BAJO LIVELIHOODS IN SAMA BAHARI, SOUTHEAST SULAWESI, INDONESIA, SINCE 1998

By

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Abstract

Members of the Bajo community in Sama Bahari, Southeast Sulawesi, Indonesia, rely mostly on the surrounding marine ecosystem for their livelihoods. However, the establishment and implementation of a marine protected area in the region between 1996 and 1998 has imposed rules and regulations that affect the livelihood strategies of local Bajo fisherfolk. Other historic events have also influenced Bajo livelihood outcomes, namely the Asian economic crisis and the fall of President Suharto in 1997/98. This thesis aims to analyze the livelihoods of this local Bajo community and to better understand how their livelihoods have changed since 1998. I collected fieldwork data through semi-structured interviews, Photovoice, a focus group and participant observation during a six-week stay in the community in 2013. I draw from the literature on everyday resistance, the sustainable livelihoods approach, and the capability approach to conceptualize my research findings. I find that there has been no significant change in financial income levels or the vulnerability context for local Bajo livelihoods; there has been a rather evident decrease in environmental sustainability; and, despite these specific elements, a slight increase in the level of overall well-being in Sama Bahari. A greater understanding of Bajo livelihoods should be considered in efforts to manage local fisheries, reduce poverty, and develop sustainably.

1.1: Context

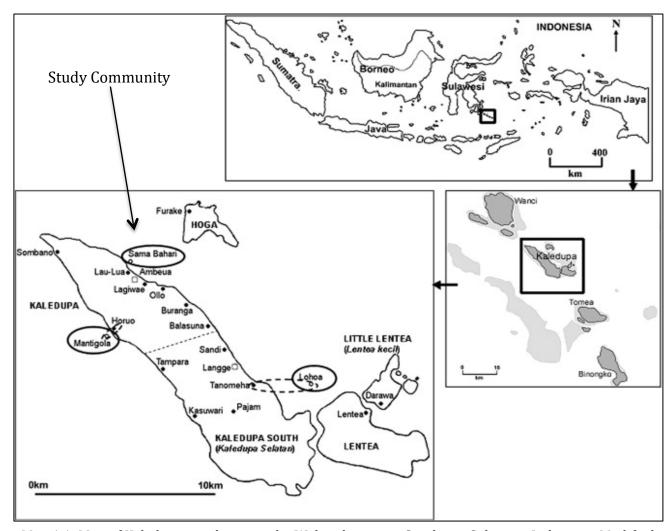
The traditionally nomadic ethnic minority group known as the Bajo live in houseboats and more recently in small communities scattered across Southeast Asian waters (Stacey, 2007). This ethnic minority group is known for "occasionally travelling over a thousand kilometers from their homes in search of under-exploited reefs" to retrieve fish and other marine resources for both subsistence and market uses (Pet-Soede & Erdmann, 1998: 33). Also notorious for their use of destructive fishing techniques, Bajo typically use blast fishing, cyanide fishing, trap fishing and tiger nets (Pet-Soede & Erdmann, 1998).

Sama Bahari is a particular village where a community of Bajo settled in makeshift huts above the water in the 1960s (Daud, Sabir, Syamsul Alam, Laiyai, 26/06/13¹). This village is located a few kilometers off the cost of the island of Kaledupa, in the Wakatobi region of Southeast Sulawesi, Indonesia. Map 1.1 shows the location of the Wakatobi region in relation to the whole of Indonesia, and the location of Sama Bahari (as well as other villages that I refer to throughout this thesis) in relation to the greater Wakatobi region. The circled villages on Map 1.1 are Bajo settlements.

Sama Bahari is home to approximately 1700 semi-nomadic Bajo (Sabir, 30/06/13). The population pyramid illustrated in Figure 1.1 describes a fairly young and rapidly growing population. Most Bajo here are subsistence fisherfolk who diversify their livelihoods with a small amount of participation in the market economy (Stacey, 2007). Indonesia is known as "one of the world's largest biodiversity centers of coral ecosystems" (Elliott et al., 2001: 296), and the vast diversity of marine life that surrounds Sama Bahari provides food and livelihood opportunities to this Bajo community.

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¹ The citation method used throughout this thesis includes the names of interviewees and the date of the interviews. All participants cited in this thesis provided consent to be referred to using their real names. Thus, all names in this thesis are the real names of the respondents. Please see Chapter 3 for more information.



Map 1.1: Map of Kaledupa in relation to the Wakatobi region, Southeast Sulawesi, Indonesia. Modified from: Cullen-Unsworth, Pretty and Smith (2011: 448).

However, only 7 percent of Indonesian coral reefs remain in good condition (Elliott et al., 2001). In response to international pressures to protect marine biodiversity, the Indonesian government has established marine protected areas such as the Wakatobi National Park, which designate no-fishing zones, identify appropriate fishing gear, and distinguish species that can continue to be fished from those which must be absolutely protected. Map 1.2 describes the designated areas of the Wakatobi National Park. While areas such as the Wakatobi National Park aim to protect marine biodiversity, failures in enforcement and lack of collaboration with local fisherfolk lead to disappointing results for conservation (Cullen-Unsworth et al., 2013). Local communities like the Bajo in Sama Bahari, are "expected to comply

with these new regulations, even if the regulations have adverse effects on their livelihoods," which leads to conflict over resource use and lack of local support for the protected area (Elliott et al., 2001: 296).

Besides the establishment of the Wakatobi National Park in 1996 and its implementation in the following two years (Elliot et al., 2001), Bajo in Sama Bahari have experienced other events that have also undoubtedly influenced their livelihoods, especially the Asian economic crisis of 1997/98. By January 1998, the Indonesian rupiah² (RP) was worth a mere 20 percent of its peak value in the previous year, and economic growth was negative throughout the following months (Waters, Saadah & Pradhan, 2003). Inflation during the first two thirds of 1998 ran at an annual rate of 58 percent, while average food prices increased by approximately 80 percent and the price of the country's staple, rice, increased by 50 percent (Asian Development Bank, 1999). The deepening financial crisis triggered riots led by pro-democracy forces, which were emboldened by international and domestic pressures to reform as globalization sparked the revolution in information and communication technology (Wah & Ojendal, 2005). This triggered the uprising

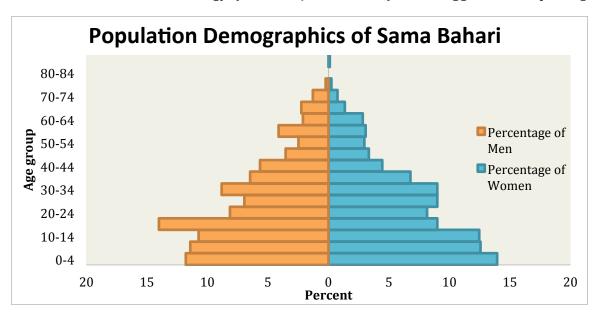


Figure 1.1: Population demographics of Sama Bahari as of June 2013. Source of data: Recapitulation of the population report: Sama Bahari, retrieved from Sabir (30/06/13) via interview. Graph created by author.

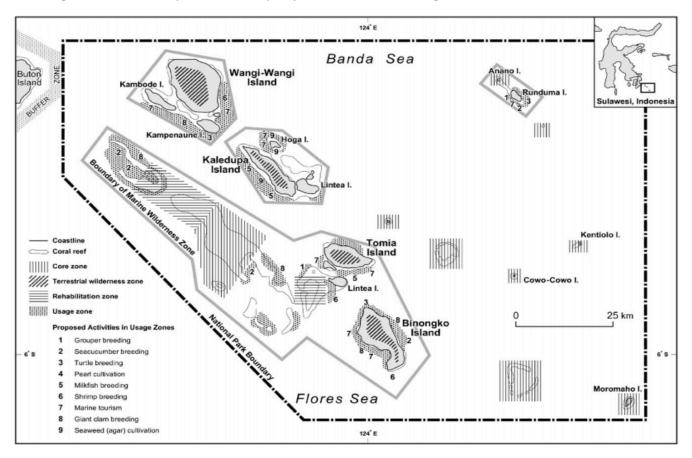
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 $^{^2}$ The rupiah is the basic monetary unit of Indonesia, equal to approximately $1/10\ 000$ of a Canadian dollar.

that forced President Suharto to resign and dismantled a number of his government's authoritarian structures (Wah & Ojendal, 2005). This era, known as *Reformasi* or political reform, sought to move beyond the collusion and corruption characterizing the New Order regime, which Suharto ruled, favouring democratization instead (Wah & Ojendal, 2005). This thesis will address the influence of these events, structures and processes on resource allocation and livelihood opportunities within the small, remote village of Sama Bahari.

The literature on the Bajo is fairly limited. In the past, authors have considered Bajo identity and social mobility around Southeast Asia (Nagatsu, 2001; Saat, 2003), and the implications of Bajo cosmologies for conservation (Crabbe, 2006; Yakin, 2013). Others have considered Bajo fishing practices in relation to the Australian Fishing Zone, (Stacey, 2007; Stacey et al., 2012), or in relation to Indonesia's marine protected areas (Clifton, 2003). My Honours thesis helps contribute to the academic



Map 1.2: Political map of the Wakatobi region, showing the regional border which also delineates the National Park. Source: Clifton (2003: 392).

research on Bajo livelihoods.

1.2: Research Aim and Objectives

Given the historical macro-level changes occurring in Indonesia over the past 15 years, my research aim narrows in to the micro-level to analyze the livelihoods of the Bajo ethnic minority group in Sama Bahari, Southeast Sulawesi, Indonesia, and to investigate how those livelihoods have changed since 1998. To approach this aim, I present three main research questions:

- 1. What are the assets and capabilities of Bajo households in Sama Bahari and how have these changed since 1998?
- 2. What are the transforming processes and structures that mediate access to these assets and capabilities?
- 3. How are Bajo livelihood strategies undertaken and how have they changed or diversified over the past 15 years?

Throughout this thesis, I attempt to present a holistic overview of the livelihoods of the Bajo ethnic minority group living in Sama Bahari, leading the way to an in-depth analysis of the interrelationships between the socio-political, economic, and environmental aspects of sustainable livelihoods within the Wakatobi. I work at the individual and household level to analyse local livelihoods, as both individual (gendered) and household decision making interplay with each to create specific outcomes and opportunities (Ellis, 2000). I argue that greater understanding of Bajo livelihoods is essential to underscore and support more relevant efforts to manage local fisheries, reduce poverty, and develop sustainably.

1.3: Thesis Structure

I describe the conceptual framework that guides my analysis in Chapter 2, which draws from sustainable livelihoods frameworks, the capability approach, and literature on everyday politics and resistance. In Chapter 3, I outline the methodological approach taken during my data collection and analysis. In Chapter 4,

I present the results of my analysis on Bajo livelihood assets and capabilities. Specifically in Chapter 4, I examine the human, physical, financial, natural and social capitals available to local Bajo. In Chapter 5, I assess the factors that mediate access to those five capitals. These include government structures, rules and regulations, as well as the vulnerability context comprising shocks, trends and seasonality. Chapter 6 analyses the strategies that Bajo villagers use to negotiate their livelihood outcomes. The strategies that I explore here include livelihood diversification, migration, and covert resistance. This chapter also identifies the outcomes of such negotiations in terms of the sustainability of generated livelihoods, measured through indices of income, vulnerability, environmental sustainability, and overall well-being. Finally, I summarize and discuss my main findings in Chapter 7.

Chapter 2: Conceptual Framework

In this chapter, I develop the framework that guides my analysis of the livelihoods of the Bajo community in Sama Bahari. I draw upon three concepts here – sustainable livelihoods, capabilities, and resistance – that help in approaching my research questions. The sustainable livelihoods approach is applied as a foundation for this framework and is described in Section 2.1. My framework is then expanded to include Amartya Sen's capability approach (Section 2.2). Finally, the literature on everyday politics and resistance is reviewed in Section 2.3 to better understand a significant livelihood strategy of the Bajo in Sama Bahari. Figure 2.1 illustrates this framework, showing how all of the concepts are interrelated. This framework thus helps me to analyze how people make a living, how people make their livings meaningful, and how they challenge or resist the structures and pressures under which they make a living.

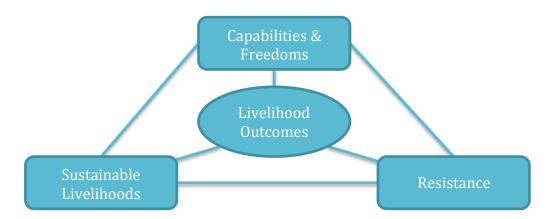


Figure 2.1: Conceptual framework for my thesis. Source: Author.

2.1: Sustainable Livelihoods

The sustainable livelihoods approach offers both a theoretical base and a practical framework that moves beyond the economic focus of earlier development thinking toward a more holistic analysis that includes social and environmental dimensions (Solesbury, 2003). The approach can "help stakeholders with different perspectives to engage in structured and coherent debate about the many factors that affect

livelihoods, their relative importance, and the way in which they interact," (Department for International Development [DFID], 1999: 1). The concept of sustainable livelihoods is widely attributed to the work of Robert Chambers and Gordon Conway (1991: 6), who consider a livelihood to be sustainable if it can:

cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term.

Since its conception in the early 1990s, the notion of sustainable livelihoods has become increasingly popular in both academia (Scoones, 1998, Ellis 2000a; de Han & Zoomers, 2005) and in international policy (Oxfam, 1998; DFID, 1999). Ellis' (2000b) framework for analysing sustainable livelihoods (Figure 2.2) depicts the creation of livelihood outcomes as a linear process, whereas the Department for International Development's (DFID) framework (Figure 2.3) illustrates feedback loops that reflect the complex nature of livelihood generation. I will draw mainly from the DFID framework throughout this thesis because of the usefulness of these feedback loops that are lacking in Ellis'. I will also make some modifications to the DIFD framework, such as identifying the role of gender in the livelihood generation process, which the framework fails to address. First though, I outline the different parts of the DFID conceptual approach.

A	В	С	D	Е	F
Livelihood platform	Access modified by	In context of	Resulting in	Composed of	With effects on
Assets Natural capital Physical capital Human capital Financial capital Social capital	Social relations Gender Class Age Ethnicity Institutions Rules & customs Land and sea tenure Markets in practice Organisations NGOs Local admin State agencies	Trends Population Migration Technological change Relative prices Macro policy National econ trends World econ trends Shocks Storms Recruitment failures Diseases Civil war	Livelihood strategies	NR based activities Fishing Cultivation (food) Cultivation (non-food) Livestock Nonfarm NR Non-NR based Rural trade Other services Rural manufacture Remittances Other transfers	Livelihood security Income level Income stability Seasonality Degrees of risk Env. sustainability Soils & land quality Water Fish stocks Forests Biodiversity

Figure 2.2: Sustainable livelihoods framework. Source: Ellis (2000b: 30).

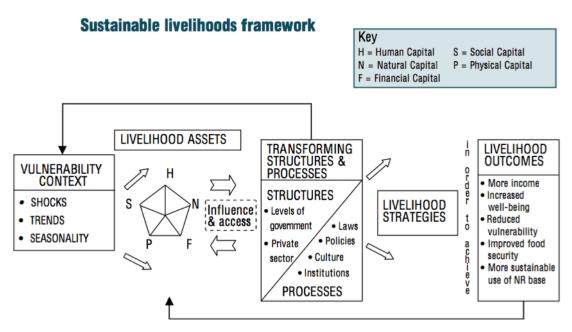


Figure 2.3: Sustainable livelihoods framework. Source: DFID (1999: 1).

2.1.1: Livelihood Assets

Some academics describe livelihood assets as the "building blocks upon which households are able to undertake production, engage in labour markets, and participate in reciprocal exchanges with other households" (Ellis, 2000b: 31). However, this method of conceptualizing livelihood assets fails to understand the freedom or power that individuals gain through accessing such assets, "in large part because of a continued focus on the economic aspects of livelihoods" (Bonnin & Turner, 2012: 97). Others, like Bebbington (1999: 2022), define assets to be "not simply resources that people use in building livelihoods; they are assets that give them the *capability* to be and act." Throughout this thesis, I will refer to assets using this latter, broader definition, because it more accurately captures the way that individuals or households access assets for reasons extending beyond economic needs. I will:

understand these assets not only as things that allow survival, adaptation and poverty alleviation: they are also the basis of agents' *power* to act and to reproduce, challenge or change the rules that govern the control, use and transformation of resources (Bebbington 1999: 2022).

Many scholars have identified five main categories of assets: human, natural, physical, financial and social capitals (Chambers & Conway, 1991; Narayan, 1997; Ellis, 2000b; Moser, 2008; Scoones, 2009), whereas others have described additional categories such as political capital and cultural capital (Bebbington, 1999). For the purpose of this thesis, I will use the former five categories of assets, because I categorize political awareness and participation under human capital and argue that culture cannot be categorized as a capital asset, rather it is influential during the whole process of livelihood generation. Human capital, comprises the skills, knowledge and health of an individual or household (DFID, 1999; Ellis, 2000b). Natural capital describes the biological environment that individuals or households access, such as land, water, or marine resources (DFID, 1999; Ellis, 2000b). Physical capital (sometimes referred to as produced or man-made capital) generally refers to economically produced goods including infrastructures (such as roads or secure housing), or productive resources that are available to the individual or household (Ellis, 2000b; Moser, 2008). Financial capital comprises any financial resources including savings and access to credit or equivalent (Ellis, 2000b). Finally, social capital, perhaps the most difficult to define, generally refers to an intangible asset that enables "its members to achieve their individual and community objectives" (Moser, 2008: 50) through "trust, social norms, and networks which affect social and economic activities" (Nakagawa & Shaw, 2004: 7).

More recently in the literature, social capital has undergone more thorough conceptualization. Though there are different ways of dissecting the term, many scholars define three different types of social capital: bonding, bridging and linking. Bonding social capital describes "social cohesion within communities or socially densely connected groups" (Ramirez-Sanchez & Pinkerton, 2009: 2). Bonding social capital refers to strong ties (Woolcock & Narayan, 2000) that build intra-group solidarity (Narayan, 1999; Goodhand, Hulme & Lewer, 2000). This type of social capital is among familiar and/or personal relationships (Faulk & Surata, 2007). Bridging social capital describes, "distinct groups loosely or weakly connected" (Ramirez-Sanchez & Pinkerton, 2009: 2) that build inter-group solidarity (Narayan, 1999; Goodhand et al., 2000). Bridged ties are between more diverse groups and the

relationships are less personal or familiar than bonded ties. Finally, linking social capital describes connections that are more vertical rather than horizontal, and involve relationships between different levels of authority or power (Faulk & Surata, 2007).

Social capital can be either positive, or negative and excluding. Social capital can result in social exclusion through people being considered non-members of social groups, without the needed 'ties' and networks. Social exclusion "refers to the societal and institutional processes that exclude certain groups from full participation in the social, economic, cultural and political life of societies" (Narayan, 1999: 6). Social exclusion does not simply describe marginalization resulting from income inequality, because one can be poor but have strong social capital networks (Narayan, 1999).

Carney (1998) produced a visual representation of livelihood assets that has been used and adapted by others (DFID, 1999; Ellis, 2000b). This asset pentagon (Figure 2.4) is "in effect, a five axis graph on which the relative wealth in each category of assets can be plotted, with the centre of the pentagon representing zero level of an asset" (Ellis, 2000b: 48) and the perimeter represents an idealistic full amount of the asset for the individual, household or community under study. I will draw on this approach to represent livelihood assets of Bajo households in Chapter 6.

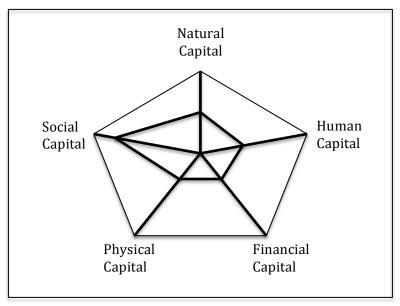


Figure 2.4: Livelihood asset pentagon, redrawn from Carney (1998: 49).

2.1.2: Vulnerability, and Transforming Structures and Processes

The external environment in which people exist frames the livelihoods that people make for themselves and for their families (DIFD, 1999). The vulnerability context comprises these external factors over which people have limited or no control, but which affect the availability of assets and more generally, their livelihoods (DFID, 1999). The first of these factors is stress. According to Chambers and Conway (1991: 10), stresses are defined as pressures that are "typically continuous and cumulative, predictable and distressing, such as seasonal shortages, rising populations or declining resources." The term 'trend' has since tended to replace the term 'stress' as the latter implies a negative consequence, while the former can account for both positive and negative effects (DFID, 1999). The aspect of seasonality is considered as its own component of the vulnerability context in the DFID framework, and will be used as such in this thesis as well, given the reliance of Bajo households on local seasonal weather patterns. Shocks are considered to be more sudden and unpredictable impacts, such as a natural disasters or epidemics (Chambers & Conway, 1991; DFID, 1999; Ellis, 2000b). The trends, seasonality, and shocks to which people are subject, together comprise the external aspects of vulnerability (DFID 1999; Ellis 2000b). The internal aspect of vulnerability is not included in the DFID diagram, but is used by some academics (Chambers & Conway, 1991; Wisner, 2009) to describe the resilience of people themselves, and their ability to cope with such external factors. I have included this aspect in my thesis, as it can account for mitigation or adaptation efforts that individuals or households can develop as a strategy to reduce vulnerability.

Apart from the vulnerability context, there are other factors that mitigate one's access to assets. In Figure 2.2 for instance, Ellis describes these as social relations, institutions and organizations, while other scholars (Carney, 1998; Scoones, 1998) have created different groupings to identify the same mediating factors. DFID (1999) has created two categories for these factors: transforming structures and processes. Transforming structures refer to "organizations, both private and public that set and implement policy and legislation, deliver services," (DFID, 1999: 19)

and make processes function. Processes, defined by DFID (1999), include policies, legislation, institutions and culture that determine the way that individuals interact. Throughout this thesis however, I will not consider culture only as a transforming process. Rather, as I lay the sustainable livelihoods framework over the context of my case study site, Sama Bahari, I will examine the degree to which culture comes through *each* aspect of the framework. I argue, following Michaud and Forsyth (2011), that culture is often not accounted for enough in livelihood assessments, and in a multi-cultural context such as Indonesia, culture needs to take more of a central stage. Likewise, I argue that there is a gendered bias in access to livelihood assets and strategies that must be accounted for in the case of Bajo livelihoods in Sama Bahari.

2.1.3: Livelihood Strategies and Outcomes

Livelihood strategies can be described as the strategies that individuals or households construct, given their access to livelihood assets, and can relate to both occupational and/or consumption choices (Allison & Horemans, 2006). Some strategies may be short-term, while others may be longer measures, and are referred to as 'coping' or 'adapting' respectively (Allison & Horemans, 2006). A main strategy often observed is that of diversification, defined as "the creation of diversity as an ongoing social and economic process, reflecting factors of both pressure and opportunity" (Ellis, 2000a: 14).

Livelihood outcomes are identified to measure the sustainability of livelihoods. DFID's framework (Figure 2.2) identifies ideal outcomes of increased income and well-being, reduced vulnerability, improved food security, and a more sustainable use of the natural resource base. Other indices for livelihood outcomes may also be considered. Allison and Horemans (2006) for instance, examine women empowerment and social inclusion in their livelihood analyses.

2.2: Capability Approach

The capability approach, pioneered by Amartya Sen in the mid-1980s (1985; 1987; 1995), but also significantly developed by Martha Nussbaum (1993; 2000; 2003), is a "broad normative framework for the evaluation and assessment of individual wellbeing and social arrangements, the design of policies, and proposals about social change" (Robeyns, 2005: 94). This approach evaluates policies to establish whether they create capabilities for people and whether the conditions for those capabilities are being met (Robeyns, 2005). The approach serves as an evaluative space (Sen, 1995; 2004) and tool for conceptualising human well-being in a variety of disciplines ranging from philosophy to economics. It does not constitute an explanatory theory, however (Robeyns, 2005), and therefore should be paired with other explanatory theories, such as the sustainable livelihoods approach, as I have done in this thesis.

2.2.1: Capabilities, Functionings, and Means to an End

The core concepts of this approach are first, that of capability, which Sen describes as one's ability to effectively "do things he or she has reason to value" (Sen, 2009: 231), and second, that of functioning, which is a person's choice to be something they have reason to value (Sen, 2009). The distinction between these two terms is between a person's valued options (capabilities) and chosen achievements (functionings) (Robeyns, 2005). A capability is a potential functioning. Of utmost importance, according to this approach, is that people have enough choices or capabilities "to lead the kind of lives they want to lead, to do what they want to do and be the person they want to be" (Robeyns, 2005: 95), so that they can chose to function in the way they value most. The concept of capabilities is then "linked closely with the opportunity aspect of freedom, seen in terms of 'comprehensive' opportunities, and not just focusing on what happens at 'culmination'" (Sen, 2009: 232).

The capabilities approach distinguishes between a means and an end to wellbeing, whereby the ends have intrinsic importance, and the means are instrumental to achieving the ends (Robeyns, 2005; Sen, 2009). For example, the accumulation of financial wealth is a means to achieving some end, and is not an end in itself because it is not intrinsically valuable. For this reason, the capability approach critiques other approaches, such as welfare theories that rely on economic indicators of wellbeing (Sen, 1999; Robeyns, 2005), or even some applications of the sustainable livelihoods theory that do not make the distinction between means and ends (Sen, 2009). However, some means have intrinsic values themselves, such as the acquisition of human capital, which is not just a means for people to produce more efficiently, but also an ends in itself, as it allows people to "engage more fruitfully and *meaningfully* with the world" (Bebbington, 1999: 2022).

The capabilities approach then distinguishes between a means and a capability, as the latter depends on factors that mitigate or transform commodities into something that someone can use. A capability in this context is more than just ability because it depends on the external conditions that create a setting for opportunities. There are three converting factors to consider in this process: personal, social and environmental. Personal conversion factors are internal factors that influence the ways in which someone can use a commodity to function. The social and environmental conversion factors externally influence the transformability of means into functionings. For example, a bicycle is a means of transportation - a means of getting from one place to another. However, it is only a capability depending on one's physical ability to ride a bicycle, society's allowance for a female to ride a bicycle without the accompaniment of a male family member, and the availability of roads, that make cycling feasible and that transform the bicycle from a means to a capability (Robeyns, 2005). This reinforces the critique that it is insufficient to exclusively assess the accumulation of capital to measure well-being without considering the circumstances in which people are living, including local cultural norms. To further this example, the distinction between a capability and a functioning depends on whether or not people choose to move from one place to another or stay put.

2.2.2: Variations Between Sen and Nussbaum's Approaches

Sen's version of the capability approach conceptualizes the term 'agency.' He first considers the standard of living to mean the part of a person's well-being that relates to their own life, independent of the lives of others (Sen, 1987). When a person sympathises for others, the person themself is affected. Therefore well-being in general refers to one's standard of living and sympathy (Sen, 1987). Finally, when a person's actions aim to increase well-being in general they are acting with agency (Sen, 1987). Nussbaum does not include this agency aspect, suggesting that these distinctions are made within the concepts of capabilities and functioning (Nussbaum, 2000). Nussbaum has also created a list of capabilities, and suggests that the capability approach requires such a list for practical reasons including prescribing a means for identifying meaningful capabilities (Nussbaum, 2000; 2003). Sen argues that the context in which a list is made varies, and thus lists should vary too (Sen, 2004). In this thesis, I follow Sen's approach as I argue that agency is not always correlated with capabilities and functionings. I do not follow the static list of capabilities presented by Nussbaum, as what is considered a meaningful capability in the context of Sama Bahari differs from what may be considered a meaningful capability elsewhere.

2.3: Everyday Politics and Resistance

Everyday politics involve people "embracing, complying with, adjusting, and contesting norms and rules regarding authority over, production of, or allocation of resources" (Kerkvliet, 2009: 232). Everyday politics, unlike official politics, are not organized or direct, but rather describe covert actions by individuals or groups that may or may not view their actions as political (Kerkvliet, 2009; Turner, 2012). Kerkvliet (2009) has divided the concept into four categories, namely support, compliance, modifications and evasions, and resistance. My thesis will focus on the final concept of everyday resistance. Resistance has been studied at length in academia, but generally focuses on overt forms (Polanyi, 1957; Gramsci 1971). Furthermore, the concept of resistance has tended to be ignored in sustainable

livelihood analysis (Bonnin & Turner, 2012; Turner, 2012), but requires addressing, as people are not simply passive recipients but are "actively involved – given the opportunity – in shaping their own destiny" (Sen, 1999: 53).

2.3.1: Forms of Everyday Resistance

The concept of covert resistance was first introduced by James Scott in 1976, but has since also been developed significantly by Benedict Kerkvliet. The term has been used interchangeably with 'everyday resistance' (Scott, 1986; 1990; Kerkvliet, 1986; 1990; 2009) to refer to "what people do short of organised confrontation that reveals disgust, anger, indignation, or opposition to what they regard as unjust or unfair actions by others more wealthy or powerful than they" (Kerkvliet, 1986: 108). Scott (1985) argues that poor rural people are not subjects of false consciousness, nor are they simply victims of hegemonic structures, but rather they are capable and even powerful in challenging features of the governing ideology.

Taking a broad definition of everyday resistance, people can resist in many ways. Everyday resistance in the form of language reveals, "disgust and indignation with the way things are compared to how they should be" (Kerkvliet, 1986: 109). Other actions such as deceit or 'foot dragging' can also constitute everyday resistance (Kerkvliet, 1986). Causing harm to property belonging to authorities or to those individuals themselves in subtle or covert ways are also a form of everyday resistance (Kerkvliet, 1986). However, the other party need not be impacted for an action to be considered everyday resistance. For instance, forms of flight can indicate everyday resistance, if people leave or run away from something for reasons to do with the feelings of unfairness or disgust, rather than convenience or failure (Kerkvliet, 1986).

2.3.2: Goals of Everyday Resistance

The first purpose of everyday resistance is not "directly to overthrow or transform a system of domination, but rather to survive – today, this week, this season – within it" (Scott, 1986: 30). While everyday resistance may sometimes result in the

renegotiation of regulations or plans, or in the brining down of the system, their main goals are simply survival and persistence (Scott, 1986). Sometimes this resistance will backfire, but that possibility or even reality will usually not result in people ceasing to resist, as they are usually just working the system to their minimum disadvantage (Hobsbawm, 1973). Secondly, everyday resistance can be for the purpose of self-satisfaction. Like any other form of resistance, the goal of justice is the same (Kerkvliet, 1986; 1990). People try to "affirm their claims to what they believe they are entitled to based on values and rights recognised by a significant proportion of other people similar to them" (Kerkvliet, 1999: 233).

2.4: Conclusions

In this chapter, taking the sustainable livelihoods approach as the foundation of my conceptual framework, I have critiqued the lack of attention given to culture and gender, and have modified the framework to acknowledge the effects of culture and gender throughout the livelihood generation process. I will draw on the five capital assets as I begin to analyse the livelihoods of Bajo households in Sama Bahari, and I will also examine the transforming processes and structures that mediate an individual or household's assets to such assets. I will evaluate the livelihood strategies that are common amongst local Bajo and the resulting livelihood outcomes. I have also created space to draw on the capability approach. I argue that the accumulation of livelihood *outcomes* should not be the only focus of this analysis, but rather I highlight the meaningfulness of livelihood generation by incorporating the aspect of choice. Finally, I have identified covert resistance to be a significant livelihood strategy that is not often considered in livelihood analyses, and will be examining the way that local householders resist imposed national park regulations that they feel are unjust. In combining these three concepts, we can approach my research questions more holistically.

Chapter 3: Methodology

In this chapter I describe the data collection methods I employed in the field as well as the analytical approaches used to generate the results of my study. To increase rigour, I used multiple methods including participant observation, a focus group, semi-structured interviews and Photovoice (Bradshaw & Stratford, 2010). Each method is outlined in this section, after first addressing ethical and logistical considerations.

3.1: Logistics, Positionality and Ethical Considerations

I collected data over the span of six weeks between June and August 2013, in Sama Bahari. I resided on the coast of Hoga Island, located approximately 5km away from Sama Bahari (see Map 1.1). All data were collected between the hours of 8am and 5pm, as low tides before and afterward would not allow for earlier or later commuting, which was done by a small, outboard motor boat. Data during interviews were recorded using pen and paper to avoid causing discomfort to local people who may not have been familiar with alternate recording technologies. Each of my participants were compensated with a photo of their family (if they desired one), on the back of which I wrote a thank you note in the Bajo language. Following the institution put in place by Operation Wallacea, each participant was also compensated with 20 000 RP (\$2 CAD) to cover at least part of the opportunity cost of their time.

Due to my research being facilitated by Operation Wallacea,³ it is therefore important to take into consideration the history of Bajo-researcher relationships when considering my own positionality. Each researcher who had previously connected with the Bajo had instilled impressions into the community, either positively or negatively. Overall, it seemed the main result of these relationships

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³ Operation Wallacea is a network of academics that conduct research surrounding conservation management around the globe. This organization has been working in the Wakatobi region since 1999.

was the Bajo's acquaintance to foreigners. As a young, educated Caucasian woman, my presence and research may have otherwise been strange to the Bajo. However, people were generally open and willing to participate in my study. As my cultural background differed from that of the study population, I actively attempted to understand these differences and to present myself in the most culturally acceptable way. Still, it is important to recognize how personal factors, such as my mood, sense of humour or gestures may have influenced the results of my data collection, and to question the ways in which I was producing knowledge (Valentine, 2002). In order to bring awareness to such effects, I made notes throughout the data collection process of events and reflections, which I have referenced while interpreting my data.

I am grateful to have had the help of three translators⁴ during my data collection stage. There were always at least two translators present while I was collecting data, as questions were translated from English to Bahasa Indonesia, and again from *Bahasa Indonesia* to Bajo (and vice versa for responses). During the focus group, Andar, a Bajo local to Sama Bahari, translated from Bajo to *Bahasa Indonesia*. Mamat, a local Bajo who had previously lived in Sama Bahari, translated from Bajo to Bahasa Indonesia during the interviews and Photovoice. Wahid, a (non-Bajo) local to the Wakatobi and who grew up in Kendari, translated from Bahasa Indonesia to English throughout the entire data collection process. These translators, in my opinion, created a comfortable setting for respondents. As Sama Bahari is a small community, Andar and Mamat were familiar faces to all participants. This seemed to generate more honest and personal responses. Wahid was extremely outgoing and personable, which many respondents appreciated. Though not of the Bajo ethnicity, being a local to the region allowed Whaid to connect with many of the respondents who had travelled to his hometown. I have also taken notes on the personal factors of my translators during the data collection process, such as their moods, which were also referenced while interpreting my data. Factors such as the start of the

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⁴ All three translators that assisted me with my data collection – Andar, Mamat and Wahid - provided consent for me to refer to them by their real names in this thesis, which I have done.

Islamic fasting season, for instance, influenced the energy levels of my translators, which is important to reflect upon at the analysis stage.

I gained permission for my fieldwork from the Research Ethics Board I of McGill University (see Appendix A). I obtained oral consent from each of my participants – written consent would have been inappropriate as many respondents were illiterate. Each participant was asked if their responses could be cited in this thesis and if they desired confidentiality. All names included in this thesis are the true names of my respondents, as they agreed to be cited and referred to.

Some of my questions were sensitive and personal, dealing with the topics of income, for instance. To create a setting for which participants felt comfortable responding, it was vital that I expressed the confidential nature of the interviews and Photovoice responses. During the focus group, I was sure to highlight the fact that confidentiality could not be guaranteed within the group, since participants were sharing ideas. Finally, Photovoice participants were asked to gain the consent of the subjects in their photos.

3.2: Overt Participant Observation

During the first week and a half in the field, I visited the village of Sama Bahari nearly every day to conduct overt participant observation. This method involved spending time with and around local people and the community in order to understand them, while taking notes or photos of observations (Laurier, 2010). I used this time to familiarize myself with the surroundings and to get to know the villagers.

Throughout my time in the field, I was able to visit a number of villages on the island of Kaledupa. I visited the Sampuatu fish market in Ambeua on Kaledupa (see Map 1.1), where many Bajo from Sama Bahari go to sell their catch or purchase necessities. Here, I was able to interact with a number of Bajo and Kaledupa men and woman, and learn about their fishing practices or about the goods they were selling. I was also able to visit the village of Mantigola (see Map 1.1), a Bajo settlement off the west coast of Kaledupa.

As Laurier (2010) states, overt participant observation requires just as much participation as it does observation. I emerged myself as much as possible into the social events and daily activities of the Bajo people. I participated in a traditional healing ceremony and attended a traditional martial art demonstration. To understand the broader context in which the Bajo live, I also participated in activities with Kaledupa fishermen, including collecting fish from a fish fence and cultivating agar. At this stage in the participant observation, I gained "a more complete experience of the subjects' world" (Pearsall, 1966: 42).

3.3: Focus Group

Working from the observations made through my first method of data collection, I then conducted a focus group of four participants. The focus group was a means of "gaining background information, clarifying ideas, developing questions, and understanding group reactions to particular problems, processes and patterns" (Skop, 2006: 114). While this single focus group was not the main method of data collection, it improved my understanding of important events in the history of the village from the Bajo perspective, and it enabled me to make a fairly detailed timeline ⁵ of such events that dates back to 1942 (Figure 3.1). With this understanding, I was able to better shape my interview questions.

3.4: Semi-Structured Interviews

As my primary method of data collection, I conducted 48 semi-structured interviews with Bajo people living in Sama Bahari. The semi-structured format "is organized around ordered but flexible questioning," which allows for slight deviations from the initial questions in an interview guide when new and relevant topics are presented by one's respondents (Dunn, 2010: 110). The aim of my recruitment was

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⁵ Focus group respondents provided the dates and information in this timeline from memory. Thus, this timeline is not meant to be a complete nor an accurate representation of historic events, but rather it is to be informative of important events from the perspective of the Bajo respondents.

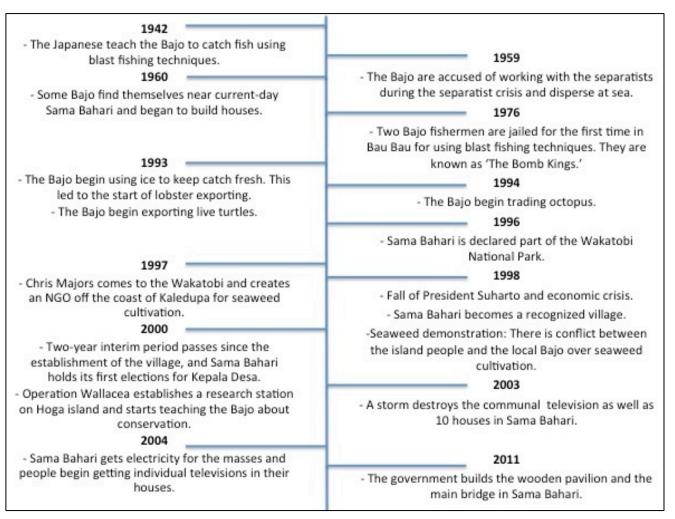


Figure 3.1: Timeline of Sama Bahari. Data retrieved via focus group (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13). Timeline created by author.

not necessarily "to choose a representative sample, rather to select an illustrative one" (Valentine, 2005: 112). Thus, I applied a purposeful sampling technique, where I actively selected the "most productive sample to answer the research questions" (Marshall, 1996: 523). I interviewed both men and women who appeared to be 30 years of age or older so they could potentially recall at least 15 years into their past, back to 1998. The specific structure of the sample population is described in Figure 3.2; notably I interviewed 17 women and 31 men, and the largest age category of respondents was between the ages of 40 and 50, while my overall sample ranged from 29 to 75 years old.

The average interview duration was approximately 1 hour and 15 minutes, with the shortest lasting around 40 minutes and the longest about 2 hours. The

interviews consisted of open-ended questions pertaining to demographics, assets, general livelihood strategies and gender expectations. Please see Appendix B for my interview guide. Respondents chose the location of their interviews. Many invited us into their homes while some chose to speak with us in a convenient public area such as a bench or a boathouse.

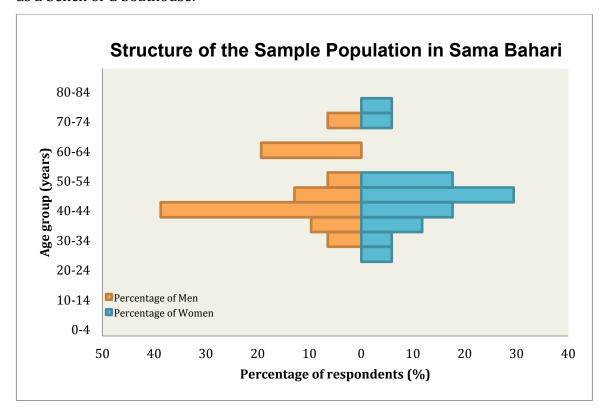


Figure 3.2: Structure of my sample population. Source: Author.

3.5: Photovoice

To complement the data collected at the interview stage, I undertook a small Photovoice project. Photovoice "entrusts cameras to the hands of people to enable them to act as recorders, and potential catalysts for change, in their own communities" (Wang & Burris, 1997: 369). This method had never before been used in the village by other researchers linked to Operation Wallacea. I lent my digital camera to two Bajo local residents, one male and one female, each for a 24-hour period. I chose these participants based on the rapport I had gained with them during the interview stage. Each participant was asked to take 12 photos to represent their livelihoods today and how those had changed over the past 15 years.

Photos were printed using a portable printer I had brought to the field. These photos were used to guide follow-up semi-structured interviews with these two individuals pertaining to the importance and meaning of the photos. Please see Appendix C for the list of Photovoice follow-up questions.

3.6: Analysis

After writing up my interview notes, I approached these notes in a reflexive and critical manner. I coded the transcripts twice, once to organize and again to interpret (Waitt, 2010). A process of thematic coding was used to identify reoccurring themes and ideas within and between interviews (Kitchin & Tate, 2000). The process of coding transcripts and identifying themes was done in a circular manner; I would define a code, classify it into a themed category, and connect the themes back to the literature. Ian Dey (2005) describes this circular process diagrammatically in Figure 3.3. I was able to then compare the results from the interviews with those of the Photovoice and focus group. A further comparison was made between these results and the notes taken at the participant observation stage, which allowed for a more holistic perspective to be developed.

3.7: Methodological Conclusions

In this chapter I have described the methods that I followed for this study. I first identified the main ethical and logistical considerations. I went on to define each aspect of my multi-method approach, which included over participant observation, a focus group, semi-structured interviews and Photovoice. Finally, I discussed my thematic coding and analysis. These set the stage for the results of my fieldwork that I start to analyse in the next chapter.

The Circular Process of Qualitative Analysis

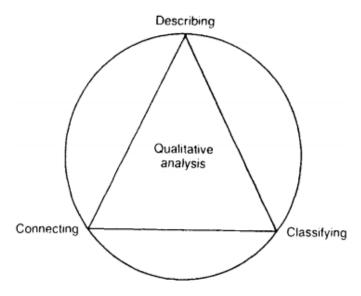


Figure 3.3: Qualitative analysis as a circular process (Dey, 2005: 32).

Chapter 4: Local Bajo Livelihood Assets and Capabilities

This chapter addresses my first research question: what are the livelihood assets and capabilities of Bajo villagers in Sama Bahari and how have they changed since 1998? I begin by addressing human capital (Section 4.1), followed by physical capital (Section 4.2), financial capital (Section 4.3), natural capital (Section 4.4), and conclude by analyzing social capital (Section 4.5) in the context of this Bajo community. This chapter draws directly on the information provided to me via semi-structured interviews with 48 local villagers, one focus group with four individuals, Photovoice with two participants, and overt participant observation.

4.1: Human Capital

I start by addressing human capital because in terms of well-being, it is both a means and an end (Sen, 1999). Due to its intrinsic value, human capital in its various forms is often both an asset and a capability. My analysis shows that human capital as a whole has been increasing over the past 15 years in Sama Bahari. In this Section 4.1, I examine the health, education, skills and training, and political awareness within the community.

4.1.1: Health

Living a healthy and long life has not always been a capability for the people of Sama Bahari. During the Asian economic crisis when people wanted to purchase basic staple foods, they had to travel far distances to reach a market. As Kona (19/07/13), a relatively wealthy fisherman, states, "it was hard because if we had money, food was not available around the village." Bajo villagers resorted to eating *propagos* (mangrove seeds) and the pits of mangos to survive (Gopang, 14/07/13; Nuhiya, 15/07/13; Daud, 16/07/13; Kuasi, 17/07/13; Kona, 19/07/13). Now, there are a variety of foods available a few kilometers away at the Sampuatu market in Ambeua (see Map 1.1), and rice is sometimes even available in kiosks in Sama Bahari (Syamsul Alam, 13/07/13; Kadang, 16/07/13). Many of my respondents expressed

the desire for more food to be available within the village itself, in order to reduce the need to travel to the Sampuatu market (Mamang, 04/07/13; Kuasi, 17/07/13; Kona, 19/07/13). Today, respondents explained that most of the population survives on a diet of rice, cassava, and a variety of seafood, but only rarely consumes vegetables or fruits. As Baharudin (28/06/13), a middle-aged sailor, states, "we never see vegetables." In fact, when one of my respondents, Syamsul Alam stated in his interview that he purchased vegetables from the Sampuatu market, my Bajo translator, Mammat, immediately asked why. Syamsul Alam (13/07/13), father of two, responded, "because my wife is from Kaledupa." This illustrates how foreign is the concept of purchasing vegetables for the average Bajo villager.

Many Bajo in the village still look to traditional medicines for healing, as such medicines are said to have great success (Puri, 11/07/13; Taiyo, 12/07/13; Immi, 15/07/13). Healers in the village and around the region offer traditional healing ceremonies to rid individuals of spirits that cause illnesses within the body. However, for more 'modern illnesses,' that are untreatable or unpreventable by traditional means (Baharudin, 28/06/13; Honna, 20/07/13), such as polio, dengue fever, malaria, or other infectious diseases prevalent in the community, there is a new healthcare center funded by the regional government. The center, built in 2007, offers check-ups, vaccinations and prescriptions (Suhaele, 30/07/13). However due to its small size, oftentimes people seeking modern medicine are forced to look elsewhere for adequate treatment, which can often be expensive. Wa Mbulu (12/07/13), for example, a divorced elder, explained how she had to sell her house to pay for her medical expenses after visiting multiple healers and medical centers in Sama Bahari, Kaledupa, and elsewhere, for a disorder relating to chronic stomach pain.

4.1.2: Education

Educational attainment is low in the village compared to the national statistical average. While the school attendance expectancy in Indonesia is 12.7 years (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2013), my

average respondent spent merely one third of that time in school, with only 3.37 years of formal education. However, educational attainment appears to be increasing in Sama Bahari, as my respondents' children had 4.73 years of schooling on average. Another indication of increasing educational attainment is shown in Figure 4.1. We observe that in each generation, the percentage of people who do not have any formal education (shown in red) nearly halves. This shows that, over time, more people are having at least some experience of formal education. It is interesting to note that 28 percent of respondents were uncertain if their parents went to school, which indicates the lack of importance given to formal education, at least in the older generation, who did not express the importance or value of formal education to their children, my respondents.

So why are we noticing this increase in formal educational attainment? To start, there is an increasing availability of classes in the village. Previously, many of my respondents stated that students had to swim to Kaledupa to attend classes if their families had no canoe (Amurudin, 16/07/13; Jono, 20/07/13). Currently in Sama Bahari, there is one kindergarten class, one Islamic primary school, one common primary school, one junior high school and one Islamic senior high school (Suhaele, 30/07/13). There has also been an increasing number of Bajo teachers in the schools, which allows for children with no *Bahasa Indonesia* language skills to understand lessons and ask questions in their own language (Mayor, 20/07/13; Janudir, 22/07/13). Respondents noted that Bajo teachers peak the interest of students more than teachers from Kaledupa, who tend to belong to the Pulo ethnic group (Tanta, 16/07/13). Bajo teachers are also reported as being more punctual (Hona, 20/07/13; Lupardi, 20/07/13). The presence of Bajo teachers has also

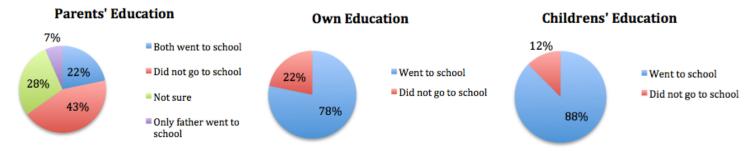


Figure 4.1: Percentage of respondents, their parents, and their children, who have experience of formal education. Source: Data retrieved via 48 semi-structured interviews. Charts created by author.

increased Bahasa Indonesia language abilities for students, because they can translate from the Bajo language to *Bahasa Indonesia*, which helps students to better understand (Sabir, 30/06/13; Sayyo, 30/06/13; Anatia, 04/07/13; Apuisa, 04/07/13). However, the quality of education still remains quite limited, compared to national standards. As Rustau (22/07/13), a candidate for the next Kepala Desa (village head) of Sama Bahari states, "teachers are not effective to increase the knowledge of students. If for example, a student finishes primary school, sometimes they don't even know how to write their name." What Rustau describes is unfortunately a scenario that I observed during my time in the field, when a research assistant, Cassandra, asked a boy of about 10 years of age to write his name in her travel journal as a memory. The boy shied away, until a young Bajo girl came and helped him spell out his four-letter name, Robi. After this simple demonstration, Robi's eyes lit up, as he wrote his name for the first time (and then again five more times) in the research assistant's travel journal. Robi is one of the many illiterate Bajo on Sama Bahari. Only 37 percent of my respondents claimed to be literate, while at the national level, 99.5 percent of youth and 92.6 percent of adults are categorised as literate (UNESCO, 2013). However, it is important to note that the Indonesian government could have overstated these literacy rates in order to alter its international appearance.

There are many impediments to continuing education for Bajo villagers. According to my respondents, cost tended to be the largest barrier, with the second largest being fear. Corporal punishment in schools takes the form of humiliation or violence. For instance, La Hama (11/07/13), now a middle-aged father of three, still has a scar on his leg from his very last schooling experience, when his teacher hit him with a wooden stick in grade one. Furthermore, lessons only last for approximately one to three hours a day, often being cut short when teachers leave early or arrive late (Mamang, 04/07/13; Daud, 16/07/13; Lupardi, 20/07/13). Another potential disincentive to formal education is the lack of relevant employment opportunities. As Rustau (22/07/13) states, "when I asked [my son] why he stopped going to school, he said: 'If I go to school, what will I be in the

future? Should I be a corrupt politician and get lots of money?' Then I said no, going to school is only to be a person who has morals and dedication." Clearly, without the capability to choose alternative career paths, incentives for attending formal education are limited for members of this Bajo community.

4.1.3: Skills and Training

There is a lack of market information in Sama Bahari. With no market in the village, most fisherfolk wishing to sell or trade their catch do so at the Sampuatu fish market on Kaledupa Island. To determine the price of their catch, many rely on their close friends or relatives for advice on how to price, while others just match the prices of similar products being sold in the market (Kadang, 16/07/13; Kuasi, 17/07/13; Jabira, 19/07/13; Nuharing, 19/07/13). Some interviewees noted that they charge more during harsh weather conditions and others charge according to the prices offered by potential customers (Daud, 16/07/13). However, oftentimes fisherfolk are not the ones taking their catch to market, but hire Bajo women as intermediaries. Wa Saimbi is such a fish collector. The fisherfolk from which she collects fish, pay her a fixed rate per day, and also tell her what to charge per fish. She recognizes the fisherfolk's lack of market information, and uses her experience in the market to determine more appropriate prices. She states, "the fishermen give me specific prices for their fish, but I can sell their fish for even higher prices at the market because they don't know how much to charge" (04/07/13). In some instances, Wa Saimbi can sell her products for twice as much as what the fisherfolk would charge. She always gets paid a fixed amount from the fisherfolk, and always gives the fisherfolk just the amount they say to charge for each fish. However, when she is able to sell the catch at higher prices, she keeps the additional profit.

From the consumer's perspective, a lack of market information translates into unpreparedness for increases in price levels. For instance, in relation to the current economic downturn in the Indonesian economy, Laiyai (26/06/13), a middle-aged fisherman, states, "last week, the price of oil rose by 2000 RP (20 cents CAD) per liter. One fisherman uses 30 liters of oil per day. This means that they spend an extra

60 000 RP per day...Oil is a fixed price and we cannot barter." With a lack of information on when prices are expected to rise and by how much, fisherfolk are not able to prepare by increasing savings. Likewise, with regards to goods his wife sells in the market, Anusing (19/07/13), a 50-year-old father of two, states, "sometimes it is low prices and sometimes it is high prices." This general unpredictability of market conditions reduces the capabilities of Bajo individuals to be financially stable and increases vulnerability to shocks.

Generally, new information and skills are acquired by consulting friends and family (Ntao', 11/07/13; Gopang, 12/07/13). When respondents were asked where they go to learn new skills, many responded with the names of different villages, which indicates the lack of information or training available within Sama Bahari. Skills that fall outside of the skillset of the immediate social group are often picked up from other Bajo and non-Bajo Indonesians that come to the village, or from travelling outside the village (Tanta, 16/07/13). For example, Apuisa (04/07/13), a 50 year-old woman, explains how she learned to make fishmeal balls, which now serves as her main livelihood activity: "I learned the skills I have from my oldest daughter. She learned her skills from her journeys to other places. When she comes back here she teaches me."

Though there is rarely any formal training available in Sama Bahari, sometimes there are meetings held by the *jagawana* (national park authority) related to marine conservation or the fishing industry (Baharudin, 28/06/13; Sayyo, 30/06/13; Suhaele, 30/07/13). As there are no formal opportunities in the village for locals to learn new skills unrelated to fishing, there are limited employment opportunities to choose from. This demonstrates a limited capability set in Sama Bahari village in terms of abilities to choose a diversity of career paths, as noted in the previous section.

4.1.4: Political Awareness and Participation

Political awareness and participation are extremely low in Sama Bahari. The village is physically distant from large Indonesian cities, and the lack of communication

devices such as televisions and radios mean that people have limited access to current news. When I visited the village, there were still remains of a central gathering space that previously housed a communal television. Since 2003 when a storm hit the village and destroyed the television, only the households who could afford electricity and personal televisions have had access to the news (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13). In terms of newspapers, Sama Bahari received the Kendari Post between 2009-2012, but after that time the regional government stopped the program that sent the paper because of the cost to deliver it to such a remote area (Suhaele, 30/07/13). However, as discussed above, Bahasa Indonesia comprehension skills are low in the village and literacy rates are even lower, so a newspaper only benefits select households. Interestingly, only 57 percent of my interview respondents knew who President Suharto was. When asked about this former authoritarian ruler of Indonesia and the 1997/98 economic crisis, Sayyo (30/06/13), a charismatic woman, stated, "I don't know who Suharto is or what the economic crisis is." Most political decisions are discussed only amongst the local village government – a small group of men, who all knew who Suharto was (Suhaele, 30/07/13). This indicates a lack of political capabilities amongst the majority of the population as well as a gendered bias in political human capital. Obviously to move forward as a 'democratic' Indonesia, efforts to increase political participation in remote areas like Sama Bahari would require increasing political awareness.

In this section, I have detailed the levels of health, education, skills and training, as well as political awareness and participation that exist in Sama Bahari. Overall, the levels of human capital are low when compared to levels elsewhere in Indonesia, especially with regards to formal education and political awareness; however, human capital seems to be increasing over generations.

4.2: Physical Capital

Like human capital, physical capital has also been increasing over the past 15 years in Sama Bahari, but I would suggest at a slower rate and in subtle ways. Unfortunately the increase in physical assets has not translated into an equivalent

increase in capabilities. In this section, I identify the tensions between traditional and modern fishing gear and practices, as well as infrastructure development.

Most people in Sama Bahari live in houses built of bamboo, aluminum and banana leaves (Figure 4.2). Constructed on stilts directly above the sea or on a foundation made of coral, houses often sway in the wind, allowing rain to penetrate walls and ceilings. Some houses are connected with makeshift bridges made of bamboo stocks or planks of wood, while others are physically disconnected from the village altogether, only accessed via canoe. In 2011, the regional government funded a project to build permanent bridges (Figure 4.3) in the village as well as a sheltered public pavilion (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13; Suhaele, 30/07/13), which improved the ease of access for many households and increased capabilities for socialization and cooperation. However, many Bajo remain dissatisfied with the government's lack of funding for housing (La Hama, 11/07/13).





Figure 4.2: Photos of Bajo houses in Sama Bahari. Source: Author.

The village received electricity for individual households in 2004 (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13), but this is only available for the relatively wealthy. Even still, electricity is intermittent and available for only a few hours a day. Furthermore, there is no access to potable water in the village. Rainwater is captured for laundry and bathing, while people queue, sometimes for hours, at Sampuatu Market to fill plastic containers of water for drinking and cooking. Some people like Sabir (30/06/13), secretary to the *Kepala Desa*, have no boat or canoe, so must rent one from a friend to get to the market for water. In rough weather conditions, obtaining this basic need becomes challenging. A quote by Nurasa

(16/07/13), a shy widowed woman, shows her desire to access basic infrastructure: "I hope that in the future, there is tap water and more electricity available too. Now it is only available for people who have money. I think it is impossible for people like me to have those things."

In terms of fishing gear, fisherfolk use gillnets, spear guns, spears, fishing line, cyanide or bombs, most of which they make themselves. Even for navigation, many fisherfolk use their traditional knowledge to guide them at sea. For example, Baharudin (28/06/13), a gillnet fisherman introduced in Section 4.1.1, explains that global positioning systems (GPS) are now available in markets around the Wakatobi, but since he cannot afford one, he uses the stars to navigate, or makes a compass using a blade and needle in water. Again, technical improvements in technology serve only the relatively wealthy.





Figure 4.3: Photos of the government-funded bridge in Sama Bahari. Source: Author.

4.3: Financial Capital

Over the past 15 years, the cash economy has become increasingly favoured over the traditional barter system in Sama Bahari. As Syamsul Alam (22/07/13), a fisherman introduced in Section 4.1.1, recalls in reference to the Photovoice photo he took, shown in Figure 4.4: "In the past, if we wanted to buy fish, we used the barter process. Now we use rupiah." Unfortunately, there has not been much improvement in terms of financial capital available to this Bajo community since 1998, and levels of savings remain low. About 47 percent of my respondents

claimed that their daily income was not sufficient to cover their basic daily needs including food, water, petrol for their boats, and any medical or educational expenses. The vast majority of my respondents stored their money in their own homes, with only one respondent, a candidate for *Kepala Desa* in the next elections, claiming to have a bank account on the island of Wanci (see Map 1.1) (Rustau, 22/07/13). As another of my respondents, Laeto (02/07/13), a member of the local village government stated, "only the really educated people living here know what a bank is." The closest financial institutions are in Wanci in the Wakatobi (see Map 1.1), or on Buton Island, located between the Wakatobi region and the main island of Sulawesi. However, there are none on the adjacent island of Kaledupa, which is likely one of the reasons for the limited knowledge of financial institutions in Sama Bahari.

With such limited savings, there is often a need for credit in order for local Bajo to meet their daily needs such as potable water, rice and clothing. Most often, my respondents borrow from relatives, friends, or customers that regularly purchase goods they sell in the market. However, there is also some access to formal loans from the national government under the *Program Nasional Pemberdayaan Masyarakat Mandiri* (PNPM Mandiri) (Juleh, 30/06/13; Jabira, 19/07/13). PNPM Mandiri is aimed at reducing poverty, and increasing prosperity and employment opportunities for poor individuals and communities in Indonesia (Program Nasional



Figure 4.4: Bajo fishermen selling fish from their canoes in Sama Bahari. Source: Syamsul Alam (22/07/13).

Pemberdayaan Masyarakat Mandiri, 2014). Many of my respondents have benefitted from the program through increased financial capital in the form of affordable loans, as representatives come to Sama Bahari on a regular basis to offer loans to the Bajo (Juleh, 30/06/13; Sabir, 30/06/13; Puri, 11/07/13; Jabira, 19/07/13). Many of my respondents pay around 10 percent interest (Sabir, 30/06/13; Puri, 11/07/13). With flexible payment programs, the majority of respondents seem confident in their ability to pay back the loan and display content in the opportunities and capabilities that this program provides (Juleh, 30/06/13).

On the other hand, there are gender expectations that provide what Sen (1999) calls 'unfreedoms.' Most often, men are expected to earn enough money to support their families. Baharudin (28/06/13), the burly fisherman introduced in Section 4.1.1 explains in length that he does not borrow money when he does not have enough because he would be too embarrassed:

If I need something to buy and my money is not enough, I am shy of it. I will not buy it and I will not borrow to buy it. I am shy to borrow money from my friends, even from my family. [My friends would say:] 'You are a big guy with big muscles. If you don't work, what is your body used for?' I don't want other people [in Sama Bahari] to hear that I am asking for money from my friends. I am shy about it. I don't want [that]. If I want to borrow money, I will make it secret, but it is difficult [to keep secrets] for the Bajo here.

This quote addresses the pressures of gender expectations that Baharudin is subject to, which lead him to refrain from buying things that him and his family need, despite having access to a social network of friends and family that may be able to lend him funds. These gender expectations reduce his choices for reaching an end, thus limiting his capabilities. Furthermore, women tend to assume many unpaid reproductive tasks such as housework and childcare (Juleh, 30/06/13). While describing their daily activities, 76 percent of female respondents included housework as one of their main responsibilities, while only 2 percent of male respondents stated they helped with household chores. While women also undertake income-generating activities, they often earn less money than men for the same activities. Sayyo (30/06/13), the charismatic woman introduced in Section 4.1.4, for instance states: "My husband and I do the same activities. [We are both]

gillnet fisherfolk" yet "my husband has more money than me" and "when I get my own money, I use it for family expenses and never for myself." These gender roles and expectations mean that women are usually the first to be denied new livelihood opportunities. Entrepreneurial women, for instance, are forced to shut down their businesses or are unable to start them if their households lack financial capital. Sabir, for example, expresses his wife's aspirations: "My wife does not work because she only does household activities. She keeps the house clean, does the laundry and bathes the kids. She also wants to build a kiosk but we don't have any money for that" (Sabir, 30/06/13). Interestingly, 72 percent of respondents stated that the man of the household made the most money, while only 4 percent of respondents stating that the woman of the house had a higher income. 9 percent of respondents said both partners had equal incomes and the remaining 15 percent were either divorced or widowed. Oftentimes, income provides leverage for household decisionmaking (Sen, 1999; Nussbaum, 2003). None of my respondents stated that the woman of the household was solely responsible for decision-making; 60 percent claimed that duty was left to the leading man, while 25 percent said it was a shared responsibility. Gender therefore influences one's capability to become financially independent, make decisions, and access financial capital.

4.4: Natural Capital

Natural capital is arguably the most important asset for the Bajo in this community, as many locals rely on marine resources for both income and subsistence. Located in the coral triangle, Indonesia is known to have "one of the world's largest biodiversity centers of coral ecosystems" (Elliott et al., 2001: 296). As Sama Bahari is situated over the sea, these marine resources provide Bajo householders with a so-called 'subsidy from nature' (Hecht, Anderson & May, 1988) from which they acquire food, and materials from which to make housing and tools. Rural communities like this one tend to "rely more on common property resources not only for income and sustenance, but also for risk coping to smooth consumption after income shocks" (Takasaki, Barham & Coomes, 2004: 204).

Despite conservation efforts, the natural resource base around Wakatobi National Park has been depleting over the past 15 years (Cullen-Unsworth et al., 2013). I will return to the depletion of marine resources in the following chapter, but here I find it important to note the sense of unfairness shared by respondents regarding access to natural capital. Laeto (02/07/13), a member of the local government introduced in Section 4.3, states, "before the *jagawana* came here, we were free to fish anywhere we wanted, but since then we have been limited." This unfairness comes from the fact that:

In the years before the *jagawana* came here, there were no restrictions or regulations. The Wakatobi [region] was not known across the world as a biosphere reserve and it is more complicated now for fishermen to look for fish in the sea...their goals are for resilience but unfortunately the fishermen inside the Wakatobi are suffering" (Rustau, 22/07/13).

Local Bajo remain dependent upon marine resources for food, income and livelihoods, however due to the increased pressures placed on marine ecosystems, the rate of extraction is unsustainable, and the natural capital available to local Bajo has been consistently decreasing.⁶

4.5: Social Capital

Finally, I address the bonding, bridging and linking social capital identified in my analysis. There is an abundance of bonding social capital in Sama Bahari village; arguably the most widely accessed asset in the community. Bajo individuals here depend on their family and friends for borrowing or sharing food, and financial or physical capital; learning skills; sharing knowledge or news; and providing services such as healing ceremonies. Some people like Sabir (30/06/13), before he became secretary to the *Kepala Desa*, relied on social capital for livelihood opportunities all together. He states, "I stopped working as a fisherman because my friend who I would go fishing with [was] travelling far away. If he [came] back, it may [have

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⁶ I am aware of the large literature on marine and forest parks and debates regarding access to natural capital in these for local residents throughout Southeast Asia. Due to page constraints I do not address them here, but see for instance: Dressler (2006), Vandergeest et al. (2007) and Roth (2008).

been] possible for me to fish again." Gopang (12/07/13), a sea cucumber collector, also realizes that social capital is key to generating his livelihood: "I follow [others to collect sea cucumber]. If I don't follow them, I have nothing." The ties are extremely tight within Sama Bahari. Thus, bonding social capital is often drawn upon when other assets are lacking. However, there is also some negative social capital within the village, influenced by level of wealth or gender. Honna (20/07/13) an elderly woman, for instance states: "I am never allowed to give my opinion at the [village] meetings. I was seen as a fool because we were seen as poor people. We had a bad house and unpredictable livelihoods."

There exists some bridging capital for community members in the form of ties between Bajo villagers and people outside this minority group, often islanders from Kaledupa, known locally as the Pulo peoples (Cullen-Unsworth, 2013). As there exist inequalities between local Bajo and Pulo, bridging capital is often used as a means of for local Bajo to access resources that are not available in Sama Bahari. As Wa Saimbi (04/07/13), a divorced woman introduced in 4.1.3 describes: "the house that I live in is not mine, but it belongs to a Kaledupa person. The owner let me live here for as long as four years. I don't pay rent, but when the owner comes back I help him with what he needs to do in [Sama Bahari]." However, language barriers make it difficult for Bajo to create social bonds with people outside of their ethnic group. Sayyo (30/06/13) explains, "I only do [social] activities with Bajo people and never with other people, especially not the people from Kaledupa. I don't speak Bahasa Indonesia and they don't speak Bajo."

There often appears to be negative social capital between Kaledupa inhabitants and local Bajo. Laeto (02/07/13) describes:

It is difficult for me to reach water resources by myself because I don't have a well, because I don't have land in Kaledupa. It is very difficult for [Bajo] villagers to get their water from Kaledupa because we have different perspectives – the Kaledupa people and the Bajo. It is us and them. They don't want to give us our own source of water.

Thus bridging capital, like bonding capital, can either be positive or negative, depending on the circumstances and household.

There is virtually no linking capital in the village, as Bajo residents seldom participate in the formal economy, nor have linkages with political decision makers outside the village who could provide access to advanced training and financial capital. Likewise, the Operation Wallacea research station on Hoga Island (see Map 1.1) rarely employs local Bajo due to lack of *Bahasa Indonesia* language abilities and the limited time the research station functions (two to three months per year).

4.6: Conclusions

In this chapter, I have addressed my first research question by analyzing the human, physical, financial, natural and social capitals of the Bajo householders whom I interviewed, and from observations in the village more generally. I have identified the capabilities that these assets create and noted the changes in the availability of these assets and capabilities since the 1998 economic crisis. Human capital as a whole has been increasing over the past 15 years in the village, but still, when compared to national levels, Bajo rates of education, skills, and political participation remain low. There has been a slight increase in physical capital since 1998, in terms of physical infrastructure and new fishing technologies for some. During the same time period, there has been little or no increase in access to financial capital, as there are very low levels of savings and little access to formal financial institutions. Because of the biodiverse coral reefs and marine ecosystems that surround the village, Bajo villagers have access to plentiful natural capital. However, the marine resources are becoming depleted, indicating a possible loss of natural capital for local Bajo in the future. Finally, the tightly knit Bajo community makes use of bonding social capital, which they often substitute for other types of assets they lack. A small amount of bridging capital is accessed, but I was unable to identify any linking capital available to my respondents. I have illustrated the relative access to each capital for the average respondent using a livelihood asset pentagon in Figure 4.5. In order to better understand how access to these assets is negotiated and how they affect livelihood strategies, we must also analyze mediating factors, as I do in the following chapter.

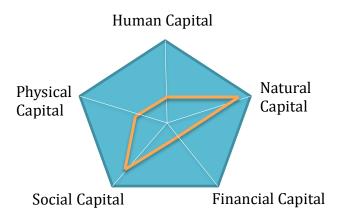


Figure 4.5: Livelihood asset pentagon representing the assets available to my typical respondent in 2013. Source: Author.

Chapter 5: Mediating Factors in the Context of Sama Bahari

In this chapter I address my second research question: what are the transforming processes and structures that mediate access to assets and capabilities? Section 5.1 addresses the trends, shocks, and seasonal effects that comprise the vulnerability context in which the Bajo people on Sama Bahari are situated, while Section 5.2 addresses the government structures, laws, and policies that further impose specific conditions for livelihoods.

5.1: Vulnerability Context

This section analyses the external environment in which access to the assets described in Chapter 4 are mediated. I first examine the vulnerability trends identified in my data analysis, I then assess the shocks that hit Sama Bahari, and I finish by identifying the effects of seasonality on livelihoods.

5.1.1: Trends

The first trend I address is that of decreasing marine resources. Being a traditionally nomadic culture, the Bajo would not normally remain in one area long enough to deplete marine resources (Pet-Soede, & Erdmann, 1998). Once settled in Sama Bahari however from the 1960s onward, as noted in Chapter 1, their same level of fishing becomes unsustainable. Figure 5.1 shows a negative trend in catch per unit effort (CPUE) over time for fish fences in the Wakatobi region. Fish fences are semi-permanent gillnets set up in a funnel design and built on the sea grass beds between mangroves and coral reefs to exploit the natural migration of reef fish between the habitats (Exton, 2010). Figure 5.2 shows a paralleled increase in the proportion of juveniles caught using fish fences until 2011. The decrease in this proportion of juveniles caught after 2011 could be attributed to the reduction of fish fences in the area (shown in Figure 5.3) that either enabled more fish to mature or failed to catch as many juveniles (Gammage, unpub.). Fish fences and gillnets are responsible for approximately 80 percent of fish extraction within the Wakatobi region (Stanford,

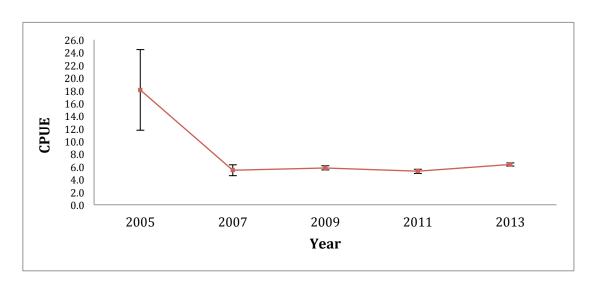


Figure 5.1: Catch per unit effort of fish fences around Kaledupa from 2005 to 2013 represented as kg fence⁻¹ day⁻¹. Source: Gammage (unpub.: 7).

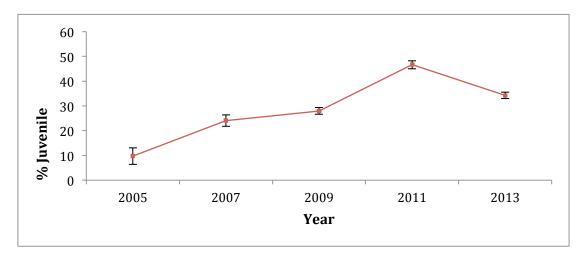


Figure 5.2: Composition of juveniles caught by fish fences around Kaledupa from 2005 to 2013. Source: Gammage (unpub.: 7).

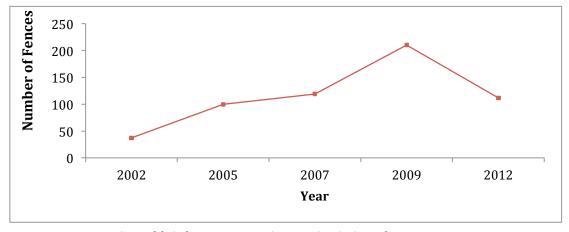


Figure 5.3: Number of fish fences situated around Kaledupa from 2002 to 2012. Source: Gammage (unpub.: 8).

2008). This example suggests the over-exploitation of marine resources in the Wakatobi region despite the implementation of a marine protected area. My respondents observe a similar trend in decreased catch with various fishing methods. Napina (15/07/12), a mother of seven states, "I [would] choose the past livelihood over today's because at the time, there were a lot of sea resources and right now they are decreasing. For example, yesterday I went to collect sea urchins, but I caught nothing the whole day." Respondents also observe decreasing fish sizes, as Jaratia (16/07/13), a coral collector states, "in the past there were many fish around here. The fish were also bigger in size. Now the fish are decreased and smaller in size." Respondents have also noticed a change in the marine environment, as Daud (16/07/13), a 43 year-old grandfather shares, "in the past, there were a lot of corals in the shallow water and mangroves along the coastline. Now they have decreased rapidly." Ramsia (22/07/13), a Bajo teacher, makes a related remark in reference to her Photovoice photo (Figure 5.4): "In the past, we would not see so much sand during low tide because there would be so much seagrass. Now, the seagrass has decreased." Sea grass habitats are a vital resource base for Bajo villagers, as they provide critical habitats for invertebrates, and fish of subsistence and commercial value (Cullen-Unsworth et al., 2013). For this reason, seagrass habitats provide a reliable livelihood activity: gleaning. However, as noted by Ramsia, seagrass beds are becoming overexploited due to increased anthropogenic pressures (Cullen-Unsworth et al., 2013).

Furthermore, the rapidly increasing population of Sama Bahari intensifies this concern (La Hama, 11/07/13; Nuhiya, 15/07/13; Nuharing, 19/07/13). Many respondents like Lupardi (20/07/13), a middle-aged gillnet fisherman, identify the impacts of an increasing human population on local marine resources: "the number of fishermen has increased and the sea resources have decreased." This trend has also increased competition for depleting resources, as Mayor (20/07/13), who

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⁷ Gleaning is the activity of collecting of marine resources such as clams or sea cucumbers within "intertidal and shallow subtidal seagrass meadows" for subsistence, commercial or recreational reasons (Cullen-Unsworth et al., 2013: 2).



Figure 5.4: Seagrass meadows near Sama Bahari during low tide. Source: Ramsia (22/07/13).

previously worked as a blast fisherman, states: "Now it is difficult to catch fish because of the increased number of fishermen."

Many of my respondents have noted an increase in unpredictable weather conditions, including unpredictable winds and rain patterns. This proves to be problematic when people aim to apply traditional knowledge that they have been passed down from generations to fishing or other livelihood activities. Baharudin (28/06/13) explains why traditional knowledge is essential for his livelihood:

I started sailing when I was a child; when I was 7 years old...All of the wind systems and the directions, I learned only from my father. Knowing about the wind system is very crucial to me...It is a warning also to make sure that if the winds are hard, we know not to go far away from home.

Juleh (30/07/13), an octopus fisherman, realizes that what he has learned from his parents about the winds no longer applies to current conditions: "I learned about the winds from my parents, but the winds that blow now are unpredictable." Syamsul Alam suspects that Sama Bahari is beginning to see the effects of climate change: "I have noticed that the sea level is increasing and I know that it comes from the melting of icebergs at the north and the south poles. That is climate change." While it is difficult to conclude that Sama Bahari is indeed being affected by climate change, it is interesting to note the fact that villagers speak of this increasing instability resulting from more frequent unpredictable weather events, and recognize the mediating effect this trend has on local Bajo livelihoods.

Another reported trend is that of increasing numbers of goods available for sale near Sama Bahari (Syamsul Alam, 13/07/13; Kadang, 16/07/13; Kona, 19/07/13). This provides Bajo villagers with more options for food and basic necessities. This has also led to improvements in technology for some people in the village, as they become more involved in the market economy. For instance, Syamsul Alam (22/07/13) expresses his appreciation for the basic technologies that were not available to local fisherfolk prior to their involvement in the market economy, while describing his Photovoice photo (Figure 5.5): "In the past, we did not use styrofoam or ice to look after the fish and keep them fresh. We just used a coconut shell." Today, these basic technologies are widely available to locals. There has been an introduction of cellular phones and televisions, as well as some improvements to fishing gear include GPS, but only for the relatively wealthy, as noted in Chapter 4, Section 4.2 (Baharudin, 28/06/13; Natsir, 15/07/13). For those who can afford these technologies, they have improved their livelihoods, but for those who cannot, the same freedoms are not generated, and so a divide is created. Natsir (15/07/13), a line fisherman, explains that his friends are able to benefit from the newly introduced GPS technology, but he does not: "When I want to go to a new fishing ground, I ask to my friends and they give me directions...They use GPS, but I don't, so I never get to the areas where they say."



Figure 5.5: Bajo woman keeping her catch fresh in a styrofoam icebox before she makes a sale. Source: Syamsul Alam (22/07/13).

Finally, there is also the trend of increasing price levels. Some Bajo interviewees view this trend as a blessing, since they can now charge more for their catch (Immi, 15/07/13; Kadang, 16/07/13; Kuasi, 17/07/13). This feeling was expressed by respondents who were in the business of selling expensive resources that are either no longer legal to catch in the National Park, or resources that are rare. Kadang (16/07/13), a father of four, for example, sells dead coral that is used for making foundation for houses. He explains that in the past, "dead corals were not worth anything. Now, dead corals are sold for huge prices." Illegal resource extraction within the Wakatobi National Park is common for local Bajo, who also purchase the forbidden goods. On the other hand, some villagers view rising prices as a burden, since it lowers their ability to purchase necessities they can no longer afford (Jabira, 19/07/13; Mayor, 20/07/13). Many of my respondents, like Laiyai, a middle-aged fisherman, feel that price levels have been increasing indefinitely. Laiyai (26/06/13) claims "prices rise rapidly day-by-day."

In sum, the main vulnerability trends Bajo villagers reported to me included a decrease in fish catch, an increasing human population in Sama Bahari, increases in unpredictable weather conditions, increases in goods available at the market and increasing price levels.

5.1.2: Shocks

Moving onto shocks that mediate accessibility of assets for the Bajo householders, I first assess the impact of the Asian economic crisis of 1997/98. Indonesia's economy as a whole was severely affected by this crisis, and the economic impacts were felt even in rural, isolated communities like Sama Bahari. The effects of the crisis are seen in many ways, some I have already mentioned in Chapter 4, like a lack of financial capital to purchase food (Gopang, 14/07/13; Nuhiya, 15/07/13; Daud, 16/07/13; Kuasi, 17/07/13; Kona, 19/07/13). My respondents generally associated the Suharto Era with low price levels, so for them, "the fall of Suharto means an economic crisis. People's lives were good before the economic crisis, but after, the prices rise" (Laiyai, 26/06/13). Many of my respondents reacted to such shocks by

purchasing fewer goods from the market. Sabir (30/06/13), for example, states, "the crisis did not change my life for work, but it affected my life for buying things. I buy less since the crisis." As noted in the previous chapter, physical or social capital is often substituted for financial capital when needed. However during the crisis, there was often not many alternative ways of acquiring goods. For example, Wa Saimbi (04/07/13) states, "the economic crisis was difficult for me. It was difficult for me to borrow things from others, but now it is easy."

Presently, the Indonesian economy is experiencing what many economists are calling a 'slowdown,' which is also having shock consequences on local livelihoods. Indonesian stocks have entered bear market territory and the rupiah depreciated to a four-year low against the US dollar in August 2013 (BBC, 2013a; The Jakarta Post, 2013). Yet, the economic impacts hitting the village today are seen by the locals as a 'crisis' rather than a slowdown (Apuisa, 04/07/13). For instance, Jaratia (16/07/13) claims "the crisis of 1998 was not as big as the crisis today. The current crisis is huge and affects our lives right now. It is making it very difficult to live." With the economy making headlines like 'Indonesian growth at slowest pace in two years' (BBC, 2013b), Bajo villagers are feeling the impacts on their livelihoods. As Puri (11/07/13), a fish collector, noted: "the crisis right now is difficult. It is more difficult now than in the past. Now you can't buy anything with 20 000 RP." Of course, conditions today might only seem worse for Bajo interviewees than conditions in the past due to the distancing effects of retrospection, but this does not discredit the mediating effects of the current economic conditions on the livelihoods of Bajo villagers today.

Finally, the village has also been subject to natural disaster shocks that mediate their access to and the availability of assets. For example, a strong storm hit the village in 2008, completely destroying approximately ten houses and damaging many more (Daud, Sabir, Syamsul Alam, Laiyai, 26/06/13; La Hama, 11/07/13; Wa Mbulu, 16/07/13). Nonetheless, in this case, because there is limited investment in houses and walkways, they are neither expensive nor time-consuming to build. This means that they are more easily damaged by natural disaster, but that their reparation also requires little time, and is often done by accessing common

resources and social capital (Baharudin, 28/06/13; Juleh, 30/06/13; Napina, 15/07/13). The diversity of marine resources that form the natural capital stock for local Bajo make these villagers more easily able to recover from financial stocks. However as shown in Figures 5.1, 5.2 and 5.3, the local fisheries are being depleted, which may lead to a natural shock that local Bajo would not be able to cope with as easily.

5.1.3: Seasonality

Seasonality affects the level of health of residents in Sama Bahari, especially during periods of *pancaroba*. *Pancaroba* has no direct English translation, but *panca* can be understood as variety in space and *roba* as change over time (Emmerson, 1991). Their combination "implies disorder and disorientation in space-time, as when strong winds gust out of time in the space between seasons – the dry season over, its wet successor not yet underway" (Emmerson, 1991: 449). Januder (22/07/13), a live-fish trapper, explains the effects of *pancaroba* on health: "When the winds are unpredictable, it affects the health of families with headaches and dengue fever because when unpredictable winds come, it makes the mosquitos come to this village." Seasonality also affects the types of work that are available for Bajo individuals to choose from. While some activities, such as fishing by gillnet, can be done year round, others, such as collecting sea cucumber, line fishing for live fish, or gleaning, depend on the season. To address this aspect of seasonality, Bajo householders are diversifying their livelihoods, which I analyze in the following chapter.

5.2: Transforming Structures and Processes

In this section, I identify the levels of government and discuss their transformative impact on the availability of assets for the Bajo. I then evaluate specific laws and policies to establish whether they create capabilities for local people and whether the conditions for those capabilities are being met.

5.2.1: Levels of Government

Indonesia is divided into provinces (*provinsi*), regions (*kabupaten*), municipalities (*kota*), districts (*kecamatan*), and villages (*desa*), which all have their own government (Beard, 2002). The most local level of government is the *Kepala Desa* (village head) and his (usually a male) local government consisting often of a small group of men. According to the *Kepala Desa* of Sama Bahari, "women over here do not have enough education to work in the village government" (Suhaele, 30/07/13). This quote illustrates how gender influences the capability to participate in political decision-making. It is at this local level that permits for fishing are issued for locals around the village, and permission is granted for temporary migration to distant areas for the purpose of fishing activities. The local government also negotiates policies and projects with the regional government, however the level of control held by the *Kepala Desa* and the local government in terms of these projects is often low compared to that of the regional government.

The regional government receives funding for local projects around the Wakatobi region. However, respondents explained that due to lack of communication between levels of government, oftentimes projects do not consider culture or context, and do not serve to increase the capabilities or freedoms of the local peoples. For example, in efforts to reduce dependency on marine resources, the regional government funded the construction of a modern aquaculture farm in Sama Bahari in 2008, but the nets provided were not of appropriate size (Suhaele, 30/07/13). Today, the unused modern aquaculture farm stands next to the working traditional fish farm. This indicates the lack of cooperation between the local and regional levels of government in development projects, leading to the inefficient allocation of funds and few improvements in physical capital. As the *Kepala Desa* argued, "the sub-district level does not know which activities we need locally" (Suhaele, 30/07/13).

The provincial government is responsible for making important decisions in education that have large impacts on the village. For instance, it was explained to me

that it is at this level that teachers are assigned and curriculums are designed. This causes many problems, as analyzed in Section 4.1.2 in the previous chapter. Notably, teachers are being assigned to Sama Bahari village without any knowledge of Bajo culture or language. The *Kepala Desa* states, "[schools here are] not sufficient for the Bajo community...It is a different curriculum that [students] need" (Suhaele, 30/07/13).

Finally, the federal government is responsible for creating national programs that also influence the well-being of the Bajo community on Sama Bahari. One of these programs is called *Jamkesmas*. As of 2005, the central government of Indonesia has introduced a public health insurance scheme - Jamkesmas - that currently insures 76 million of Indonesian's poorest citizens (Harimurti et al., 2013). While the program design is aimed at providing universal healthcare, it is performing below its potential as "there is evidence of high levels of mistargeting and leakages to the nonpoor, low levels of socialization and awareness of benefits, low utilization and relatively low quality of care," amongst other drawbacks (Harimurti et al., 2013: 1). Nonetheless, villagers did state that this program is actually benefitting some Bajo individuals on Sama Bahari, increasing their capability to lead a healthy life in the village. PNPM Mandiri, described in Chapter 4, Section 4.3, is also developed and run by the federal government. In sum, at different governmental levels, programs and policies mediate the capability set of the Bajo villagers of Sama Bahari; some are having positive results, such as healthcare programs, while others remain limited, such as the education system.

5.2.2: Laws and Policies

Of course when addressing the factors that influence livelihoods for any Indonesian community, we must consider the fall of President Suharto and the effects of the following transitional period known as *Reformasi* (political reform). The fall of the authoritarian regime and the switch to a democracy (although a rather new and at times troubled democracy) has created an environment for which people have more

capabilities. Rustau (22/07/13), a candidate for the next *Kepala Desa*, provides an example:

After *Reformasi*, we became not afraid anymore to speak in front of people, even the government. Everyone has the right to speak. Sometimes that affects my life. I have a capability to speak in front of policemen or government officials, even if I have something not so good to say to them. That is different than in the past. When we spoke in front of the policemen or government officials, we would be arrested.

Decentralization during the period of *Reformasi* has also allowed for the *Kepala Desa* to propose, demand, and lobby for funding and projects that serve the needs of the local community (Suhaele, 30/07/13). For example, the *Kepala Desa* was able to receive funding to build central bridges in Sama Bahari in 2011. He explains:

The local community proposed the bridge as an activity that we can do with the budget. It is different from the Suharto government in the past. Now there is local autonomy, but in the past there was only central autonomy (Suhaele, 30/07/13).

As such, despite the limited scope of democratic practices in Indonesia, Bajo community members consider *Reformasi* to be a period during which their capabilities and freedoms expanded.

The implementation of the Wakatobi National Park has also impacted Bajo householders to a great extent. For the whole community, it has narrowed fishing grounds, limited fishing gear, and restricted specific species from their catch, at least legally speaking. As the *Kepala Desa* (30/07/13) states:

The *jagawana* came here with their zoning areas, which made many people change their fishing grounds. Before the *jagawana* came, the people felt free to catch fish in the sea without being limited, but after...the people felt worried about doing their activities.

Nevertheless, some Bajo interviewees view the National Park as a mediating factor that increases their capabilities. For example, Ramsia (04/07/13) recognizes the long-term goals of the National Park: "I am actually thankful that the *jagawana* are here. Because there are zones for fishing and there are many spawning grounds protected for the fish." Others claim that the National Park restricts their freedoms

(Sayyo, 30/06/13; Juleh, 30/06/13; Apuisa 04/07/13). Ntao' (11/07/13) for example, was forced to change his livelihood: "Since the National Park was established, we can no longer collect things as we wish. In the past, I went to Bali to sell turtles, but now with the *jagawana*, I cannot catch turtles to bring to Bali." Others now live in fear due to the constant surveillance of the *jagawana*: "I don't go near Hoga because I am afraid to get permission from the *jagawana*" (Wa Saimbi, 04/07/13). For some, the Park authorities just waste valuable time:

The *jagawana* patrols took two hours of some fishermen's time that could have been used to catch fish in the sea, to check out the fisherman to make sure they were using gillnet and line fish. They were only using gill net and line fish, but to our understanding, the gill nets and line fish are allowed (Rustau, 22/07/13).

The overall impact that the National Park has on capabilities thus depends on the scale of both time and space, but is nevertheless vital to address when assessing the livelihoods of local Bajo.

5.3: Conclusions

In this chapter I have addressed my second research question, which analyzed the mediating factors affecting Bajo livelihoods. The trends discussed included decreases in fish catch, an increasing Bajo population, increases in unpredictable weather events, increases in the amounts of processed goods for sale in the market, and increasing price levels. Shocks have comprised the Asian economic crisis of 1997/98, the current Indonesian economic slowdown and natural disasters. Seasonal effects are also important. Together these factors make up the vulnerability context in which the Bajo people on Sama Bahari are situated. Key structures and processes are also impacting local livelihoods, including *Jamkesmas, PNPM Mandiri*, the period of *Reformasi*, and the implementation of the Wakatobi National Park. However, I note that local Bajo are not passive recipients to such laws, policies, and regulations. In the following chapter, I address specific livelihood strategies Bajo individuals and households use to negotiate access to assets and generate new capabilities for themselves.

Chapter 6: Bajo Livelihood Strategies and Outcomes

In the previous two chapters, I analysed the livelihood assets that are available to Bajo villagers in Sama Bahari, and investigated the transforming processes and structures that mediate access to these various forms of capital. In this chapter, I address my third research question by analyzing the strategies that local Bajo take in negotiating their own livelihoods (Section 6.1). I conclude by presenting an overview of the resulting livelihood outcomes (Section 6.2).

6.1: Livelihood Strategies

Local Bajo households use a number of strategies to achieve the best livelihoods they can, given external factors that influence livelihood outcomes. One main strategy in the village is livelihood diversification, which I analyze in Section 6.1.1. I address the strategy of migration in Section 6.1.2, and conclude by investigating the use of everyday politics and resistance in Section 6.1.3 with regards to local Bajo livelihoods.

6.1.1: Livelihood Diversification

As a measure of securing a livelihood, small-scale fisherfolk often participate in a diversity of activities (Allison & Ellis, 2001), which is certainly the case in Sama Bahari. Many Bajo locals use different fishing methods or collect a diversity of different marine resources rather than specializing, in order to increase the chances of catching enough for their household's subsistence needs (Wa Saimbi, 04/07/13; Ntao', 11/07/13; Syamsul Alam, 13/07/13). Most of my respondents, both men and women, diversified in this way. However, men usually had more paid activities than women, who tended to take on the majority of unpaid duties around the house in addition to her paid livelihood activities. The respondents or the spouses of respondents who did chose not to diversify on a daily basis tended to have a higher level of success or skill in the specific activity they chose to specialize in. For

instance, Juleh, a very successful octopus fisherman, is able to hold his breath at length while catching octopi with his bare hands. His years of experience allow him to easily identify octopus habitats, and his success rate provides a certain level of security that leads him to pursue only this during the right season. Similarly, his wife makes bed sheets for sale in the village as her only livelihood activity, since her speed and skill level give her a comparative advantage.

Bajo villagers pursue different livelihoods at different times of year to reduce vulnerability. As mentioned in Chapter 4, seasonality has a cyclical impact on livelihood activities, and thus leads to livelihood diversification depending on time of year. For instance, Ramsia (04/07/13) explains "my husband changes to tuna fishing from gillnet fishing when the waves are high and the wind blows hard. That usually happens in dry season." Gillnet fishing is usually practiced throughout the year, but in the case described by Ramsia, it is a second livelihood activity next to the seasonal, more profitable tuna fishing.

As well as every day and seasonal diversification, a closer look at Bajo livelihoods reveals how local Bajo pursue a diversity of natural resource extracting activities to deal with fluctuations in capital assets. If one livelihood activity is not producing enough income for instance, a diversity of livelihood activities provides alternative opportunities for income generation. For widows or divorcees like Wa Saimbi (04/07/13), more activities are needed to meet daily needs. She says, "in the past, I collected debt for others and I got paid for that. That was my only job. Now [that I am no longer married], I have many more jobs."

Furthermore, local Bajo choose to participate in the market economy, although only very minimally. Many fisherfolk retain livelihoods that are mostly subsistence, but also aim to catch a slightly larger amount of marine resources to exchange for cash, which they then hold as savings. In the event that they are unable to catch enough food for their households, only then will they use this small amount of savings to purchase food from the market. For instance, Jawaria sells her husband's extra catch in the market, yet only makes purchases when absolutely necessary. She states, "if there is something to buy at the market, it is only to cover our daily needs" (13/07/13). Overall, 'one foot in subsistence and the other in the market' is a

common strategy in Sama Bahari used by households to reduce vulnerability, while seasonal and life course diversification is also undertaken as and when necessary.

6.1.2: Migration

Another livelihood strategy that local Bajo use is different forms of migration. As the Bajo were traditionally a nomadic culture, migration is weaved into the threads of their cultural livelihoods. Migration is still very common among the settled Bajo in Sama Bahari, which is why I consider local Bajo here to be semi-nomadic.

My interview with the *Kepala Desa* of the village revealed four main types of Bajo fishing patterns: *Palilibu, Pongka, Sakkai* and *Lama. Palilibu* describes the fishing pattern of fisherfolk who do not migrate, but stay near the village to earn a livelihood. *Pongka* describes a temporary trip of around 7-10 days on average, usually to atoll reefs to seek out more valuable catches. *Sakkai* describes an organized group of fisherfolk who travel slightly longer distances than those practicing *Ponka*, for a number of weeks or months. However, *Sakkai* is uncommon amongst the Bajo in Sama Bahari, due to the lack of coordinators to organize such trips. There are no experienced coordinators in Sama Bahari that could lead a group of fisherfolk for *Sakkai* migration (Suhaele, 30/07/13). Finally, *Lama* migration, which is practiced by locals to Sama Bahari, is long-term movement to areas as far away as Sabah, Malaysia, for a number of years (Suhaele, 30/07/13).

Interestingly, those who choose migration as a livelihood strategy continue to work at sea in the areas to which they travel, instead of seeking labour on land. This is likely linked to both the cultural importance of the sea for Bajo individuals as well as a lack of human capital, such as *Bahasa Indonesia* skills. Nonetheless, migration offers a strategy to earn greater livelihoods. As Suhaele (30/07/13), the *Kepala Desa*, states: "People start by doing *Palilibu*, then if they are not making enough money to support their livelihoods they start doing *Pongka* and then *Lama*." This suggests that, as one would suspect, local Bajo stay in the village as a first choice (Sabir, 30/06/13), and only migrate farther afield if their livelihoods in the village are insufficient. The main reason for the *Pongka* migration strategy is to fish a particularly high valued

species. Anusing (19/07/13), a middle-aged fisherman, for instance, migrates to Buru (approximately 400 kilometers away) for months at a time to hunt turtles, while Sabir (30/06/13), the secretary for the *Kepala Desa*, used to follow his father to the Timor Sea for months to fish for shark. A second reason for practicing *Pongka* is to earn higher incomes. For instance, Laeto (02/07/13), a local government representative, has a teenage son that works in pearl cultivations around the Wakatobi region, who has temporarily left the village to earn a higher income. He sends remittances back to his family in Sama Bahari. Mainly middle-aged Bajo men and women practice *Pongka* as needed, once they have mastered the skills needed to catch high valued species. However, young Bajo, like Laeto's son, also practice *Pongka* if they are able to secure a high-paying job, or if they can learn from their family members like Sabir had done. The main reason for the *Lama* migration strategy is to primarily learn new skills. Because of this, Lama tends to be practiced by both men and women early on in their adult lives. Once local Bajo have gained the skills they set out to master on their journeys, they return to their village and practice what they have learned. Laeto (02/07/13) explains, "in 1983-1988, I went to Malaysia and learned from a technical point of view, how to catch fish. I brought back those skills here to modify my way of catching fish."

The National Park regulations have also altered migration and fishing patterns over time for local Bajo. La Hama (11/07/13), a friendly gillnet fisherman, for instance, explains the difference in his fishing patterns now and before the implementation of the Wakatobi National Park:

Before the *jagawana*, I could catch fish around the village, even if I only spend a short amount of time fishing. But now, I have to go farther to catch fish. This happens because there are more fishermen who use gillnets and there is an increasing population, which degrades the fish. In the past, I could catch fish everywhere I wanted because there were no protected areas. Now, there is more protection by the park authorities. I could catch many fish if I could catch the fish around Hoga, but Hoga is protected.

This is an interesting quote because it brings up the tension between local livelihoods and resource conservation, mentioned briefly before in Chapter 1. In the implementation of the Wakatobi National Park, many different forms of fishing gear

were banned, leading many fisherfolk to pursue gillnetting. Gillnetting is a form of fishing where a vertical net is cast in a straight line and tangles, gills or wedges fish in the netting. What La Hama describes in the above quote is a phenomenon where the large quantity of gillnets overlap, allowing for only the first gillnets to yield any catch. This, as well as the increased number of fisherfolk, degradation of fish, and newly protected areas, has led many local Bajo like La Hama to temporarily migrate to farther areas to be able to earn a sufficient living.

6.1.3: Covert Resistance

Another strategy used to negotiate different livelihoods is that of resistance. When I observed the landscape of Sama Bahari, I asked the question: why have these households decided to settle over water rather than land? The story goes, as it was explained to me by different storytellers in the village, that the traditionally nomadic Bajo ethnic group was accused of working with rebels and separatists during Islamic movements⁸ of the late 1950s, which led the tightly knit Bajo group to separate at sea as a strategy to avoid the eye of the government (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13). At this point, the government of Indonesia put pressure on the ethnic group as a whole to settle, in order to more easily keep track of its peoples. Then in 1960, three families found each other where Sama Bahari is built today, and decided to settle there (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13). Due to their deep connection to the sea, these individuals chose to settle over the water on makeshift houses, initially using only canoes to get from house to house. The storytellers I spoke with did not consider this settlement as a political statement, but the landscape speaks for itself. I argue that the construction of Bajo villages over Indonesian waters, such as Sama Bahari, is a form of everyday resistance whereby local Bajo reject Indonesian (those of majority cultural groups such as the Javanese) cultural norms and work around official pressure to settle, in a

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⁸ According to Hugo (2006: 69): "Rebellions aimed at making Indonesia an Islamic state erupted in West Java (1948-62), South/South east Sulawesi (1951-65), Aceh (1953-57; 1959-61) and South Kalimantan (1950-60)."

fighting statement to keep their cultural traditions of living with the sea. As Sabir (30/06/13) summarizes, "the sea is my land."

A more apparent act of everyday resistance is the fishing activities in which locals engage. Cyanide fishing and blast fishing are two destructive fishing methods that have been banned in Sama Bahari, as described in Chapter 1. Despite these relatively new regulations, locals continue to use such methods. As the *Kepala Desa* (30/07/13) describes, "as long as the fishing business is working, the cyanide will still be there. The cyanide is used on fish that are sold for high prices." A similar case is made for blast fishing. While conducting my field research, a bomb went off in the waters near Sama Bahari and a crater was observable to divers afterwards in a nearby reef. As Natsir (15/07/13) illustrates:

When someone does blast fishing, the *jagawana* authority will be in other areas and there will be a game made out of it. The *jagawana* never catch the fishermen with the bombs. That is why the degradation of fish and coral around the village and around Kaledupa is common.

Likewise, many women 'play games' with the *jagawana*: "the women look around to see if there are park rangers. If there are no rangers, they will continue to cut down the mangroves. It is like cat and mouse" (Daud, Sabir, Syamsul Alam & Laiyai, 26/06/13). Ramsia (22/07/13) and Syamsul Alam's (22/07/13) Photovoice responses in Figure 6.1 support this claim, as the photos illustrate women skinning and drying mangroves for firewood, an illegal activity said to represent a main





Figure 6.1: Women skinning, arranging and drying mangrove wood for fuel. Sources: Photo on the left taken by Ramsia (22/07/13); photo on the right taken by Syamsul Alam (22/07/13).

livelihood activity for women in Sama Bahari. This expression of 'playing games' was also used repeatedly by Wa Ulu (07/16/13): "When we go to collect dead corals, we must play like cat and mouse with the authority," and Juleh (30/06/13): "When I want to fish in zoning areas, I play like cat and mouse with the *jagawana*."

These quotes illustrate a trend in Bajo livelihood strategies; one that leads local Bajo to resist regulations that otherwise restrict them from pursuing activities they have been doing their whole lives. These quotes show the cunning abilities of local Bajo, who are clearly not passive recipients of new rules and regulations, but creatively resist and actively shape their own livelihoods.

6.2: Livelihood Outcomes

As I have shown throughout this thesis, the village of Sama Bahari has faced many changes over time that have influenced local livelihoods. I have also shown in this chapter, that Bajo do not passively accept these changes, but actively negotiate their own livelihoods. This Section 6.2 addresses the outcomes of these negotiations. I first address the outcomes in terms of income (6.2.1), followed by vulnerability (6.2.2), environmental sustainability (6.2.3), and the overall level of well-being (6.2.4) in the context of Sama Bahari.

6.2.1: Income

In Sama Bahari village, my data do not indicate there has been no observable increase in income levels between 1998 and 2013. My analysis suggests this is likely due to lack of alternative livelihood opportunities and linked to lack of human capital. This highlights the need for relevant policies to provide improved conditions for Bajo capabilities.

6.2.2: Vulnerability

From my analysis, levels of vulnerability in Sama Bahari have remained fairly steady over the past 15 years as a whole, yet specific forms of vulnerability have changed. There is an increasing number and intensity of extreme weather events hitting the

village, leaving villagers to rebuild destroyed houses or foundations (Baharudin, 28/06/13; Syamsul Alam, 13/07/13; Juleh, 30/07/13). However, with more participation in the market economy and more goods available for purchase nearby the village, the level of food security has increased since 1998 (Syamsul Alam, 13/07/13; Kadang, 16/07/13; Kona, 19/07/13). There have also been increases in the healthcare available, through the *Jamkesmas* program described in Chapter 5. However, overall the villagers are still fairly vulnerable due to their low skill levels, which limits their opportunities to purse alternative livelihood strategies in their own village.

6.2.3: Environmental Sustainability

The trends of fish size and fish catch addressed in the previous chapter clearly indicate that the level and type of fishing that is occurring at the regional level is unsustainable. Despite the implementation of the Wakatobi National Park, the lack of regulation, lack of alternative livelihoods available, inefficient restrictions, and local resistance have all led to an overall failure in conservation efforts. There is a need for policymakers to work more effectively with local Bajo and other fisherfolk in the area to manage local fisheries, reduce poverty and help the development of sustainable livelihoods.

6.2.4: Well-being

My data suggest that the overall level of well-being in the village has increased since 1998. To start, the fall of the authoritarian regime and introduction of democracy has at least allowed for freedom of speech for the Bajo of Sama Bahari (Rustau, 22/07/13), despite the lack of political awareness and participation in the region. Political reform has increased local agency and resulted in increased physical capital at the community level, in the form of infrastructure projects demanded by the local community and funded by provincial governments (Suhaele, 30/07/13). Moreover, further integration into the market economy has increased the level of goods available to the locals, as mentioned in Section 6.2.2, resulting in increased food

security. For these main reasons, my analysis suggests that the level of well-being in Sama Bahari has increased over the past 15 years. However, there are still significant areas for improvement in terms of the well-being of local Bajo, as described in Sections 6.2.1 to 6.2.3.

6.3: Conclusions

In this chapter I answered my final research question by analyzing the strategies used by local Bajo to negotiate livelihoods in a manner that they deem appropriate. Section 6.1.1 examined the ways in which local Bajo diversify their livelihoods every day, by season, and on an as-needed basis. In Section 6.1.2, I identified common migration trends: *Palilibu, Pongka, Sakkai* and *Lama*. I addressed the use of covert resistance as a strategy to maintain traditional livelihoods in Section 6.1.3. In Section 6.2, I analyzed livelihood outcomes for local Bajo given the assets described in Chapter 4, the transforming processes and structures identified in Chapter 5, and the strategies outlined early on in this chapter. Specifically, my analysis concludes that there has been no significant change in income levels or the vulnerability context, but a rather evident decrease in environmental sustainability and despite all, a slight increase in the level of overall well-being in Sama Bahari.

Chapter 7: Discussion and Conclusions

Throughout this thesis, I have considered how the semi-nomadic Bajo community in the remote village of Sama Bahari has responded to the impacts of the Asian economic crisis, the fall of President Suharto, and the implementation of the Wakatobi National Park. Specifically, my aim was to analyze the livelihoods of the Bajo ethnic minority group in Sama Bahari, Southeast Sulawesi, Indonesia, and to investigate how those livelihoods have changed since 1998. I developed a conceptual framework to underpin this aim, drawing from sustainable livelihoods approaches, the capability approach and the literature on everyday politics and resistance.

My first research question, answered in Chapter 4, was: what are the assets and capabilities of Bajo households in Sama Bahari and how have these changed since 1998? In this chapter, my results showed that levels of education, skills, and political participation are low in Sama Bahari compared to national averages, but have been increasing during this time period. There has been a slight increase in availability of physical capital in the form of infrastructure development and new fishing technologies; however there has not been equal access to such technologies in the village, as access depends on level of wealth and gender. Local Bajo have low levels of savings and virtually no access to formal financial institutions. Some government loans are provided through PNPM Mandiri to cover the costs of basic daily needs, but little else. The diverse marine ecosystem in the Wakatobi region provides a wealth of natural capital to local Bajo, however these resources are becoming depleted. Of all the capitals, bonding social capital is a key asset for local Bajo, who often rely upon friends and family for accessing financial capital they would not otherwise be able to.

In Chapter 5, I answered my second research question: what are the transforming processes and structures that mediate access to these assets and capabilities? My results showed that recent trends have included decreases in fish catch, raising concerns for the majority of the local Bajo community who depend upon marine resources for their livelihoods. Another trend identified was that of an

increasing Bajo population, which places more anthropogenic pressure on decreasing marine resources, while also increasing competition for resource collection. Increases in unpredictable weather events have challenged traditional knowledge of wind and rain patterns for fishing and marine harvests, and increased the vulnerability of local Bajo. An increase in the amount of goods for sale in the Sampuatu market has allowed locals to more easily access staple foods and new technologies, but dependence upon the nearby island of Kaledupa creates issues for some local Bajo households in accessing basic needs such as potable water. Increasing price levels has been either for better or for worse for local Bajo, as some are benefiting from the higher profits they are making selling goods at the Sampuatu market, while others are struggling to afford their basic needs. Seasonal effects also impact local Bajo livelihoods in terms of health and feasible livelihood activities. Local shocks that I identified included the Asian economic crisis of 1997/98, the current Indonesian economic slowdown, and natural disasters. The national Jamkesmas and PNPM Mandiri programs have benefitted some villagers by providing healthcare and loans, respectively. The period of *Reformasi* increased the capabilities and freedoms of local Bajo, who now benefit from freedom of speech and a decentralized, more democratic government. My respondents expressed mixed feelings regarding the implementation of the Wakatobi National Park, however the lack of capacity for enforcement of regulations, the lack of coordination with local fisherfolk, as well as the absence of alternative livelihood opportunities for Bajo villagers has led to clear failures in conservation.

My final research question was: how are Bajo livelihood strategies undertaken and how have they changed or diversified over the past 15 years? I responded to this question in Chapter 6. Local Bajo diversify their livelihoods in a variety of ways. Everyday diversification is common for local Bajo, unless they are unusually skilled at their main livelihood activity. Seasonal diversification is important for many Bajo villagers, men and women, as a way to take advantage of higher income-generating activities that only occur at certain times of year. Some local Bajo diversify on an asneeded basis – after becoming widowed or divorced, or as a response to an economic shock, for instance. Another common livelihood strategy for local Bajo is

that of migration. Mainly practiced by young to middle-aged Bajo men and women, *Pongka* is a form of temporary migration during only a few months, on an as-needed basis or to secure high-paying jobs. The more long-term *Lama* migration strategy is to primarily learn new skills and tends to be practiced by both men and women early on in their adult lives. Interestingly, even those who migrate tend to stay out at sea rather than find work on land. Finally, Bajo also use everyday politics and resistance as strategies to resist political pressures from outside and maintain traditional livelihoods. By drawing on all of the aspects covered in my analysis, I conclude that there have been no significant change in financial income levels or the vulnerability context for local Bajo livelihoods; there has been a rather evident decrease in environmental sustainability; and, despite all these specific elements, a slight increase in the level of overall well-being in Sama Bahari.

Throughout this thesis, I have strived to present a holistic interpretation of the livelihoods of the Bajo ethnic minority group living in Sama Bahari, providing an indepth analysis of the interrelationships between the socio-political, economic, and environmental aspects that work towards or hinder sustainable livelihoods within the Wakatobi region. This research, based on six weeks of fieldwork, has uncovered a range of nuanced decision-making actions, specific concerns and resistance measures of local fisherfolk, that are vital to understand with regards to the ability of Bajo villagers to maintain and improve sustainable livelihoods in the future. With more time in this community, even more detailed results would be possible; such work is essential to create a greater understanding of Bajo livelihoods in efforts to manage local fisheries sustainably, reduce poverty, and support local residents reach their well-being goals and aspirations.

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Research Ethics Board I Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 500-0513
Project Title: Livelihood Strategies in Southeast Sulawesi
Principal Investigator: Melody Lynch Department: Geography/Environment
Status: Undergraduate Student Supervisor: Prof. S. Turner
The REB-I reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans. Deanna Collin Ethics Review Administrator, REB I, II
Approval Period: 03 June 2013 to 02 June 2014
This project was reviewed and approved in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.
* All research involving human participants requires review on an annual basis. A Request for Renewal

^{*} All research involving human participants requires review on an annual basis. A Request for Renewal form should be submitted 2-3 weeks before the above expiry date.

^{*} When a project has been completed or terminated a Study Closure form must be submitted.

^{*} Should any modification or other unanticipated development occur before the next required review, the REB must be informed and any modification can't be initiated until approval is received.

Appendix B: Interview Guide

- 1. How many people live in your home? Who lives with you? If you have any children, how many?
- 2. What do you do everyday? Has this changed at all throughout your life? Did the economic crisis of 1998 affect your job? Did the establishment of the National Park affect your job?
- 3. Do you have any other jobs besides your main job? Does this vary throughout the year? How so?
- 4. Do you produce anything market? If yes, what? When did you start producing these for market?
- a. How do you decide what to charge for the things you sell at the market?
- 5. Do you own a boat? If not, how do you get around? (I.e. borrow boat/walk/etc.)
- 6. How did the tornado of 2003 affect your house?
- a. Were you still able to do your regular activities (i.e. fishing/school/etc.)? If not, for how long were you unable to do these activities?
- 7. Where do you go now for information about the weather/winds? What do you know about the weather? Have you heard of climate change? Do you think Sama Bahari is being affected by climate change? Why or why not?
- 8. Does your household's health change with the season?
- 9. Do you buy any food or do you catch/grow it all?
- 10. Do you have to buy any permits (to fish, to sell things, etc.)?
- 11. With what do you catch fish? (i.e. blast fishing, cyanide fishing, etc.) Is this different than what you used in the past?
- 12. What does your wife/husband do during the day?
- a. Has this changed since the economic crisis of 1998? If yes, how?
- 13. Who works the most in your household (work including housework, community work, volunteer work, etc.)?
- 14. Who makes the most money in your household?
- 15. What do you do with the money that you earn yourself?
- 16. Who makes decisions in your household?
- 17. Do you do your activities with others? Who do you do these activities with?
- 18. Do others ask you for assistance? If yes, what do you ask from them in return?
- 19. If you want to get information about new fishing places, or new job opportunities, how do you usually gain this information? Family, friends, mosque, local government officials, others?
- 20. Do you feel particularly excluded from any groups in the community?
- 21. What do you know about Suharto? Who is he and what does he mean to you?
- 22. Do you own the materials that you use for work? (I.e. fishing gear, etc.) If so, were these materials given to you as a gift or did you buy them? If not, how do you obtain the materials you need?
- 23. If your children go to school, how long does it take them to get there? Where is the school? What kind of school? How do they get there? How many hours a day?

- 24. Do you own a house? If not, who owns the house in which you live? If so, was this passed down to you or did you buy it?
- a. What is your home made of? Is this sufficient to protect you from the weather?
- b. Do you have access to any electricity? Television? Mobile phone?
- 25. Where did you learn to do your work (i.e. fish/craft-making, etc.)?
- 26. Where do people in the community go if they want to learn something new?
- a. Do you ever go there to learn something new? If not, why?
- 27. Do you live with any long-term illnesses or diseases? If so, how do you deal with those? (i.e. do you take medication or see a doctor, etc.?)
- a. How often do you go to the hospital or medical center? Why or why not?
- 28. Did you go to school? If not, why not? If yes, why did you stop going to school? Can you read and write?
- a. Do the things you learned in school help with your work? If yes, how? If not why?
- 29. Did your parents attend school? If not, why not? If yes, when did they stop?
- 30. Are the teachers Bajo? If not, who are they? Does this affect the type of knowledge that exists in the community? Are they of any particular gender?
- 31. Does your household have any savings? If so, how are those savings stored?
- 32. If your household needs to borrow money, where will you go to get it?
- 33. Do you have any savings? Do you have any borrowed money that you must repay? Which do you have more of? Is your income sufficient for daily activities?
- 34. Do you own any land? Do you rent any land? Why/why not?
- 35. What does it mean to be successful in Sama Bahari?
- 36. If you could change one thing about Sama Bahari, what would it be?

Appendix C: Photovoice Follow-Up Questions

What is this picture of? Why did you take it?

Which of these pictures best represents your livelihood today? Why?

If you took these photos 15 years ago, how different would they be? What has changed? What has stayed the same?

Which of these photos is your favourite? Why?

Were there any photos you wanted to take, but couldn't? If yes, what would they have looked like?

What did you think of the Photovoice project?