THE IMPORTANCE OF INSTITUTIONAL SUPPORT TO SUSTAIN COMMUNITIES' LIVELIHOODS IN MARINE PROTECTED AREA: TUN SAKARAN MARINE PARK, SABAH, MALAYSIA

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ABSTRACT

This study was conducted in the first and the only marine protected area in Malaysia to include private land and recognize native customary rights (NCR) especially in matters regarding land. This exploration is especially timely for the communities in Tun Sakaran Marine Park (TSMP), where some are entitled to native rights and some have been given usufruct rights by native rights holders, and yet they are living in a gazetted park under Sabah Parks administration, a statutory body under Sabah's Ministry of Tourism, Culture and Environment,. Therefore, it is crucial to examine the livelihoods impacts of park establishment on communities living within the park and the strategies to cope with the impacts. A sustainable livelihoods (SL) approach was adopted as a framework to analyse the relationships among the institutional entitlement, which is the NCR, livelihood strategies and livelihood outcomes. In-depth household surveys and stakeholder interviews were undertaken during the fieldwork. Although co-management and ecotourism were planned to be implemented in TSMP, it was found that the local communities are not involved in management and benefited from any tourism activities. Therefore, institutional arrangement should be strengthened to support the design of more appropriate livelihoods strategies for communities in TSMP.

Keywords: : Native customary rights, communities' well-being, institutional arrangement, livelihood sustainability

1. INTRODUCTION

Often the issues and problems in a MPA, such as resources exploitation, resources users' conflicts, and ecosystem deterioration, are caused by social, economic, institutional or political failures (Saarikoski et al, 2018). Previous analysis on sustainable governance of common resources suggested that institutions play a key role in governing the commons e.g. marine resources (National Research Council, 2002). Furthermore, Muradian and Rival (2012) and Primmer et al. (2015) suggested that multi-level participatory governance processes that focuses on both internal and external institutions is more likely to produce better outcomes in common pool resources management.

Understanding the situations of people and how property rights and institutions are influenced by social, cultural and historical situations will lead to comprehension of how people connect with marine resources institution. McCay (2002) supported this in his discussion of 'the emergence of institutions for the common' that emphasizes individual rational choice in particular situations that are placed firmly in the context of history, political dynamics, social structure, culture and ecology. As rules, laws and governance are commonly recognized as major institutions that shape human behavior, Muradian and Rival (2012) further acknowledged that institutions for the commons should also include new and changed patterns of behavior, norms and values.

In Sabah, Malaysia, native customary rights (NCR) are a significant social, cultural, historical and political factor to be considered in understanding their influence on community involvement in shaping institutions that eventually result in a community's well-being. Native rights to land were introduced in Sabah during the colonial era, 1885-1913. It was only during

the second governorship (1889) of Charles Creagh that the native rights to land were implemented seriously. However, native claims had to wait until the introduction of Land Laws in 1913 that established natives with state-recognized title (Doolitle, 2005). The objective was to protect native rights to land and to protect them from increasing foreign land concessions during that colonial era.

Under Malaysian law, native title has been described as a sui generis, i.e. it is based in statute, common law, and native laws and customs. In order to determine the nature of the right, judiciaries must refer to all the bodies of laws, to give practical importance to what the courts have called a 'complementary right' (Phoa, 2009). At present, NCR is a right given to the natives of Sabah that have been living and working on public land for their livelihoods for three consecutive years and is subject to section 65, 13-16 and 88 of the Land Ordinance (Sabah Cap 68).

2. SUSTAINALE LIVELIHOODS APPROACH

A sustainable livelihoods approach is one of the community development approaches that has been adopted especially to reduce poverty by putting people and their needs as the priority for development (Morse et. al, 2018; DFID, 1999). Livelihood thinking requires initial understanding of what a livelihood is, and in what shape, form or state that livelihood is sustainable?' This study cites the most well-known and most-cited definition of sustainable livelihoods by Chambers and Conway (1992, pp. 6) that stated: A livelihood comprises the capabilities, assets (store, resources, claim and access) and activities required for a means of living. *A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets and provide sustainable livelihood opportunities for the next generation.*

For the purpose of this research, empirical work focused on a marine protected area (MPA). An MPA has been defined as '*an area designated to protect marine ecosystems, processes, habitats and species, including the essentials of marine biodiversity and which can contribute to the restoration and replenishment of resources for social, economic and cultural enrichment*' (WWF, 2008).This research focuses on an MPA that not only protects natural areas but also includes social, economic, and cultural interests.

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[1]Section 65. "Customary tenure" means lawful possession of land by natives either by continuous occupation or cultivation for three or more consecutive years or by title under this Part or under the Poll Tax Ordinance, or Part IV of the Land Ordinance, 1913.

Commonly inhabited by rural communities who live in poverty and surrounded by agricultural land in the case of terrestrial PAs and marine resources for MPAs, often the establishment of protected areas has had unfavorable effects through a reduction in food security and a loss of livelihoods for local people (Karki, 2013). Hence, numerous incentive-based programs (IBPs) have been advocated, such as community-based conservation (CBC), community-based tourism and integrated conservation and development projects (ICDP), to reduce the adverse social effects for local communities (Karki, 2013; Garnett et al., 2007). Some research studies have highlighted the failure and negative impacts of such programs, including lack of attention to social differences, wishful expectations without meeting targets, and an unequal distribution of benefits (Naughton-Treves et al., 2005; West et al., 2006). In addition, one significant limitation for the evaluation of IBPs is lack of information on the impacts of protected areas and conservation incentives at individual or household levels. This means that the overall impacts of IBPs remain uncertain, especially how impacts vary in different contexts because of the highly complex and heterogeneous characteristics of communities and the settings in which they operate (Lai and Nepal, 2006). Moreover, ICDP conceptual frameworks seldom adequately address issues of legality, laws, governance and policy that will ultimately influence the success of the projects and other initiatives i.e. these things have only been considered as aspects of social capital rather than as influences on all capital assets and, therefore, requiring consideration in all other asset components (Morse et. al, 2018).

Therefore, the concept of Sustainable Livelihoods (SL) is used in this study to bridge the gaps that have been highlighted in Incentive-Based Programs studies concerning the impacts of MPAs on communities' livelihoods. Given a primary interest in the well-being of local people and the precarious nature of their means of sustenance, the prevalence of poverty in the developing world and the considerable evidence that local lifestyles are disrupted by PA establishment, it is appropriate to adopt a SL framework to explore local livelihood issues.

Sustainable Livelihoods Framework (SLF)

The advantage of adopting a SL approach is the strengths of the framework that is used to draw in conventional analyses (economic, environmental, social, and institutional) to understand the complexity of livelihoods, the influences on poverty, people`s options regarding sustaining their livelihoods and to identify where interventions can best be made (Figure 1) (Morse et. al, 2018). An analysis of assets is fundamental to understanding the options that are accessible to households and communities, and to the recognition of the assets that people possess and how they change over time. Five capital assets (assets pentagon) are identified in the framework: human, physical,

social, natural, and financial. Moreover, social differences are recognized in the analysis of the accessibility to and control over assets. Options are further determined by policies, institutions and processes (such as the role of government and the private sector, institutional and traditional culture, gender etc.) with which people engage (Morse et. al, 2018).
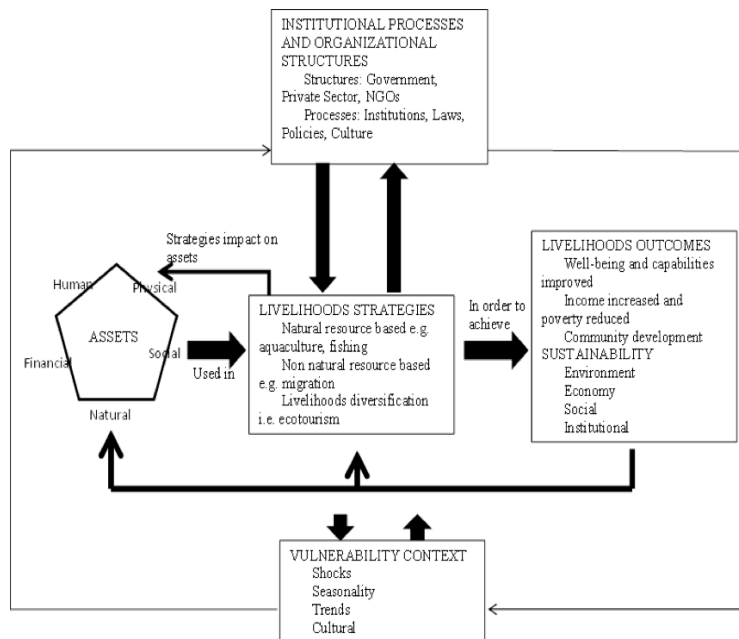

Figure 1: Sustainable Livelihoods Framework (SLF) (adapted from Scoones, 1998; Cahn, 2002)

An analysis of outcomes focuses on achievements, indicators and progress that eventually provide an understanding of what contributes to the well-being of people (Cahn, 2002). Furthermore, it is important to understand the diverse and dynamic livelihoods strategies to identify the best time to intervene. An analysis of livelihoods strategies provides important information on how people negotiate on appropriate processes and structures to implement the strategies. Finally, an analysis of the vulnerability context helps one to understand how people adapt and cope with events that are beyond their control. In the proposed study, vulnerability will be addressed through a focus on the establishment of marine parks and how it influences the overall livelihoods system. In addition, the analysis should examine the role of institutional processes and structures required to handle and reduce vulnerabilities and how the vulnerabilities influence processes and structures.

However, for the purpose of this study, the analysis using SLF will focus only on the institutional processes and structures, livelihoods strategies, livelihoods outcomes and their possible relationships between the key research components.

3. METHODS

A priority is given to qualitative methods as the research involved an ethnographic case study to observe and to collect data, especially in regards to the issues of institutional structures and processes, the social and cultural attributes of marine communities, livelihoods and native rights issues that are easier to describe through qualitative analysis and more comprehensible through qualitative interpretation. Although qualitative approaches dominate the research design, quantitative measures are also used. Methods such as content analysis and analysis of secondary data incorporate statistical techniques using SPSS. Similarly, questions requiring quantitative responses, such as demographic information on household size and ethnicity, were asked on the household survey as a means of gathering data for statistical analysis. Quantitative analysis of survey data is important, especially when needed to complement the qualitative results and to analyze diverse opinions.

Fieldwork

The fieldwork was conducted for three months in Tun Sakaran Marine Park, which is located within Semporna district, Sabah. TSMP is situated at the entrance of Darvel Bay in Semporna, off the southeast coast of Sabah, Malaysia (Figure 2).

Figure 2: Location of the Tun Sakaran Marine Park in Malaysia

Three ethnic groups live in TSMP: Bajau, Bajau Laut and Suluk. Although Bajau and Bajau Laut speak the same Sama language (perhaps with different dialects) and are believed to be from the same origins, they are different in terms of the places they lived in, the livelihoods strategies they choose, their perceptions of their lives and the institutional structures that shape their livelihoods. At the same time, Suluk people are distinctively different from Bajau and Bajau Laut, especially in terms of language and livelihood activities. In addition, the three ethnic groups live in the islands only among their own people, with the Bajau community living permanently in Selakan, the Bajau Laut scattered around Maiga, Bodgaya, Boheydulang and Sibuan, and the Suluk people found especially in Sebangkat (the great majority live on the reef-top settlement), and some villages in Bodgaya and Boheydulang. Different islands also support different livelihood activities: Sebangkat and Selakan are significant for seaweed farming, and Bodgaya and Boheydulang possess better soil for gardening. With this in mind, it was necessary to devise a sampling method to represent each ethnic group and island.
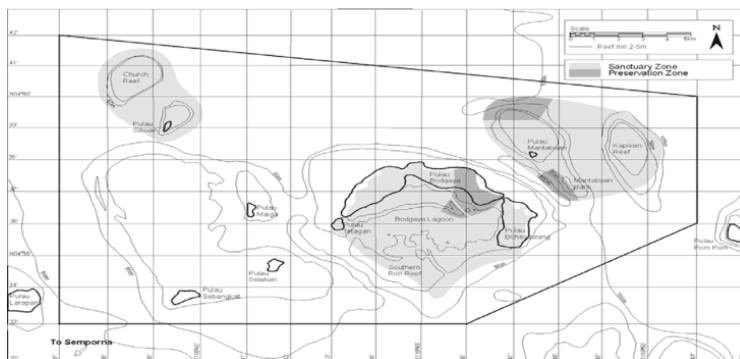

Figure 3: Map showing the eight islands and associated reefs (SIP Management Plan, 2001)

Proportionate stratified random sampling was chosen to ensure representation of the three ethnic groups in all of the six inhabited islands. 79 households were interviewed i.e. approaching half of all households in the park (total household =184). From the interviews, it was found that 28 respondents of Bajau ethnicity represent 179 Bajau population, the 20 Bajau Laut respondents represent 145 Bajau Laut population, and the 31 Suluk households represent 209 Suluk population. The household survey was designed to obtain information about respondents' livelihood practices (before and after park establishment), demographic characteristics, institutional issues especially regarding local participation in park management and the relationship with native customary rights, and respondents' perceptions of ecotourism.

Therefore, the interview questions were divided into four groups: demography; livelihoods; institutional structures and processes, and ecotourism. The four themes were each addressed through both closed and open-ended questions. Open-ended questions allow the researcher to hear respondents' opinions in their own words and minimize external influences from the interviewer or from the research instrument itself.

4. RESULTS

Native customary rights (NCR) entitlement

NCR entitlement is an important variable to consider in this study area and is among the rationale for site selection. There are important relationships between NCR and institutions that promote livelihoods strategies, community participation, and property entitlement, which will need to be examined. Hence it is very crucial in this study to investigate how NCR influences community's participation in institutional arrangements and livelihoods.

Table 1 shows that 100% of Bajau respondents said they are entitled to NCR status, and 100% of Suluk and Bajau Laut respondents said they are not entitled to it. In the household survey, it was discovered that the majority of the Bajau Laut and Suluk lived in TSMP islands with the permission of the owners/heirs of the island who was entitled to NCR or based on the usufruct rights . Some of the owners/heirs lived in Selakan island and many had moved to live in Semporna town and other parts of Sabah and Malaysia. However, although they are entitled to NCR, not many of them actually owned land officially or possessed permanent accommodation (Table 2).

Table 1: NCR entitlement according to ethnicity

	Entitlement		
	Yes	No	Total
Bajau	28	0	28
Bajau Laut	0	20	20
Suluk	0	31	31
Total	28	51	79

Table 2: Land or property owned by respondents

	Entitlement		
	Yes	No	Total
Bajau	28	0	28
Bajau Laut	0	20	20
Suluk	0	31	31
Total	28	51	79

All twenty-eight native Bajau respondents in Selakan island are entitled to NCR but, in most cases, the grants for houses or land they occupy belonged to their parents or grandparents who had already died. According to the interviews with most of the related respondents, lack of knowledge of how to transfer the name on the grants to the heir's name is one factor that contributes to the current situation. Furthermore, the process of transferring ownership to a new owner requires all potential owners/heirs to come to a mutual agreement as to whose name should be given e.g. if the father died, the mother and all children must come to an agreement as to who should administer the property (Act 98, 2006) and, usually, the responsibility is given to the eldest brother in the family (Subject #024, 2013). This is a complicated process where lack of knowledge and awareness among family members hinders the process of changing ownership. Therefore, the properties are considered hereditary with rights to the land in TSMP and rights to permit others to settle on the land provided the park authorities are informed. It can be concluded that NCR plays an important role in the rights of TSMP communities to stay in TSMP, and gives an absolute right to the Bajau community and usufruct rights to Bajau Laut and Suluk communities to stay in the park and get involved in park activities since Bajau community have land rights.

Current livelihoods activities and community settlements

Twenty eight respondents from the Bajau community that were interviewed in this study lived permanently in Selakan island. Selakan is the only island inhabited by the native people that are recognized by the state's Native Laws. Twenty Bajau Laut respondents were interviewed during the fieldwork. The Bajau Laut people adhere to their traditional nomadic lifestyle and they move to find a better place when things are not good for them. Thirty one respondents from Suluk community were interviewed. Particularly in TSMP, Suluk people were initially brought in by the seaweed company to work in their farm. Based on interviews and observations, it is concluded that Suluk people are gifted with farming skills on both land or on the sea. This is why the seaweed farming company hires many Suluk people as their farmers. Based on Table 5, Suluk communities show the highest percentage of all ethnic groups for seaweed farming and gardening, i.e. 56.4% and 66.7% respectively. Their settlements are largely on Sebangkat-Selakan reef-top settlement (for seaweed farming) and Bodgaya island (for fruit and vegetable gardening).

Based on Table 3, Table 4 and Table 5, the proportion involved in fishing for Bajau community is relatively low in comparison with the Bajau Laut (23% compared to 45%) as many people in Selakan have stopped fishing as their main livelihood since park establishment. Similarly, the proportion involved in seaweed farming is low compared to the Suluk (23% compared to 56%). One of the reasons for this situation is that people in Selakan, as recognized citizens, have many livelihood options. Although there are not yet any alternative livelihoods provided by park management, being natives and recognized as citizens provide local people in Selakan with the opportunity for them to take their own initiatives. The Department of Fisheries (DoF), a government department responsible for enhancing fishermen's livelihood status, is the most important stakeholder in Selakan for fishing and seaweed farming, The department has its own station in Selakan with one permanent officer (a local Selakan man). A variety of fisheries projects have been offered to the Selakan community to raise their living standard, including boat and engine subsidies and mariculture projects such as seaweed and fish farming (Interviewees, 2013). Moreover, a successful seaweed-farming project in collaboration with Universiti Malaysia Sabah (UMS) provides another alternative, especially for younger generations in Selakan island (Subject SH07, 2013). In addition, running tuck shops, craft production and migration are other sources of livelihood. From interviews with local people and other stakeholders, it was found that apart from two respondents, there also some people in Selakan work with government agencies such as Sabah Parks, DoF and the District Office. The fact of having legal citizenship status distinguishes the Bajau from the Bajau Laut and Suluk communities in terms of opportunities and entitlements.

Table 3: Livelihoods activities of Bajau respondents

Livelihoods activities	Frequency (N=28)	Percent	Percent of total (of all ethnics)
Fishing	9	32	23
Seaweed Farming	9	32	23
Gardening	1	4	8
Operating tuckshop	2	7	40
Housewife	11	39	85
Craftsman	4	14	100.0
Others (work in nearby town)	3	11	33
Total	39	100	

Table 4: Livelihoods activities of Bajau Laut respondents and their settlements

Livelihoods activities	Frequency (Total N=20)	% of total (of all ethnics)	Islands						
			i	ii	iii	iv	v	vi	vii
Fishing	18	45	0	0	6	1	7	4	0
Seaweed Farming	8	21.5	0	0	1	0	7	0	0
Gardening	3	25	0	0	3	0	0	0	0
Tuck shops	3	60	0	0	1	0	1	1	0
Others	3	33.3	0	0	1	0	1	1	0
i= Selakan; ii= Sebangkat; iii= Bodgaya; iv= Boheydulang; v= Maiga; vi= Sibuan; vii= Sebangkat-Selakan reef top settlement									

Table 5: Livelihoods activities of Suluk respondents

Livelihoods activities	Frequency (Total N=31)	%of all ethnics	Islands						
			i	ii	iii	iv	v	vi	vii
Fishing	13	32.5	0	2	4	1	1	0	5
Seaweed Farming	22	56.4	0	2	0	0	6	0	14
Gardening	8	66.7	0	0	5	3	0	0	0
Housewife	2	15.4	0	0	0	1	0	0	1
Others	3	33.3	0	1	1	0	0	0	1
i= Selakan; ii= Sebangkat; iii= Bodgaya; iv= Boheydulang; v= Maiga; vi= Sibuan; vii= Sebangkat-Selakan reef top settlement									

Livelihoods status and changes before and after park establishment

Based on Figure 4, almost half (47%, n=37) indicated that their livelihood activities had not changed in any way, although 30% said that their livelihoods activities and income had decreased substantially. One tenth (9%, n=7) suggested that the question was not applicable to them as they were mostly women who were basically housewives. For Bajau and Bajau Laut, men are the head of the family and are expected to be the breadwinner. In the Suluk community, women also help in seaweed and gardening activities. Only 4% (n=3) said that their livelihood was currently good and they engage in alternative livelihood activities, such as running a small business, fish farming or operating their own seaweed farm.
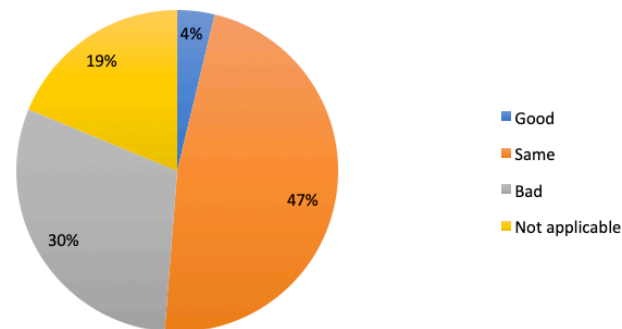

Figure 4: Status of existing livelihoods activities

Figure 5 indicates that approaching a half (43%, n=34) believed that there had been few changes in their circumstances in the preceding ten years, whereas 37% (n=29) perceived negative changes and 20% (n=16) said there had been positive changes. Again, the negative evaluations reflect livelihood deterioration due to fish bombing, poor seawater conditions, adverse effects of zoning and reduced accessibility to the fishing area, and unequal distribution of benefits.
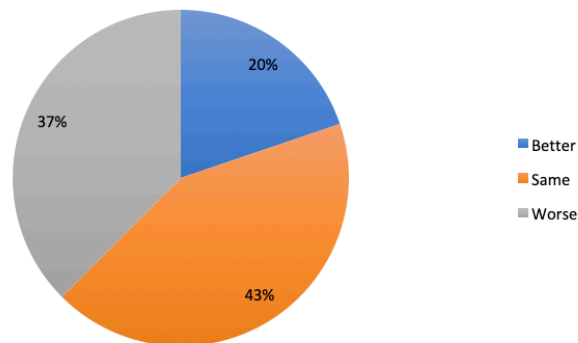

Figure 5: Changes perceived in the past 10 years

Further analyses were undertaken in search of possible difference between the ethnic groups. According to one-way ANOVA and the post hoc test (Table 6 and Table 7), significant differences were found in association with ethnicity: Bajau respondents were more vocal in expressing opinions/perceptions than Bajau Laut and Suluk who were more reserved in their responses. Again, most of Bajau Laut and Suluk respondents answered 'I don't know', 'nothing', or 'the same' when asked for their opinions in Likert-type questions. Interviews and open-ended questions resulted in more revealing responses. For example, Bajau Laut and Suluk respondents expressed their views as follows:

'I never agreed with the park establishment. But we are Bajau Laut. We have no rights to say no because we have not acquired a legal document. We are afraid of being displaced. At the end of the day, we do not care anymore about the park.' (Subject #050)

'Our lives have always been difficult. Before, after (park establishment), the same. Nothing more we can do except to go on.' (Subject #026)

'We were thankful to the Malaysian government for accepting us here. We do not want to go back to the (southern) Philippines. Life is even worse there: you can get killed easily. We feel safe here. (Subject #072)

Bajau people with NCR were more vocal in expressing their opinions than the socially marginalized Bajau Laut with no entitlements. The Suluk were once recognized as a superior group in the Sulu-Sulawesi Sea, but their status as immigrants, both legal and illegal, undermined their right and willingness to express their feelings.

Table 6: One-way ANOVA test showing differences with ethnicity

		Sum of Squares	df	Mean Square	F	Sig.
Better	Between Groups	.761	2	.380	2.538	.086
	Within Groups	11.391	76	.150		
	Total	12.152	78			
Same	Between Groups	.033	2	.016	.064	.938
	Within Groups	19.335	76	.254		
	Total	19.367	78			
Worse	**Between Groups**	**4.590**	**2**	**2.295**	**11.804**	**.000**
	Within Groups	14.777	76	.194		
	Total	19.367	78			

*The mean difference is significant at the p<0.05.

Table 7: Post-hoc test to determine which group is significantly different from the others

Dependent Variable	(I) Ethnic_3	(J) Ethnic_3	Mean Difference (I-J)	Std. Error	Sig.
Better	Bajau	Bajau Laut	.221	.113	.131
		Suluk	.192	.101	.144
	Bajau Laut	Bajau	-.221	.113	.131
		Suluk	-.029	.111	.963
	Suluk	Bajau	-.192	.101	.144
		Bajau Laut	.029	.111	.963
Same	Bajau	Bajau Laut	-.029	.148	.980
		Suluk	.023	.132	.983
	Bajau Laut	Bajau	.029	.148	.980
		Suluk	.052	.145	.932
	Suluk	Bajau	-.023	.132	.983
		Bajau Laut	-.052	.145	.932
Worse	**Bajau**	**Bajau Laut**	**.543***	**.129**	**.000**
		Suluk	**.474***	**.115**	**.000**
	Bajau Laut	Bajau	-.543*	.129	.000
		Suluk	-.069	.126	.848
	Suluk	Bajau	-.474*	.115	.000
		Bajau Laut	.069	.126	.848

*The mean difference is significant at the p<0.05. Tukey HSD test.

Institutional arrangement of TSMP

Currently, the Sabah Parks Board of Trustees, also known as Sabah Parks, a government agency under Sabah's Ministry of Tourism, Culture and Environment, manages TSMP. Sabah Parks was established in 1964 and has now gazetted eight parks in Sabah with a total area of 317, 654 hectares. The headquarters of Sabah Parks is located in Kota Kinabalu on the west coast of Sabah, and has branch offices located at each gazetted park. TSMP was gazetted after an intense study called The Semporna Island Project (SIP) led by the Marine Conservation Society (MCS) (UK) and Sabah Parks. The initial management objectives of the park gave significant priority to benefits for local people and the environment. The conservation framework was properly designed in the interest of all users, especially the TSMP community. Co-management was proposed to manage the park. However, unfortunately, until now, after nine years of establishment, Sabah Parks is still hesitating to implement the framework and has doubts about the co-management regime due to conflict with the park's communities (Subject #SH09, 2013).

According to the interviews with a park official, only a few staff and rangers are originally from Semporna and only one of them is from Selakan island in TSMP. As a result, many officers that were interviewed suggested that they possessed little knowledge regarding the historical, cultural and social contexts of the park. However, officers exhibited more knowledge regarding environmental issues. When asked about the community, many of the officers answered with comments that showed lack of knowledge about the community and lack of involvement of the community in the park's activities:

"I am not sure how many of them there are now. The last time we conducted a survey was in 2010 and I believe the number has changed since then. I don't have the exact figure now." (Subject SH09)

"It is hard to determine the number since the Bajau Laut people come and go at any time." (Subject SH04)

"We have a communication problem with the TSMP community. It is hard to develop the park, especially when we have unsettled land issues." (Subject SH05)

When asked about co-management, the Acting Manager responded that the idea of appointing people as park rangers from TSMP communities had been discussed at the park level; however, since the park is under state administration, all appointees must be approved by the state's leaders and supported by Sabah Parks' Board of Trustees. This process is cumbersome since most of the top-level decision makers do not understand the problems that exist on the ground (interviewee SH16, 2013). It is commonplace in Sabah that government employees are reluctant to honor local stewardship or respect local knowledge (Subject# SH16, 2013; Doolittle, 2005).

In the interviews with park rangers, they complained that the existing staff were not sufficient to safeguard the 35,000 ha park. The organization chart that the researcher obtained from the Sabah Parks office in Semporna showed that 15 rangers / officers were located at three substations in the islands. However, Sabah Parks only placed a total of six rangers at three substations in Boheydulang island, Sibuan island and Mantabuan island. Furthermore, they were not on duty at the same time, thus reducing the capabilities of the staff to patrol the ocean and deal with the multiple tasks, such as identifying legal permits for visitors and, importantly, dealing with the prevalent fish bombing incidents. Significantly, the staff and park rangers agreed that the park is in need of local rangers and that cooperation from villagers, especially from Selakan island, has resulted in positive outcomes in terms of protecting their village and waters from intruders. The situation reflects the willingness of

local communities to co-manage TSMP, especially in terms of safeguarding the surrounding waters.

Community involvement in TSMP management

Co-management that would involve communities and other stakeholders in park management is yet to be implemented. The in-depth household survey revealed that 43% of respondents had been involved in planning, the decision-making process, or had received information or education, only once or twice before the park was officially gazetted. Almost half (49%) of the respondents said that they were never called to participate in any consultation or meeting with the park authority. Interviews with other important stakeholders i.e. the district (municipal) office, the Department of Fisheries and tourism operators, also revealed that most of them were not official members of the park management team. Representatives from the district office and the Department of Fisheries agreed that they were involved in consultation and any development projects in TSMP but that the final decisions always depended on Sabah Parks alone. Interviews with tourism/dive operators revealed that they were not involved officially in planning and developing tourism in TSMP and they literally visited Sabah Parks to register tourists who would be going to TSMP and Sipadan Island.

5. DISCUSSION

Native customary rights (NCR) and institutional arrangement for sustainable livelihoods

Customary laws are a very important factor that should protect a community's rights to land and other property on that particular land. Indirectly, when a community has their rights recognized by law, it should also ensure that they could never be sidelined in park decision-making processes. Based on the findings of the study, NCR is marginally recognized as an influence in TSMP institutional arrangements. The park management plan indicates that co-management will be introduced, hence the foundation of a Local Community Forum (LCF) to represent those in the community with NCR. Unfortunately, engagement with LCF only occurred before and a few times after park establishment. A very important member of LCF indicated in an interview his disappointment that Sabah Parks had stop consulting them prior to making decisions about the park. He added that prior to the park's official establishment, they were given priority treatment in every discussion and decision-making process. They filed ten pledges to be fulfilled if Sabah Parks wanted the community to give consent to the proposed TSMP. Sabah Parks only agreed to six of the pledges. Nonetheless, LCF proceeded to give their

consent because of the promises made by Sabah Parks i.e. co-management, ecotourism and a hatchery project. At the time of interview in 2012, the respondents stated that it had been five years since they had been last invited to Sabah Parks meetings.

The park authority's failure to consult with local communities on park management and development are detrimental to relationships among stakeholders and the management of the park. Hostility between the park authority and local people is fostered, as well as negative perceptions towards conservation and ideas about sustainable resource use. Disempowerment of the community further marginalizes poor people. These negatives consequences could be reduced if the park authority would give extra attention to educating and involving local people in park management. The participatory events organized by the researcher and survey results revealed widespread negative perceptions towards the park authorities.

The most significant consequence of the failure to recognize those with NCR is that pending development plans are thwarted due to long-standing problems of ignorance and, in consequence, local resistance. For example, in an interview with a Sabah Parks officer, it was discovered that some projects have been cancelled or postponed because of disapproval from the community. The officer argued that many of those who disagreed with a project did not justify their action with claims of legal entitlement to native land, and gave no proof of a grant or other evidence of belonging. From the perspectives of Sabah Parks, communication and consultation with the local community will only complicate matters. As a result, they adopt a controller role as the state's government agency rather than acting as a facilitator to involve relevant stakeholders in developing and managing the park. On the other hand, from the community's perspective, the argument has been made that they inherited the land and the sea from their ancestors. This can be seen from their gardens, their ancestors' graves and the seaweed farms that they ran for many years before park establishment. Some who did not possess valid grant or native title argued that they claimed the land under NCR long before park establishment and suspected that their application was still pending due to the gazetting of the park.

The two different perspectives can only be resolved through a meaningful and ongoing discussion, consultation and sharing of information between the park and people. NCR entitlement means that holders have the right not only to stay in TSMP, but also to be involved in managing it, i.e. determining access and control over resource use. They should benefit from whatever opportunities the park has to offer. For example, there was strong support for the introduction of ecotourism development in TSMP if it is locally managed. Some respondents especially the Bajau and Suluk communities expressed interest in homestays, boat rentals, cruises and other sea-venture activities but most emphasized that they would only agree to such activities if the power and benefits are equally shared. Surprisingly, most of the the Bajau Laut community agreed to follow (ikut saja) whatever their fellow Bajau community is doing. This shows that the community was well aware of what was happening around them, but they were not sufficiently well informed and well educated to devise their own means of influencing the institutional arrangements and management actions effectively.

The importance of institutional change for the livelihoods system

An SL approach is promoted in an attempt to eradicate poverty among rural, often marginalized, communities by putting people's priorities first, linking sectors both vertically and horizontally and from local to higher levels, building capacity and recognizing ownership of land or other properties, thereby moving the system in the direction of sustainability (Keely, 2001). In accordance with this, the institutional process, including customary laws, and the organizational structure (park management arrangements) have been studied in order to investigate how they can be used to influence the livelihoods system. Based on previous discussions, if NCR is truly recognized, it could be used to stimulate the acquisition of local feedback, thereby changing how institutions work, eventually contributing to organizational change (institutional arrangements). For instance, representatives from the people with NCR entitlement could be incorporated into the organizational structure of park management, allowing them to participate actively and meaningfully in information sharing and the decision-making process. Community participation is necessary to inform the management team about the situation on the ground and also for the community to be well informed on what is happening outside of their jurisdiction. Through information sharing and education, understanding and trust could be created, possibly resulting in mutual accommodation among stakeholders. Management efficiency could be increased through provision of a more productive environment, especially in terms of livelihoods and marine conservation in TSMP.

The objectives of the organization in managing TSMP should be to improve the well-being of communities and to conserve the ecosystems and natural resources of the park. Once all stakeholders are in unison to work on these objectives, feedback would inform the institution to change management strategies accordingly. Furthermore, the dynamic nature and complexity of the marine environment will influence the feedback process and the movement towards sustainable livelihoods through institutional change.

6. CONCLUSION

In summary, through combining interactive appropriate research methods with a sustainable livelihoods framework, the researcher found that institutional inefficiencies have contributed substantially to the many negative impacts of park establishment, such as livelihood depression and the associated hostility towards Sabah Parks. The case of TSMP involves residents with NCR rights and, thus, sustaining their livelihoods should have been a priority in order to obtain their cooperation and willingness to engage in the co-management of the park. It shows that even where legal rights exist, they can be ignored. The entitlement should influence their involvement in the institutional arrangements that should be created to address issues and problems. Therefore, empowering communities is a vital strategy in any attempt to reduce over-exploitation of marine resources, especially when they have strong legitimacy to participate in co-management because they have the most to lose if the resources that they control are degraded (Mozumder et. al, 2018). Eventually, relevant stakeholders that will guide the management of the park should represent the park organization through such an institutional arrangement. Through the legal empowerment of the community, they could influence the decision-making process, especially related to park resources management and livelihoods issues.

REFERENCES

Act 98. (2006). Small Estates (Distribution) Act 1955. The Commissioner Of Law Revision, Malaysia, Under The Authority Of The Revision Of Laws Act 1968. Percetakan Nasional Malaysia Bhd.

Bruce, J., (1998). *Review of tenure terminology*. Tenure Brief No. 1. Land Tenure Center, University of Wisconsin-Madison.

Cahn, M. (2002). Sustainable livelihoods approach: concept and practice. *3rd Biennial Conference of the International Development Studies Network of Aotearoa, New Zealand*.

Chambers, R. & Conway, G. (1992). Sustainable rural livelihoods: Practical concepts for the 21st century. *IDS Discussion Paper 296*. Brighton: IDS.

Department for International Development (DFID), (1999). *Sustainable livelihoods guidance sheets*. (DFID, Producer) Retrieved February 24th, 2010, from http://www.livehoods.org/info/guidance_sheets_pdfs/section2.pdf.

Doolittle, A. (2005). Property and politics in Sabah, Malaysia (North Borneo): a century of native struggles over land rights, 1881–1996. *Nature and Culture Series*. Seattle : University of Washington Press.

Garnett, T.S., Sayer, J., Du Toit, J. (2007). Improving the effectiveness of interventions to balance conservation and development: a conceptual framework. *Ecology and Society*, 12 (1):2.

Karki, S.T. (2013). Do protected areas and conservation incentives contribute to sustainable livelihoods? A case study of Bardia National Park, Nepal. *Journal of Environmental Management*, 128, 988-999.

Keeley, J. E. (2001). *Influencing Policy Processes for Sustainable Livelihoods: Strategies for change*. *Lessons for Change in Policy & Organisations*, No. 2. Brighton: Institute of Development Studies.

Lai, P., & Nepal, S. (2006). Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan, *Tourism Management*, 27(6), 1117-1129.

McCay, B.J.(2002). Emergence of Insitutions for the Commons: Context, situation and events. in the *Drama of the Commons*. Elinor Ostrom, Thomas Dietz, Nives Dolšak, Paul C. Stern, Susan Stonich, and Elke U. Weber (eds). Washington, DC: The National Academies Press. doi.org/10.17226/10287.

Morse, S.,McNamara, N. & Okwoli, B. (2018).. *Visions of Sustainability: Stakeholders, Change and Indicators*. London: Routledge.

Mozumder, M., Wahab, M. Sarkki,S., Schneider, P. & Islam, M. (2018). Enhancing Social Resilience of the Coastal Fishing Communities: A Case Study of Hilsa (Tenualosa Ilisha H.) Fishery in Bangladesh. *Sustainability*. 10.p.21. doi.org/10.3390/su10103501

Muradian, R. & Rival, L. (2012). Between markets and hierarchies: The challenge of governing ecosystem services, *Ecosystem Services*, 1 (1), 93 – 100.

Naughton-Treves, L., Holland, M. B., & Brandon, K. (2005). The role of protected areas in conserving biodiversity and sustaining local livelihoods, *Annual Review of Environment and Resources*, 30, 219-252.

National Research Council. (2002). *The Drama of the Commons*. Washington, DC: The National Academies Press. doi.org/10.17226/10287.

Phoa, J. (2009). Protecting Native Customary Rights: Is Legal Recourse Viable Alternative?, *Journal of Southeast Asia Social Sciences and Humanities*, 77 (1), 69-89.

Primmer, E., Jokinen, P., Blicharska, M., Barton, D.N., Bugter, R. & Potschin,

M. (2015). A framework for empirical analysis of ecosystem services governance, *Ecosystem Services,* 16, 158-166.

Saarikoski, H., Primmer, E. Saarela, Sanna-Riikka., Antunes, P., Aszalós, R., Baró, F., … Young, J. (2018). Institutional challenges in putting ecosystem service knowledge in practice, *Ecosystem Services,* 29, 579-598. doi.org/10.1016/j.ecoser.2017.07.019

SIP Management Plan. (2001). *Semporna Islands Project (SIP) Management Plan.* Sabah: European Community.

West, P., Igoe, J., & Brockington, D. (2006). Parks and peoples: The social impact of protected areas, *Annual Review of Anthropology,* 35, 251-277.

WWF International (2008). *Indigenous Peoples and Conservation: WWF Statement of Principles.* Gland, Switzerland: WWF International.