children. The other one suddenly added, "They will have to reimburse him a bit for the quota, because that it is his retirement". I was surprised to hear more fishers state that they would like to pass their quota to their children or even grandchildren as another fisher stated:

I was not sure if my son would continue in the business. I can transfer, or sell him or even give him the quota, so he can carry on (A02).

Yes, very much [like to see his children/grandchildren follow his path]. I have one grandson, and I do what I can to give him the opportunity. That is kind of why I am still hanging on to it [the quota] for a bit, to see if he likes it (A06).

Most fishers declared that they wanted to see their children or even grandchildren follow their path into fishing. Fishers know exactly how important it is to keep quota within the family, especially considering how hard it is to enter the fishing industry today. We have to keep in mind that the young fisher who takes over the family business still has to work extremely hard, just like everyone else to make a profit from his or her business. The difference, however, concerns the special access to experience; the

resources, and the opportunity to accumulate funds to purchase quota that are available to the young fisher compared to someone without a fishing family background.

"I am unique in that way [no relatives in the fishing industry]. I have no connections to the fisheries in any way except through my own experience in it. So I had to do everything by myself, pretty much" (A06).

That is how one fisher who had no family ties in the industry described his first steps in the industry. Some fishers get no help while others can build their business on a foundation that is already there.

As stated earlier, families together can accumulate more quota than individuals which enables them to make more income from fishing. There are a few families that have been relatively successful in acquiring quotas that in the end enable family members to work on the lake. We still have to be cautious, since I cannot generalize this idea to the whole lake. Nonetheless, the family can serve as a support for a fisher who is taking his or her first steps in the industry. That kind of a support can be in the form of financial support:

I bought my own quota. My dad financed my brother and me and we shared a quota and then we just made a move from there. From the money for that quota we bought more quotas, and we went separate ways and we started to buy quotas and just kept on, until we got a lot of quotas (A13).

When older fishers in the family retire from the fishery it provides an opportunity for the younger ones to rent or fish the quota to accumulate more savings to buy more quotas. It is difficult to say how common this practice is in Gimli, but it is a practice to some extent, as the following statement shows:

I bought quotas. First when I started fishing, my father was starting to retire, he was putting less fishing effort, so I picked up the fishing effort and caught fish on his quota to start with. Since then, I have purchased quota off him and I have purchased my own quota on the side from other fishers (A10).

## **5.3.4.** Other relationships

There were other relationships that the fishers perceived as important in terms of influencing their paths to meet their goals. Crew and other fishers were rated as fourth and fifth most important relationships but those two go hand in hand to some extent. Fishers who hold many quotas and have fairly large operations tend to have some crew, especially during the winter season. A good crew is especially important on a dangerous lake like Lake Winnipeg where an experienced worker can make a big difference. You want to be safe on the lake and it does make everything safer having an experienced crew that knows the lake and the dangers that the lake can present. However, there is a perception among some fishers that the quality of crew has become more variable. One fisher mentioned that the quality of crew can vary between years or even seasons. Another fisher pointed out that the main difference is that today many people do not want to work in the fishing industry:

Some of these guys don't want to work anymore. It was not like that years ago, where you could just point at people and say "you, you and you come with me". But now...the work ethic is not there, for some (A08).

By the same token, the relationship with other fishers is equally important, mostly due to safety reasons. Most fishers work by themselves on an open skiff and therefore they are dependent on other fishers if an accident happens on the lake or to help each other out in order to make fishing better;

We depend on each other for safety, and for getting along and helping each other out, telling where the good fishing is and so on (A14).

Fishers also recognized banks as one important institutional relationship that can affect their well-being. Ten percent of my informants mentioned banks as an important relationship for their fishing. The investment in starting a fishing business on Lake

Winnipeg is significant and you have to access to a fair amount of money for it. Today, banks have begun to accept quota as collateral and more fishers have borrowed money to buy quota and equipment. Since fishers have begun to borrow money from the bank, they need to meet their obligations towards the bank. This puts pressure on the fisher because he or she still has to pay the bank even when there is no catch.

Competing users were also mentioned as a relationship that affects fishers' well-being. Lake Winnipeg is a large lake and therefore it serves multiple purposes, from a source of drinking water, to a place for recreation and tourism. The fishers that mentioned competing users did that for two different reasons. First, all the other users of the lake were mentioned as a certain threat, such as sport fishing and the native fishing industry as one pointed out:

I am worrying about sport fishing, other people who want to get in to the fish, other people want to see us removed from the lake, worried about the First Nations and what is going to happen with that in the long term because the Canadian government is under a lot of pressure to yield some of their management resources, the ownership of the resources so it has to come from somewhere, it has to come from us and I am worried about that (A06).

On the other hand, competition with other fishers was mentioned, not as a threat, but rather as a motivation to work even harder on the lake:

It is always a competition; it is always good to compete. Even when I am fishing with my cousin, and between the two of us we have many, 16 nets in the water, we both try to go as hard as we can because we want to bring in more fish than the other one and it works good (A09).

Lastly, customers were mentioned by 5% of the fishers as an important relationship. While most fishers sell their fish solely to the FFMC, some have the annual special dealer licenses from the FFMC. They sell their product locally, directly to customers and to restaurants, retailers and hotels within the area. Those who mentioned

customers as an important relationship were happy with them but when fishers sell directly to customers they try to meet their demands which affect how they fish:

I can adjust the way I fish, different species, different sizes of fish, I can adjust my fishing to my customer's needs. That affects a little bit where I set my nets and what type of fish I am going after (A10).

These relationships with customers also have a link to fishers' income as was mentioned earlier. By selling directly to customers they receive higher prices for their product at the cost of having to spend a little bit more time in their shed, processing the fish.

Finally, there were two external relationships in particular that I sensed the fishers were extremely concerned could affect their well-being; Lake Winnipeg's water quality and Eco-certification. Even though not being mentioned in the Governance Relationship Assessment, the fishers acknowledge that these two relationships were important but they felt they had little control over either.

Concerns have been raised for the health of the lake in recent years (Zienkiewicz 2013). Excessive nutrient loading into the lake has been a major issue for the lake since it can create a very dangerous condition for some fish species that could change the dynamic of the ecosystem if nothing is done (Hayes 2001: Lake Winnipeg Task Force 2011: Scheffer 2001: Schindler and Vallentyne 2008). The fishers acknowledge the fact that the water quality can and will affect their fishing and they know how important it is to keep nutrients such as phosphorus in balance and try to prevent excessive amount of it running into the lake. However, it is important to note that the fishers see it as the responsibility of the Federal and Provincial governments to keep the nutrients in balance. The fishers have become tired of listening to politicians argue about the importance of

keeping the lake healthy while they feel that nothing is being done to reduce nutrient loading of the lake:

I think, that is a lot of noise about it, a lot of money being generated for all this research, but actually, it is just all talk. It is the typical way of dealing with it, talk, talk, give money, get studies, work hard, but they actually don't do anything (A06).

They always tried to blame the farmers, but now maybe Winnipeg will quit dumping all their sewage to the Red River and that happens more often and it is probably the biggest polluter right there, so..... We have to be stewards of it, because that is your livelihood. Every fisher wants to have a nice lake, because it is your livelihood (A11).

At the end of the day, the lake is not polluted. Not to say that we should not be watching the city of Winnipeg, we should, to anybody who is dumping anything into the watershed should be monitored. Not that we want to be overly police state like. If you are piling up your manure by the side of the river, so the river will wash it away in the spring, you cannot do that! There should be rules about stuff (A12).

The other external influence that has raised concern among some fishers in Gimli and the surrounding areas is the possible eco-certification of Lake Winnipeg. There has been a growing trend, especially in Europe towards market oriented strategies or ecolabeling sea products campaigns (Bush et al. 2013). Theoretically, the eco-labeling sea products is seen as a way to bring the general public to the table and let them influence resource extraction by changing their consumption patterns towards ethically caught fish (Christian et al. 2013). There has been talk around Lake Winnipeg that the lake might go through an eco-certification process which was probably triggered by the fact that Lake Erie decided to go through an independent assessment in 2013 (MSC 2013) and Lake Waterhen in Manitoba will go through a similar process in 2014 (MSC 2012). Some fishers on Lake Winnipeg are against eco-certification because they are concerned that it might change the quota system and therefore influence their material well-being. They

mentioned that in order to get eco-certification, the government would need to change the quota system to single species quota system, which would constrain their ability to concentrate on the most valuable species and lower their capacity for by-catch:

I catch 100% of my quota in pickerel [walleye], essentially all in pickerel. If the government would say to me "we will give you 80% of your quota in pickerel and 20% of whitefish that would cost me 20% of my income!" (A10).

This lake is sustainable, but what they want to do is split our quota species, they want to separate the three. That won't work because, if I catch all my sauger first, then I am going to quit fishing, because they are telling me I can't catch any more sauger. I cannot help it if sauger gets into my nets. They are not making any allowances for by-catch (A14).

For now, this is only a speculation since Lake Winnipeg has not yet gone through the eco-certification process and moreover, it is uncertain whether Lake Winnipeg will go through the process at all due to some fishers' resistance.

It is hard to measure the impact that these two external relationships have on the fisher's well-being today. However, it is important to keep those two relationships in mind for future studies and to monitor how their relationship to fisher's well-being will evolve.

# **5.3.5.** Relational well-being summary

According to the Governance Relational Assessment, social institutions such as the Freshwater Fish Marketing Corporation, the Provincial Government and the family were the most important relationships for the fishers. The fishers in Gimli were relatively happy with their social relationships. However, despite this general sense of satisfaction, they were willing to see some change in their relationships with those social institutions. Around 55% of the fishers wanted to see changes in their relationship with the FFMC.

Even though the majority of the fishers wanted to see some changes with the FFMC, it did not mean that they wanted to get rid of it. On the contrary, they perceived the FFMC as important for their business, and the relationship with the FFMC interlinked heavily with domains related to subjective well-being such as financial security and independence. One of the most interesting things about fishers' perceptions of their relationships with the FFMC was their contradictory views on its relationship to the independence that they value. On the one hand, they saw the FFMC as a constraint because of their inability to influence the prices it sets and because of the bureaucratic nature of the FFMC as a government run business. On the other hand, with reference to the past, they also saw the FFMC as a support for their independence and freedom.

The Provincial Government was perceived as the second most important relationship by fishers. The Provincial Government influences when and how the fishers can fish. One of the most effective management tools that the Provincial Government has is the quota system. The fishers are apparently relatively happy with the quota system. The link between the quota system and independence again shows how interlinked the well-being dimensions are for fishers. The quota system was also perceived as important for financial security since the ITQ system enabled them to sell the quota as a retirement fund. However, the fishers hold contrary views on the ITQ system due to the side effects that the system has developed. The quotas have become more expensive for people to buy which makes it harder for new people to enter the business. Regardless of being relatively happy with the quota system, 15% of the sample wanted to see some changes with their relationship with the Provincial Government. The unhappiness with the Provincial Government could be traced to the fact that the fishers believed that their voice was not

be heard within the government and wanted to be more involved in the decision making process.

Family was the third most important relationship in the Lake Winnipeg fishery. Family often acts to relieve the pressure of finding a good hired hand since family members are often ready to make contributions. The family is also seen as a support network, especially for those who are entering the fishery. In various ways, family enables fishers to acquire quota. In some instances, an older family member rents quota to a younger one, or older fishers pass or sell the quota to them.

## 6.0 Concluding remarks

Despite the importance of small scale fisheries around the world, they have often been overlooked by policy makers (Allison 2001; Allison and Ellis 2001; Berkes et al 2001; Berkes 2003). However, due to the embeddedness of small-scale fisheries in place-specific social institutions, small-scale fisheries bring various challenges to the table for resource management that makes previous methods unsuitable (Berkes et al 2001). Because of this uniqueness of small scale fisheries, McGoodwin (1990) and Berkes et al. (2001) encourage all of us to think beyond traditional methods in resource management and ask us to begin to collect broader information on small-scale fisheries. That is the main purpose of this thesis, which is to shift our attention away from traditional models and concentrate rather on the social reality of the fisher.

A well-being framework developed by the ESRC Well-being in Developing Countries Research Group and adapted by Sarah Coulthard et al. (work in progress) was chosen because it takes into account the material, subjective, and relational situation of the fisher. The advantage of the methodology is that fishers evaluate themselves in their social surroundings and become therefore the focal point of the examination. It is important to recognize that the methodology is a heuristic way to analyze a person's well-being: all three dimensions of well-being (material, subjective and relational) interpenetrate each other and it is hard to separate them from each other. When aggregated, responses received in a well-being analysis can shed light on the main drivers that influence well-being for a particular group.

Lake Winnipeg has through the decades been poorly represented in the academic literature (Ayles & Rosenberg 2004; Franzin et al. 2003; Wassenaar & Rao 2012). Nonetheless, Lake Winnipeg supports a small-scale fishery that produced an annual

average of 6.4 million kg between 2003 to 2010 (Manitoba Conservation and Water Stewardship, Fisheries Branch 2011). Walleye is the biggest portion of the total catch (Manitoba Conservation and Water Stewardship 2011). The largest portion of the year's catch is harvested during the open water seasons (spring and fall seasons). For the last two decades, catches have been large in a historical comparative sense. However, the earlier history of the Lake Winnipeg fishery was marked by fluctuating catches and, more recently, by diminishing economic returns. The fishery hit its nadir at the end of 1960s. Catch declined considerably and almost no one made any income out of fishing. On top of that, the lake was closed for two years due to mercury pollution (Gislason 1999). These unfortunate events triggered a sweeping institutional response from the federal and provincial governments which reversed the decline. In 1969 the Federal Government established the Freshwater Fish Marketing Corporation to be the main pillar of marketing of freshwater fish in Canada. Around the same time, the Provincial Government implemented a Quota Entitlement system which in 1986 was made transferable among active fishers. This unorthodox combination of social institutions has been central to increasing the stability of fishery.

Even though the history and the main role of the two social institutions are relatively well known locally, the dynamics of the fishery are poorly understood in the academic literature (Franzin et al 2003). These two institutions have had positive impacts on the material well-being of the fishers; however, fisher's lives are more complicated than just this one dimension. The function of these two institutions for the other aspects of fisher's lives has not been elaborated in the academic literature and, in fact, we do not know much about how their influences have been mediated through other fisher social

institutions. The FFMC and the quota system affect fisher well-being; not only as a safety net, but relationally and subjectively as well.

Well-being analysis might help policy makers on Lake Winnipeg to gain a better understanding of the dynamics of the fishery. Fishers in the Gimli area are doing relatively well in terms of material well-being. For most of the individual fishers in the area, the peak season is in the first three weeks of spring season and then the last three weeks in the fall. Daily income during the peak seasons range from \$300 – \$1,000 after expenses. The leanest months in terms of making income from fishing are during the winter months where a bad daily income can fluctuate between 0 - \$100. Everything above \$300 after expenses would be considered a good income during the winter months. The quota system is strongly interlinked with material well being, since the more quotas a fisher holds, the more potential income the fisher can get from fishing. Some fishers, however, do not hold enough quotas and have to supplement their fishing with other sources of income.

Current policies regarding Lake Winnipeg seem also to be working in the areas of relational and subjective wellbeing, as indicated by the Person Generated Index tool. Family, work, financial security, honesty and independence were the most dominant aspects that fishers mentioned that they need to have in order to live well. It was noticeable how happy fishers seem to be with their lives and in fact, they were very content with the areas that they thought were important because they were reluctant to allocate points to the domains that they thought they needed to change to improve their lives. The aspects of life that the fishers believed to be important all interlinked to each other in one way or another. Domains such as family, work and financial security were

heavily interlinked in that work and financial security were seen as important means to support their families. What was also interesting was that fishers connected work with other important aspects of life such as independence, freedom and self-respect. They linked those attributes to work or, in other words, their work as a fisher provided them independence, freedom and self-respect since they could work for themselves without interference by a boss.

Social institutions or relationships with others were also prevalent in the subjective well-being of fishers. The vast majority of fishers talked about family as central to living a good life. They stated that they get their support from their families and that their fishing business revolves around their families. They also talked about the importance of being honest and accepted in the community in order to have a strong fishery. However, social relationships are reflected best in the importance of financial security for fishers since they sell most of their fish to the Freshwater Fish Marketing Corporation.

Relationships with either other people or institutions can often set limitations on what people can do with what they have in life (White 2010). For Gimli fishers, the FFMC, the Provincial Government and family are the most influential relationships according to the Governance Relationships Assessment tool. Fishers seemed to be relatively happy with those relationships; however, fishers were also not reluctant to wish for changes in their relationships with those social institutions. More than a half of my sample wanted to make changes to their relationship with the FFMC and one quarter of the sample wanted to see changes in their relationship to the Provincial Government.

The Freshwater Fish Marketing Corporation was perceived as the most important social relationship for Gimli fishers. The importance of the FFMC can be traced to the impacts it has on the material well-being of fishers. Fishers sell most of their catches to the FFMC since the FFMC is required to buy all the fish that is offered to it. The FFMC sets the price for the fish, which obviously affects the material well-being of fishers. The reason why the majority of the fishers wanted to see changes in their relationship with the FFMC is because they think the price that they receive from the FFMC should be higher. Usually, they made a reference to the retail price to support their argument. However, others pointed out that the FFMC has become too inefficient and too bureaucratic to be able to offer good prices. Despite wanting changes, they still wanted to hang onto FFMC. The reason for their belief in the FFMC is mainly because of the history of the fishery and that the FFMC compensates for its drawbacks by facilitating reliability of income, independence and freedom. Fishers mentioned how important it was for them to have a reliable buyer for their fish. They always have a guaranteed buyer which makes planning easier for them. The FFMC can be seen as supporting fishers' subjective values of freedom and independence. With the FFMC, they do not have to market or sell their fish by themselves but instead they have the freedom to concentrate on fishing and spending time with family. Additionally, a few of the fishers felt that they had more independence with the FFMC in the market by referring to the injustice of earlier marketing arrangements when fishers were indentured to fish companies.

The Provincial Government was the second most important social relationship according to the fishers. Generally, the fishers were happy with the provincial government, especially when asked about the quota system. The quota system supports

subjective values such as financial security and independence. Fishers emphasized the importance of the quota system regarding financial security. They pointed out that by buying a quota they were essentially ensuring themselves an income. As they said, 3,788 kg of quota secures them roughly \$9,000 in gross income. Additionally, fishers pointed out that with the current quota system, they could sell their quota for their retirement fund which enhances their financial security later in life. They said that the quota system supports their subjective value of independence and, again, the memory of earlier marketing arrangements was a factor here. Fishers emphasized that, with the current quota system, power was in fishers' hands. They also remarked that by buying a quota, only fishers earned the income that was derived from the quota, and they did not have to pay any share to a company. The quota system is not perfect, however, and fishers raised concerns relating to the cost of acquiring a quota share. The price for quota shares has increased considerably in recent years, from \$1 - \$2 a pound to \$6 a pound. A few fishers in Gimli were concerned that the price of quota might prevent new and younger fishers from entering the fishing industry. Otherwise, fishers did not want to change the quota system, except maybe to take the whitefish out of the quota, or separate it from sauger and walleye. Nonetheless, 15% of my sample wanted to see some changes in their relationship with the Provincial government. This unhappiness with the Provincial Government can be traced to the fact that fishers believed that their voice is not being heard within the Provincial Government or not being welcomed enough.

Family was the third most important relationship for fishers. Families serve multiple roles, including providing a reliable source of crew and helping with accounting and other work on shore. It is common that family members of a fisher are always ready to

make some contribution to the family business. Fishers also perceive the family as their support network, especially for those who are entering the fishing industry. A big fishing family that has a few fishing members can acquire more quota entitlements, which would increase total potential income from fishing. Moreover, when a fisher is a part of a fishing family, it is easier for young fishers to rent quota from the older ones or to buy the quota with some discount.

These points show how important social relationships are for the well-being fishers in Gimli. They also shed light on the dynamics of social institutions, including the FFMC and the quota system. These institutions not only affect the material well-being of fishers but also support their subjective values. Even though these points help us to gain an understanding of the dynamic of the fishing industry in Gimli, we cannot generalize the results of this study to other parts of the lake.

There are several distinctive characteristics of my data that should be acknowledged. As can be seen in the table 1 (page 19) the average age of my informants is relatively high, reflecting the age structure of Gimli where the median age is 56.2 years old (Statistics Canada 2012). Nonetheless, my sample is biased towards experienced fishers as the majority of my sample has 30 years of experience or more. These fishers have already established their fishing operations and do not have to worry about buying more quotas. Only 30% of my informants are under 50 years of age and are still in a state where they are building up their operation. This could possibly reflect a problem in the South Basin, where it has become increasingly hard to buy quota entitlements and younger people might be looking for other job alternatives.

Another issue to keep in mind is the fact that only a small minority of my informants is female because I concentrated on active fishers. Most women involved in the fishery work on shore in roles such as book keeping and finance.

The third issue is that marginalized fishers are not as prevalent in my sample as I would have liked. There are few who only fish part time and need to supplement their fishing with other employment. One of the reasons for the lack of marginalized fishers in my sample is that it was much harder to find them and gain their trust in comparison to the established fishers. Four months of fieldwork was simply not long enough to cultivate relationships with this group. I am also aware that the South Basin and especially Winnipeg beach and the Gimli area are exceptional due to that fact that more quotas are held in that area than in others. This means that fishers in the South Basin possibly have higher incomes than others elsewhere. Likewise, the voices of hired hands and those who have left the fishery are lacking. It is likely that those groups have different perceptions of the current situation than those who already have access to the resource.

Finally, other communities around the lake are not as dependent on walleye as South Basin fishers are missing in this study. The proportion of whitefish gets larger in the catch further north on the lake. Some communities on the North Basin also do not have job alternatives other than fishing which may influence their perceptions of important relationships. The other difference is that communities like Norway House hold community quotas that are allocated to the members of the community. The greater importance of community institutions in the North Basin may differently shape perceptions of the FFMC and the quota system.

Even though we cannot generalize the results of my research for the whole lake, the results nonetheless still give us a good indication of the dynamics of the fishery on Lake Winnipeg and shed some lights on recent developments of the quota system and the relationship with Freshwater Fish Marketing Corporation. My research provides a good starting point for further more comprehensive studies.

### **6.1** The Future of Lake Winnipeg

Overall, fishers in Gimli are relatively optimistic for the future of the fishery. At the moment, fish appear to be abundant but, as one fisher stated: "I mean, the fish can drop off tomorrow, could be gone. Hopefully it will stay the same. It looks good now, and it looks healthy and the lake has a lot of fish right now" (A01). However, close monitoring of the fishery will required over the next 4-5 years. Fishers have become tired of hearing news stating that the lake is polluted or predictions of the collapse of the fishery as one fisher pointed out:

I am optimistic about the next 3-4 years, but after that, who knows? When fishing is good you live in fear but when fishing is bad, you live in hope. So, in the further future, we can always hope that things go well. We have been living in fear for awhile that fishing might drop off (A02).

The fishers realize that excessive nutrient loading cannot go on forever without consequences. They know that it might hurt their fishing but fishers perceived it as beyond their control.

As the Person Generated Index revealed, there is a developing gap between fisher's subjective value of financial security and the reality of stagnating prices paid to fishers by the FFMC. This subject was already touched upon through the Governance Relationship Assessment but there seems to be growing disgruntlement among fishers

with the price of fish that offered by FFMC. Some fishers raised their concerns regarding the development of prices. As one fisher noted, "I am pretty optimistic about the fisheries, but I am not optimistic about the price they are paying" (A05).

As we saw earlier, despite some fishers being irritated by the inability of the FFMC to increase prices, they still saw the FFMC as an important tool to match their subjective values of freedom and independence. However, fishers are attentive to the fact that there is a serious institutional threat facing the fishery: the possible closure or change in mandate of the Freshwater Fish Marketing Corporation. Fishers have seen what happened to the Canadian Wheat Board and they are worried that the Freshwater Fish Marketing Corporation will receive the same fate. Some fishers were not in favor of the idea of market liberalization:

If you think that people are beating a path to your door to buy your fish, you better give your head a shake because we have to compete with all the farmed fish, it's just a huge market out there! (A02).

As the table 4 showed, the FFMC is extremely important for the fishers since the FFMC buys a big proportion of the catch while only small fraction of it is produced privately. If the mandate of the FFMC changes, it could possibly have great impact on the fishers and how they will act on the market. Not only might fishers have to compete with each other, but they might also have to compete directly with fish producers around the world. Again, if Table 4 is kept in mind, we can imagine that fishers would try to sell more of their product locally or to Winnipeg, which could possibly lead to oversupply and declining prices. If the FFMC is disbanded, fishers will have to market their own product and more time will be spent on other things than their preferred activity of fishing. Changes to marketing arrangements could therefore easily negatively affect

fisher job satisfaction and subjective well-being (Poggie and Pollnac 2006; Carothers 2008).

At the same time, fishers cannot afford further price declines, especially those who hold only 1 to 3 Quota Entitlements. The danger is that such fishers might perceive the industry as unprofitable and therefore possibly sell their quotas. "The next years will be challenging and we will probably see 50% of fishing businesses go under" (A15) one fisher emphasized. The same fisher raised added his concerns that the continual decline of price would result even more accumulation of quotas to fewer hands as has happened elsewhere (Pálsson 2006; Langdon 2008 and Carothers 2008):

We will see this in the next 5 years. People will leave [the fishery as owners], yes, [but] they will [still] be around. We will own the lake. There is no question that people around here will have all this fish and there will be enough fish. We will go ahead and ask the premier for 12 quotas and then 18 quotas. People will sell, buy and there will be employees in fishing boats" (A15).

Should the prediction of this fisher – whose perspective is exceptional – be realized it would hasten the process of quote commodification and consequent price inflation. Young would-be fishers would thus face even greater difficultly in entering the industry. As one fisher pointed out, young and new fishers who have invested heavily in the industry cannot afford any downturn in catches or prices:

The first time when there is a down turn in fishing, and you cannot fill your quota, and you have borrowed all this money and now you have to pay it back whether you can fill your quota or not (A14).

The fishers are therefore aware of how influential the government is for the future of the FFMC and the fishery on Lake Winnipeg as a whole. Like one fisher emphasized: "It always depends on the government. Everything they want to do, they will do it" (A08).

The fishers themselves also know their own responsibility, and that is to contribute to sustainability of the lake for the future generation and their well-being. As one fisher reminded us that is should be our goal:

It [Lake Winnipeg] is something that has been passed to us. It is something that we have been told to carry. It is a torch that we keep burning. Now, we have to make that fire burn brighter, how? And that is my passion for Lake Winnipeg. To make it burn brighter. To make it better, better fisheries for everyone in the future. I am not going to do this forever, although, I would like to... (A04)

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### **Appendix A: Price List for 2012**<sup>7</sup>

Effective May 6, 2012

#### FRESHWATER FISH MARKETING CORPORATION FFMC 2012/13 INITIAL PRICES TO FISHERS PRICES BELOW ARE S/KG FOB WINNIPEG, MANITOBA

(FREIGHT COSTS MUST BE DEDUCTED TO ARRIVE AT LAKESIDE PRICES)

-	FREIGHT COSTS N	icor be bedeered	PRODUCT		May - Dec	Jan - Apr	Jan - Apr
SPECIES	GRADE	CITE / VC	CODE		2012		2013
SPECIES	GRADE	SIZE / KG	CODE	2012		2013	
				S/kg	\$/Ib	\$/kg	\$/lb
WHITEFISH	SML	(.4585 kg)	01201	\$1.050	\$0.476	\$1.550	\$0.703
EXPORT DRESSED	MED	(.85 - 1.3 kg)	02201	\$1.580	\$0.717	\$2.180	\$0.989
	LGE	(1.3 - 1.8 kg)	03201	\$1.700	\$0.771	\$2.300	\$1.043
	JBO	(Over 1.8 kg)	04201	\$2.000	\$0.907	\$2.600	\$1.179
WHITEFISH	SML	(.4585 kg)	01203	\$1.000	\$0.454	\$1.400	\$0.635
OTHER DRESSED	MED	(.85 - 1.3 kg)	02203	\$1.000	\$0.454	\$1.400	\$0.635
	LGE	(1.3 - 1.8 kg)	03203	\$1.000	\$0.454	\$1.400	\$0.635
	JBO	(Over 1.8 kg)	04203	\$1.000	\$0.454	\$1.400	\$0.635
	JBO	(Over 1.6 kg)	04203	31.000	\$0.434	31.400	\$0.033
WHITEFISH HEADLESS	LAKE RUN	ALL SIZES	05307	\$1.000	\$0.454	\$1.400	\$0.635
WHITEFISH DOWNGRADED		ALL SIZES	05308	\$1.000	\$0.454	\$1.400	\$0.635
WHITEFISH ROE			05109	\$5.700	\$2.586	\$0.000	\$0.000
PICKEREL	SML	(27 cm - 41 cm)	01110	\$2.420	\$1.098	\$2.800	\$1.270
ROUND	MED	(41 cm - 52 cm)	02110		SPECIAL O	RDER ONLY	
	LGE	(Over 52 cm)	03110			RDER ONLY	
PICKEREL BELLY SPLIT	SML	(27 cm - 41 cm)	01210	\$2.420	\$1.098	\$2.800	\$1.270
PICKEREL	SML	(25 cm - 30 cm)	01310	\$3.850	\$1.746	\$4.550	\$2.064
HEADLESS	MED	(30 cm - 37 cm)	02310	\$4.100	\$1.860	\$4.800	\$2.177
	LGE	(37 cm - 41 cm)	03310	\$3.750	\$1.701	\$4.450	\$2.019
	JBO	( Over 41 cm)	04310	\$3.150	\$1.429	\$3.850	\$1.746
SAUGER ROUND	LAKE RUN	(Over 27 cm)	05120	\$2.190	\$0.993	\$2.490	\$1.129
SAUGER BELLY SPLIT	LAKE RUN	(Over 27 cm)	05220	\$2.190	\$0.993	\$2.490	\$0.000 \$1.129
SAUGER HEADLESS	LGE	(Over 27 cm)	03320	\$3.620	\$1.642	\$4.220	\$1.914
PERCH ROUND	LAKE RUN	(Over 20 cm.)	05184	\$1.940	\$0.880	\$3.500	\$1.588
		(0.0120000)			4		
NORTHERN PIKE	MED	(.9 - 1.9 kg)	02240	\$1.100	\$0.499	\$1.100	\$0.499
DRESSED	LGE	(1.9 - 4.1  kg)	03240	\$1.100	\$0.499	\$1.100	\$0.499
DRESSED	JBO		12 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m		\$0.499		\$0.499
	JBO	(4.1 - 6.1 kg)	04240	\$1.100	30.499	\$1.100	\$0.499
NORTHERN PIKE HEADLESS	MED	(1.1 - 3.5 kg)	02340	\$1.200	\$0.544	\$1.200	\$0.544
	LAKE RUN	Small & Large	05340	\$1.100	\$0.499	\$1.100	\$0.499
NORTHERN PIKE ROE			05149	\$0.000	\$0.000	\$5.000	\$2.268
LAKE TROUT	SML	(.7 - 1.8  kg)	01230	\$0.910	\$0.413	\$0.910	\$0.413
DRESSED	MED	(1.8 - 2.7  kg)	02230	\$0.910	\$0.413	\$0.910	\$0.413
	LGE	(2.7 -3.6 kg)	03230	\$0.850	\$0.386	\$0.850	\$0.386
	7.000				N. A.		
LAKE TROUT HEADLESS	LGE	(Over 3.1 kg)	03330	\$0.690	\$0.313	\$0.690	\$0.313
GOLDEYE	SML	(.2035 kg)	01283	\$0.460	\$0.209	\$0.460	\$0.209
BELLY SPLIT	MED	(.3545 kg)	02283	\$3.330	\$1.510	\$3.330	\$1.510
	LGE	(Over .45 kg)	03283	\$3.490	\$1.583	\$3.490	\$1.583
	LGE	(Over .45 kg)	03203	33.490	φ1.303	33.490	φ1.203
TULLIBEE HEADLESS	LAVEDIN	All Ciona	05250	\$0.800	\$0.262	\$1.000	\$0.454
	LAKE RUN	All Sizes	05358		\$0.363		\$0.454
TULLIBEE ROE			05159	\$5.850	\$2.654	\$0.000	\$0.000
DICONDILLUE A DI ECC	) (FFF		02202	60.020	60.122	60.020	eo 122
INCONNU HEADLESS	MED	(Under 1.4 kg)	02382	\$0.930	\$0.422	\$0.930	\$0.422
	LGE	(Over 1.4 kg)	03382	\$2.580	\$1.170	\$2.580	\$1.170
			100000000000000000000000000000000000000	900 Horesto	1922 TO STATE OF STAT	555 200000	
CARP HEADLESS	LAKE RUN		05370	\$0.150	\$0.068	\$0.150	\$0.068
CARP ROE			05179	\$2.000	\$0.907	\$2.000	\$0.907
WHITE BASS	MED	(23 cm - 28 cm)	02191	\$0.120	\$0.054	\$0.120	\$0.054
ROUND	LGE	(Over 28 cm)	03191	\$0.540	\$0.245	\$0.540	\$0.245
	LOL	(O'CL ZO CIII)	00171	50.540	Q0.2.10	50.540	40.270
	1		i	1		I	
MULLET HEADLESS FINS OFF	LAKE RUN		05460	Two Ti	r Pricing Ties	1 - \$0.80 Tier	- \$0.25

 $<sup>^{7}</sup>$  The Price list for 2012 provided by FFMC. Interested individuals should contact FFMC for sources.

## FFMC 2012/13 INITIAL PRICES TO FISHERS FOB WINNIPEG LOOSE - EFFECTIVE MAY 6, 2012

www.covueed.com.upu	20.000 00000000		PRODUCT	May - Dec	May - Dec	Jan - Apr	Jan - Apr
SPECIES	GRADE	SIZE / KG	CODE	2012	2012	2013	2013
				\$/kg	\$/lb	\$/kg	\$/lb
WHITEFISH	SML	(.4585 kg)	01201	\$1.050	\$0.476	\$1.550	\$0.703
EXPORT DRESSED	MED	(.85 - 1.3 kg)	02201	\$1.580	\$0.717	\$2.180	\$0.989
	LGE	(1.3 - 1.8 kg)	03201	\$1.700	\$0.771	\$2.300	\$1.043
	ЈВО	(Over 1.8 kg)	04201	\$2.000	\$0.907	\$2.600	\$1.179
	746-7200	(=	M11/1/1/2010/05/		0000000000	50000,000000000000000000000000000000000	Approximately (Control)
WHITEFISH	SML	(.4585 kg)	01203	\$1.000	\$0.454	\$1.400	\$0.635
OTHER DRESSED	MED	(.85 - 1.3 kg)	02203	\$1.000	\$0.454	\$1.400	\$0.635
	LGE	(1.3 - 1.8 kg)	03203	\$1.000	\$0.454	\$1.400	\$0.635
	JBO	(Over 1.8 kg)	04203	\$1.000	\$0.454	\$1.400	\$0.635
WHITEFISH HEADLESS	LAKE RUN	ALL SIZES	05307	\$1.000	\$0.454	\$1.400	\$0.635
WHITEFISH DOWNGRADED		ALL SIZES	05308	\$1.000	\$0.454	\$1.400	\$0.635
WHITEFISH ROE			05109	\$5.700	\$2.586	\$0.000	\$0.000
PICKEREL	SML	(27 cm - 41 cm)	01110	\$2.420	\$1.098	\$2.800	\$1.270
ROUND	MED	(41 cm - 52 cm)	02110		SPECIAL O	RDER ONLY	
Committee of the Commit	LGE	(Over 52 cm)	03110			RDER ONLY	
PICKEREL BELLY SPLIT	SML	(27 cm - 41 cm)	01210	\$2.420	\$1.098	\$2.800	\$1.270
PICKEREL	SML	(25 cm - 30 cm)	01310	\$3.850	\$1.746	\$4.550	\$2.064
HEADLESS	MED	(30 cm - 37 cm)			\$1.740		\$2.004
HEADLESS	LGE	,	02310	\$4.100	- C	\$4.800	\$2.177
	100000000000000000000000000000000000000	(37 cm - 41 cm)	03310	\$3.750	\$1.701	\$4.450	
	JBO	(Over 41 cm)	04310	\$3.150	\$1.429	\$3.850	\$1.746
SAUGER ROUND	LAKE RUN	(Over 27 cm)	05120	\$2.190	\$0.993	\$2.490	\$1.129
SAUGER BELLY SPLIT	LAKE RUN	(Over 27 cm)	05220	\$2.190	\$0.993	\$2.490	\$1.129
SAUGER HEADLESS	LGE	(Over 27 cm)	03320	\$3.620	\$1.642	\$4.220	\$1.914
PERCH ROUND	LAKE RUN	(Over 20 cm.)	05184	\$1.940	\$0.880	\$3.500	\$1.588
NORTHERN PIKE	MED	(.9 - 1.9 kg)	02240	\$1.100	\$0.499	\$1.100	\$0.499
DRESSED	LGE	(1.9 - 4.1 kg)	03240	\$1.100	\$0.499	\$1.100	\$0.499
	ЈВО	(4.1 - 6.1 kg)	04240	\$1.100	\$0.499	\$1.100	\$0.499
NORTHERN PIKE HEADLESS	MED	(1.1 - 3.5 kg)	02340	\$1.200	\$0.544	\$1.200	\$0.544
	LAKE RUN	(Small & Large)	05340	\$1.100	\$0.499	\$1.100	\$0.499
NORTHERN PIKE ROE		52.5	05149	\$0.000	\$0.000	\$5.000	\$2.268
LAKE TROUT	SML	(.7 - 1.8 kg)	01230	\$0.910	\$0.413	\$0.910	\$0.413
DRESSED	MED	(1.8 - 2.7 kg)	02230	\$0.910	\$0.413	\$0.910	\$0.413
	LGE	(2.7 -3.6 kg)	03230	\$0.850	\$0.386	\$0.850	\$0.386
LAKE TROUT HEADLESS	LGE	(Over 3.1 kg)	03330	\$0.690	\$0.313	\$0.690	\$0.313
COLDEVE	ey II	(20, 251)	01202	60.460	60.200	60.460	60.200
GOLDEYE	SML	(.2035 kg)	01283	\$0.460	\$0.209	\$0.460	\$0.209
BELLY SPLIT	MED	(.3545 kg)	02283	\$3.330	\$1.510	\$3.330	\$1.510
	LGE	(Over .45 kg)	03283	\$3,490	\$1.583	\$3.490	\$1.583
TULLIBEE HEADLESS	LAKE RUN	All Sizes	05358	\$0.800	\$0.363	\$1.000	\$0.454
TULLIBEE ROE		and the company of th	05159	\$5.850	\$2.654	\$0.000	\$0.000
INCONNU HEADI ESS	MED	(Under 1.4 kg)	02202	S0 020	\$0.422	60.020	\$0.422
INCONNU HEADLESS	20.000.000		02382	\$0.930 \$2.580	5000000000	\$0.930	\$0.422
	LGE	(Over 1.4 kg)	03382	\$2.580	\$1.170	\$2.580	\$1.170
CARP HEADLESS	LAKE RUN		05370	\$0.150	\$0.068	\$0.150	\$0.068
CARP ROE	LAKE KUN		05370	\$2.000	\$0.008	\$2.000	\$0.008
	1		001/7	φ2.000	QU.701	\$2.000	90.707
WHITE BASS	MED	(23 cm - 28 cm)	02191	\$0.120	\$0.054	\$0.120	\$0.054
ROUND	LGE	(Over 28 cm)	03191	\$0.540	\$0.245	\$0.540	\$0.245
MULLET HEADLESS FINS OFF	LAKE RUN		05460	Two Ti	or Pricing - Tio	 	2 - \$0.25
MOLLET HEADLESS FINS OFF	LAKE KUN		03400	1 WO 110		1 - 50.60 Her.	- 30.23
			1				

**Appendix B: Questionnaires**<sup>8</sup>

**Subjective Well-being** 

PART 1- Quality of life score						
Step 1: Identifying aspects of life that are important for living well	Step 2: Scoring Satisfaction in Each Area	Step 3: Spending Points – what needs to be changed?				
We would like you to think of the areas of your life that are most important for you to be able to live well in this community.  These can be things that you:  need to have  need to be able to do  the sort of person you need to be	In this part we would like you to score your level of satisfaction in the areas that you mentioned.  This score should show how you felt about this area of your life over the past MONTH. Please score each area using this scale:	If you were able to change these areas of life what would you seek to change (and WHY)? We want you to 'spend' 10 points to show which areas of your life you feel are most important to change in order to improve your overall quality of life.				
Please tell us up to five areas in order of IMPORTANCE	5 = Excellent - Exactly as you would like to be 4 = Good - Close to how you would like to be 3 = OK, but not how you would like 2 = Poor but not the worst you could imagine 1 = Bad - The worst you could imagine	Spend more points on areas you feel are most important for you to change and less on areas that you feel are not so important.  You can choose to spend no points on one or more areas, but you can't spend more than 10 points in total.				
	<b>→</b>					
	<b>—</b>					
	<b>→</b>					
	<b>→</b>	<b>→</b>				

#### 3.0 Material Wellbeing

3.2 In which months do you earn the most income (From Fishing)? (if not months, in which seasons do you earn the most income?)

What is a typical "good" daily income (During peak season) for you? (If not daily income, season income instead)

<sup>&</sup>lt;sup>8</sup> Adapted from Coulthard et al. Unpublished.

Which months do you have the lease income (Lean Season)

What is a typical low daily income during these months?

3.3 Over a typical year, what proportion of your household income comes from fishing? (please circle)

None	Less than half	About half	Most of the income	All income
(0%)	(25%)	(50%)	<b>(75%)</b>	(100%)

- 3.4 Please state any other sources of income to your household\_\_\_\_\_
- 3.5. What would you say is your biggest expenditure in fishing? How much expanses is one fishing trip or season?

#### 5.0 Relational Wellbeing

- 5.2 Could you identify three relationships that you perceive as being important for your fishing in terms of how strongly they influence your fishing behaviour?
- 5.2.2 Could you rate how important these relationships influence your fishing decision? With 1 being most important?

1.	(Most important)	Why?
2.		Why?
3.		Why?

5.2.3 Of these 3 most important relationships, how satisfied are you with each using a scale from 1-5 where 1 is very dissatisfied and 5 very satisfied.

1. Why?	Satisfaction (circle)	1	2	3	4	5
2. Why?	Satisfaction (circle)	1	2	3	4	5
3.	Satisfaction (circle)	1	2	3	4	5

5.2.4 If you could, which of these relationship would you change, and why?

#### **Appendix C: Consent Form**

(Printed on U. of M. letterhead)

#### **Consent Form**

#### **Research Project Title:**

Lake Winnipeg: Well-being among Gimli Fishers

**Researcher:** Sölmundur Karl Pálsson for Master of Anthropology Thesis

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and understand any accompanying information.

- 1. The objective of the study is to gain an insight into the social realities of Gimli fishers through a social wellbeing-based analysis with particular attention to the social and ecological determinants of wellbeing. It is hoped that this research will enhance our understanding of the composition, abundance, and dynamic of the fisher communities on Lake Winnipeg.
- 2. Your participation in this research will involve responding to the researcher's questions to the extent that you are able and willing to do so.
- 3. The risk involved in this research is minimal meaning that it is not greater than that which a person would experience in everyday life.
- 4. The interview and related assessment questionnaires is expected to require between 60 80 minutes. It will be recorded on a small audio recording device, if you consent. The researcher will also take written notes during the interview. The interview will take place at a location that is mutually agreeable between you and the researcher.
- 5. The material collected will be analyzed and interpreted by the researcher and will become a part of the written thesis document. However, this thesis will not in any way allow others to identify you unless you specifically request otherwise. Further, to protect your confidentiality, all interview material will be kept in password protected file for the duration of the project. The only other person beside the researcher who will have access to this material will be the researcher's advisor, Dr. Derek Johnson.
- 6. There will be no monetary compensation for your participation.
- 7. Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in this research project and that you agree to

participate as a subject. In no way does this waive your legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refreain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent so you should feel free to ask for clarification or new information throughout your participation.

Principal Researcher: Sölmundur Karl Pálsson 204.xxx.xxxx

Advisor: Derek Johnson 204.xxx.xxxx

This research has been approved by the Joint Faculty Research Ethics Board at the University of Manitoba. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Ethics Secretariat at 204.474.7122, or e-mail <a href="margaret\_bowman@umanitoba.ca">margaret\_bowman@umanitoba.ca</a>. A copy of this consent form has been given to you to keep for you records and reference.

Participant's Signarature	Date
Researcher's Signarature	Date

#### Contact Information:

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Appendix D : Average price for Walleye, Sauger and Whitefish in Constant 2012 \$ (2012). Calculations  $^9$ 

Average price for Walleye

	· · J ·		
Year	Nominal Price	CPI (July)	Constant Price (2012)
2003	4.65	102.6	5.58
2004	3.45	105	4.04
2005	3.41	107.1	3.92
2006	3.15	109.6	3.54
2007	3.35	112	3.68
2008	3.5	115.8	3.72
2009	3.35	114.7	3.60
2010	3.22	116.8	3.39
2011	2.82	120	2.89
2012	3.19	123.1	3.19

Average Price for Sauger

Year	Nominal Price	CPI (July)	Constant Price (2012)
2003	3.88	102.6	4.66
2004	3.13	105	3.67
2005	2.83	107.1	3.25
2006	3.33	109.6	3.74
2007	2.5	112	2.75
2008	4	115.8	4.25
2009	3.33	114.7	3.57
2010	3.17	116.8	3.34
2011	3	120	3.08
2012	2.29	123.1	2.29

Average Price for Whitefish

Year	Nominal Price	CPI (July)	Constant Price (2012)
2003	1.19	102.6	1.43
2004	1.1	105	1.29
2005	1	107.1	1.15
2006	1.02	109.6	1.15
2007	1.09	112	1.20
2008	1.08	115.8	1.15
2009	1.49	114.7	1.60
2010	1.39	116.8	1.46
2011	1.17	120	1.20
2012	1.18	123.1	1.18

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<sup>&</sup>lt;sup>9</sup> The nominal prices are the average prices that fishers reveived after the initial and the final payment according to FFMC (2012). The Consumer Price Index is according to the Bank of Canada calculator. The constant price is claculated as fallowing: Nominal price \* CPI (July 2012)/CPI (july the current year).