

COMMUNITY RESILIENCE IN THE FACE OF COVID-19 PANDEMIC: THE CASE OF NYEGOL OF UPPER BENGOH

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Submitted final draft: 15 April 2021

Accepted: 19 May 2021

<http://doi.org/10.46754/jssm.2022.01.002>

Abstract: Drawing on anthropological observations, this paper throws its focus on the Nyegol community in Upper Bengoh, Sarawak, to examine how and what the community did to negotiate and adapt to the disruptions as a result of COVID-19. In a world changed by COVID-19, the importance of understanding community resilience to health security has garnered the attention and interests of scholars, health practitioners, and policymakers worldwide. There are increasing attempts to understand, measure disaster preparedness, and examine the ability of communities to negotiate the spread of the disease itself as well as to adapt to the disruptive effects of the mechanisms put in place to halt the transmissions of the virus. Based on Chaskin *et al.* (2001), this paper elaborates on the four characteristics of a community in dealing with the pandemic, namely, a sense of community, commitment to the community, ability to solve problems, and having access to resources. The community has effectively mobilised mechanisms and resources, namely their social capital, and social organisation, located within the locality. With that this paper suggests that it is important to consider rural communities' adaptive strategies and especially their own autonomy when designing policies that affect their livelihoods.

Keywords: COVID-19 pandemic, community resilience, nyegol upper bengoh, community adaptive capacities, movement control order.

Introduction

One of the concepts developed as a theoretical framework to understand how communities are able to cope with change or disturbance as a result of stressors/triggers is community resilience. Like many other concepts in social sciences, there is yet to be a consensus on what community resilience is, with different definitions emerging in academic literature, policy, and practice. However, in this paper, it is invariably viewed as positive and there is growing recognition that resilience is seen as critical to a community's ability to withstand and mitigate the stress of disturbance or disruption. Recent studies have identified several strategies and interventions as components of community resilience. These include an increase in adaptations and system transformations (Nelson *et al.*, 2007), strong social/institution factors (Schwarz *et al.*, 2011), the importance of addressing and facilitating recovery (Alonge *et al.*, 2019) and rehabilitation (Jamshed *et al.*, 2019).

Drawing on the concept of community capacity, this paper explores how the displaced community in Nyegol negotiate and adapt to the effects of disruption due to COVID-19. The concept of community capacity has been used to theorize the context of change and it is also a component of social organisation (Mancini & Bowen, 2009). Chaskin *et al.* (2001) outline four action bases of community capacity: "(1) a sense of community (2) commitment to the community among its members (3) the ability to solve problems and (4) access to resources" (p.14). Resilience is attained through these adaptive capacities. In contrast to an earlier understanding of resilience as a measure of "stability" (Holling, 1973), this paper argues it is a process that leads to community's adjustments and adaptation. The question we want to explore is how and what the community has done in response to government efforts to minimize the spread of the COVID-19 virus. This is important because the success of government decisions and

protective measures rely on the rapid changes in community response. The case of COVID-19 in Malaysia was reported on 25 January 2020 and in March 2020, the Malaysian Prime Minister announced the first Movement Control Order (MCO) of 14 days from 18 to 31 March 2020. Social distancing measures developed by the World Health Organisation (WHO) to stop transmission chains of COVID-19 have been implemented nationwide. These include orders to stay at home, closure of entertainment and business venues, and bans on social gatherings. Like everywhere else in the country, the Nyegol community in the Upper Bengoh was not spared from MCO.

Building on Chaskin *et al.* (2001) arguments, this paper highlights how the community has effectively mobilised both mechanisms and resources located within their social organisation as they engage with the challenges and issues related to the pandemic. All the four characteristics of community capacity were mobilised through three levels of social agencies, identified to be individuals, organisations, and networks (Chaskin *et al.*, 2001). The first part of this paper gives the background context to this study; the second

part provides a brief overview of this paper's conceptual framework, followed by an account of disruptions within the Nyegol community. The final part will discuss the findings and then, its conclusion.

Background Context

The community living in Nyegol comprised 19 families, whose livelihoods primarily depend on subsistence farming, cash crop cultivation, and the use of their surrounding natural resources. Nyegol is located in the Upper Bengoh basin, which sources the tributaries flowing into the main Sarawak Kiri River. Originally, there were four Bidayuh settlements located in the Upper Bengoh, namely Taba Sait, Pain Bojong, Semban Teleg, and Rejoi, accommodating around 200 families in the mid-2000s. It was also at that time the Sarawak government had planned to build the Bengoh dam to cater for the increasing water demand in Kuching (Heng *et al.*, 2014). The building of the dam would create a lake covering an area of 8.77 km² (Kuok *et al.*, 2011), inundating these settlements and their surrounding farmlands. As a result, the 200-odd families from these four settlements were required by the government to relocate



Figure 1: The 4 villages in Upper Bengoh and the Bengoh Dam

to the Bengoh Resettlement Scheme (BRS) in Semedang and Skio areas, about 20 km downstream from the dam.

The construction of the dam started in 2007 and was completed in 2012 (Heng *et al.*, 2014). During this construction period, various government agencies constantly instructed the people from the four settlements to relocate from the Upper Bengoh to the BRS. Most families from Taba Sait, Pain Bojong, Semban Teleg, and Rejoi eventually agreed to resettle in the BRS. Assistant Housing Minister Abdul Karim Rahman Hamzah quoted in the local newspaper *Borneo Post* (Fletcher, 2013) said that the families from Taba Sait would be the first to move to the BRS upon the completion of the houses in March 2013. Initially, 54 affected families in Taba Sait began resettling in the BRS. But soon after that, not satisfied with their new lives in the BRS, many families made their way back to their lands in Taba Sait. Since Taba Sait was going to be completely inundated, they established their new settlement at Muk Ayun.

Their neighbouring village, Pain Bojong, had a population of 54 families. While a majority of the population opted to move to the BRS, 12 families decided not to move and stay put in their area. Their settlement too would be submerged underwater once the dam is ready for impoundment. As such, the 12 families moved further up on the slopes of Mount Jogong and built a settlement at Sting.

Semban Teleg is located about 400 m above sea-level and a few hours' walk ascending through the jungle path from Pain Bojong. 50 families were living in this settlement, but all decided to move to the BRS despite knowing their village would not be submerged underwater. For them, they preferred relocating to the BRS because their old settlement was too remote from the nearest road. Before the dam construction, it would have taken around four to five hours to walk from Semban Teleg to Bengoh village, where they usually buy their rations like salt, sugar, petrol, and sell their farm and non-timber forest products. They thought resettling in the BRS would give them easier

access to these goods, education, and health care facilities.

The people in Rejoi have close kinship ties to the families in Semban Teleg. Both belong to the Bi'mbaan cultural group who trace their origins in Semban. In the early 1970s, some families began moving out of Semban and established a new settlement in Rejoi. Similarly, in the early 1980s, the remaining group built their settlement at Teleg, on the fringe of their older settlement in Semban. By the time the dam was complete, there were around 40 families in Rejoi. However, 19 families refused to move to the BRS citing socio-economic uncertainties at the resettlement scheme and the sense of attachment to their ancestral lands as some of their main reasons to stay put. Following the impoundment of the dam in 2016, Rejoi was soon flooded under the lake. Like the others, the 19 families decided to establish their settlement at a hill called Nyegol, not far from Rejoi.

Inevitably, the disagreements between families who decided to move to the BRS and those who resolved to stay in their ancestral lands above the flooded perimeter created a tense relationship among them. The latter also had to deal with the constant pressure from the state government and local politicians to move into the BRS. A part of the state's narratives portrays the BRS as representing socio-economic development for the people, while those opting to stay put in their new settlements in the Upper Bengoh are perceived to be dissidents to development (see articles by *Dayak Daily*, 14 January 2019; *The Star*, 14 March 2014). It went to the extent that the state alleged those families who established their settlements in Muk Ayun, Sting and Nyegol are settling illegally on state land. This resulted in the three communities filing a civil suit against the state government in 2009. In 2014, the communities won their civil suit and gained recognition for their Native Customary Rights (NCR) land, which includes their farming and forested areas (Report of the COAR Fact Finding Mission to Bengoh, 2016).

The disturbance resulting from dam-induced displacement challenged the community's

resilience, which demanded a response. Findings from this research suggest that social capital, which comprised their leadership and social organisation, has played a significant role in making coping and adaptation possible. In this case, one of the factors contributing to the community's resilience is their traditional natural resource management systems. It is a significant step for mobilising the process of resilience.

While numerous articles have discussed the impacts of dam projects on communities leading to their displacement in state-established resettlement schemes (see Nguyen *et al.*, 2016; Huang *et al.*, 2018), there is a lack of studies on communities that established their own settlements above the dam's flooded perimeter. Despite being geographically remote from modern public facilities like the ones available in the BRS, the case of Nyegol shows that they can socially and economically thrive in their own settlement. Today, based on their own initiatives, the Nyegol community is equipped with a gravity-fed water system, electricity from micro-hydro, a new church, and a lodge to accommodate tourists, all without assistance from the state.

This resilience is attributed to their social organisation and capacity to access, manage, and control their natural, human, and social capitals. It reflects their sustained ability to respond to the effects of COVID-19 pandemic measures that have been put in place to slow the spread of the virus. The community was able to identify and leverage the activities that are already in place to further build their resilience.

Concept of Community Resilience and Its Capacities

There is a consensus that community resilience is defined in terms of its broad capacity for successful adaptation in the face of adversity, disturbance, or stress (Norris *et al.*, 2008). This is about the ability of communities to withstand and mitigate the stress of disaster, disturbance, or disruption. However, often these definitions are broad and there is little understanding about

the levers for actions that enable the community to respond quickly to threats. As mentioned earlier, one way to understand community resilience is by examining the community's capacity to deal with the changes and mitigate possible problems resulting from these changes. This capacity includes the organisation of networks and capitals. Networks are made up of informal and formal networks, and capitals are local resources that communities strategically invest collectively (in Magis, 2010; Matarrita-Cascante *et al.*, 2016). This is because when community members have a common goal, identity, and pride, it would often be referred to as "we" instead of "I" (Bowen *et al.*, 2000). Therefore, community capacity demonstrates two important features: A sense of shared responsibility for the general welfare among its members, and collective competence in taking advantage of opportunities for addressing their needs and confronting situational threats that impend the well-being and safety of their members (Bowen *et al.*, 2000).

Most literature on community resilience have adopted Chaskin *et al.*'s (2001) approach to community capacity, which they defined as

"...the interaction of human capital, organizational resources, and social capital existing within a given community that can be leveraged to solve collective problems and improve or maintain the well-being of that community. It may operate through informal social processes and/or organized efforts by individuals, organizations, and social networks that exist among them and between them and the larger systems of which the community is a part" (p.7).

Although many described community resilience as a community's ability to respond to shocks or disturbance, Matarrita-Cascante *et al.* (2016) argued that its conceptualization requires an understanding of the nature of community and the stressors they are grappling with, and their responses as they navigate away from disturbance. For the arguments made in this

paper, Chaskin *et al.*'s (2001) characteristics of community capacity will be employed: "(1) a sense of community; (2) commitment to the community among its members; (3) the ability to solve problems; and (4) access to resources" (p.14). This paper discusses the characteristics as outlined by Chaskin *et al.* (2001) by considering the two key features emphasized by Bowen and Mancini (2009), the importance of community actions and their observable results, and that the capacity possessed by the community is fluid.

Chaskin *et al.* (2001) said that a "sense of community" is understood as "a degree of connectedness among members and a recognition of the mutuality of circumstance, including a threshold level of collectively held values, norms, and vision" (p.16). To achieve this sense of community, there needs to be a recognised social organisation to ensure a sense of shared responsibility in achieving the common objective. Social organisations are network structures consisting of formal and informal networks (Bowen & Mancini, 2009). Informal networks consist of the relationship among family members including extended families, friends, or neighbours. Formal networks are those associated with organisations or agencies whereby an element of obligation exists. Chaskin *et al.* (2001) also suggested the degree of their involvement or participation is the key determinant that ensures the community's mobilisation and development. It can be fostered through communal activities that appear to be worth investing in one another, which is usually cultivated through local associations or organisations.

Social organisation is frequently associated to be the 'mother' of these three elements of network, social capital, and community capacity (Bowen & Mancini, 2009). Most literature written on network structures are grouped under the umbrella of social capital. The reason being is that social capital is defined as "the aggregate of resources that arise from reciprocal social relationships in formal and informal networks. The resources fuel the community's ability to achieve desired results through collective

action" (Mancini & Bowen, 2009, p.255). It also refers to the "ability and willingness of members to participate in actions directed to community objectives, and the processes of engagement, that is, individuals acting alone and collectively in community organizations, groups, and networks" (Magis, 2010, p.407). Ultimately, network structures comprised social participation within a community and are also an element of 'social capital' (Norris *et al.*, 2008; Sherrieb *et al.*, 2010).

To ensure communities achieve their objectives, the existence of local organisations is important as these serve as a vessel for local mobilisation. According to Chaskin *et al.* (2001), there are two crucial aspects of 'commitment': Members of the community are viewed as stakeholders and are eager to participate actively as stakeholders. In addition, Norris *et al.* (2008) argued that there are three elements of social capital in the model of community resilience: social support, social participation, and community bonds. These elements were examples used as an aggregate measurement derived from survey data that aims to determine social trust and organisational participation (in Norris *et al.*, 2008). A recent study by Cassidy and Barnes (2012) in rural communities of Botswana examined resilience by using the social network analysis as a tool for measuring connectivity and its role in adaptive management particularly in informal networks. It was discovered that greater levels of social capital constitute a more resilient outcome. Therefore, an active relationship within the local organisation leads to an immediate response to an issue, conflict, or crisis (Chaskin *et al.*, 2001). As such, social capital refers to the actions where "individuals invest, access, and use resources embedded in social networks to gain returns." (Norris *et al.*, 2008, p.137)

Ahmed *et al.* (2004) said that for a resilient community to cope with adversities, they need to be capable of acquiring material, physical, socio-political, socio-cultural, and psychological resources. It is the response and how disruption is addressed that strengthen community bonds

and its resources in developing their resilience (Magis, 2010). The responses are actions that are translated from acts of commitment and are an important component of community capacity (Chaskin *et al.*, 2001).

Resilience is about adaptation. Adaptation or adaptive capacity is manifested in the processes of facing challenges. The concept of adaptive capacity in social resilience is similar to 'community capacity' (Norris *et al.*, 2008). According to Nelson *et al.* (2007), adaptive capacity is about a set of resources that are available and the ability to engage with the resources to achieve the desired transformation. Chaskin *et al.* (2001) again pointed out that the problem-solving mechanism can be measured by the capacity to adapt and respond to the impacts of community change. In the case of Nyegol, they formed various collectives comprising different community members as a response to not only the recent pandemic but also the construction of the Bengoh dam that has disrupted their lives. This supports the notion by Nelson *et al.* (2007) who suggested that adaption cannot occur in isolation but as a result of the actions of multiple actors.

Access to resources is the ability of the community to link themselves with networks outside their own. They can access and weigh on available resources that are either inside or outside their community (Chaskin *et al.*, 2001). These resources are economic, natural, social, cultural, and political capitals. Affirming arguments made by Chaskin *et al.*'s (2011), Magis (2010) stated that "community resilience is developed through the engagement of all capitals" (p.410). Langridge *et al.* (2006) highlighted the importance of mapping the patterns of access both historically and spatially. It mapped the ability or capacity to gain, control, and maintain access against their ability to cope under stress. Therefore, access is about the ability to gain essential capitals that would benefit the community simultaneously while coping with the disruptions or change (Langridge *et al.*, 2006). Community resources are dynamic, and the development is the result of the community's

capacity to respond. In this sense, community resilience is reflected in actions taken and not just the capacity to act (Magis, 2010). Therefore, resilience is not only about the community's ability to cope and recover but this experience has reflected their capacity to self-organize in facing the recent pandemic.

Disruptions in Upper Bengoh: From Dam Displacement to COVID-19 Pandemic

It is important to understand the threats to public health in rural communities. This is especially concerning the importance of community resilience in ensuring health security. The experience of the COVID-19 pandemic for the Nyegol community challenged their social organisation. This was amplified during the government's implementation of the Movement Control Order (MCO) throughout Malaysia. COVID-19 did not only pose public health threats to the rural communities but challenged their resilience in facing the implications of COVID-19 pandemic protocols.

The main findings demonstrated the process of adaptation during the COVID-19 pandemic. In the case of Nyegol, the nation's stay-at-home order has banned mass gatherings, closed businesses, and workplaces. Adding to the dilemma in Nyegol, the village headman, who is often instrumental in organizing community activities, and 16 other household members were in Johor Bahru to attend a wedding in March 2020 just before the MCO was put in place. Their initial plan was to attend the wedding for a couple of days. But when the MCO was in effect, they were unable to return to Nyegol due to the nationwide lockdown. To exacerbate this problem, it was towards the end of the rice harvesting season for the community in Nyegol. Prior to the MCO, some of the villagers have completed *netem pedi* (harvesting paddy), while some had already *dewan pedi* (sun-dry paddy). However, some have yet to complete *netem* as they were occupied with other related farming activities such as pepper harvesting, drying pepper, or rebuilding the *tanjuk* (veranda) to dry their harvested paddy.



Another problem facing the community was accessing daily goods such as fuel for the boat, cooking oil, soap, sugar, and salt. These were usually obtained in Bengoh village, less than an hour's boat ride from Nyegol. Bengoh is the nearest village to have access to good road infrastructure connecting to the BRS and nearby towns. With the MCO, the Nyegol community was not even allowed to travel beyond the dam manned by the Kuching Water Board security guards. In the following sections, we discuss the concept of resilience in relation to the community's existing social structures.

Study Area and Methodology

This paper is rooted in our long research engagement with the Nyegol community in Upper Bengoh, Padawan district, Sarawak. As described earlier, the villagers were asked to relocate when the Bengoh Dam was built, which began in 2007 and was completed in December 2010 to provide water to the capital of Sarawak, Kuching. About four villages namely

Kampung Taba Sait, Kampung Pain Bojong, Kampung Rejoi, and Kampung Semban were offered resettlement packages to resettle at the Bengoh Resettlement Scheme. However, some families from Rejoi and Pain Bojong rejected the packages and settled in Nyegol and Sting respectively. This was out for concern for loss of income and livelihood. For this reason, the 19 households from Rejoi built their present village of Nyegol on their ancestral territory. Nyegol village is home to 119 people, not all of whom live in Nyegol on a daily basis as some have taken up paid jobs elsewhere in Sarawak.

In 2015, we began to engage with the Nyegol community to explore their coping strategies and the workings of their internal decision-making mechanisms in the face of development-induced displacement. For many generations, the people of Nyegol have practised shifting cultivation, gathered and hunted game, and cultivated cash crops and other vegetation. Using participant observation, participatory rural surveys in the form of kinship mapping, semi-structured in-depth interviews, transect



Figure 3: Bengoh village, Bengoh Dam and BRS (Bengoh Resettlement Scheme)

walks, natural resource mapping, and informal conversations and interviews, we examine how the dam and displacement affect their economic activities and control over natural resources. It was obvious from our observations that the community drew on existing social organisation and mobilised resources found in the new location to negotiate the negative impacts of displacement.

These observations were affirmed and even made more prominent during our four weeks of fieldwork in Nyegol in March 2020. It was a busy time in the village because it was towards the end of the harvest season for both paddy and other cash crops such as pepper. Incidentally, one of the authors was “stranded” in the village due to the national Movement Control Order (MCO) during the first and second phases of the MCO. It was during this period that observations were made and data collected for the purpose of this article. Due to the immediate and country-wide movement restrictions, only 45 members of the Nyegol community were in the village. Meanwhile, the others were away in other parts of Sarawak, including those who attended a family wedding in Johor Bahru.

As it was harvest time, the author participated in the activities organised by Persatuan Masyarakat Nyegol and Sting Penrissen (PMNSP) which involved *royong* and *nyilih-lapaes*. While participating in these activities, many conversations and interviews were conducted that were related to the themes of this article. These include in-depth interviews with two respected individuals of the village due to the absence of the village headman. Another in-depth interview was conducted with four youths of different age groups who frequently commute in and out of the village and also participated in the PMNSP activities.

Besides that, semi-structured interviews were also conducted with representatives of each household to gain their perspectives and experiences of the ongoing pandemic and the Movement Control Order. This included the whereabouts of household members as a result of the pandemic. The semi-structured interviews were guided by observations made through participation in village-based activities. This in turn helps to verify information gleaned from informal conversations on many occasions. The exercise provides first-hand and contextual insights into their capacities and abilities to cope

with the challenges of the COVID-19 pandemic. To protect and respect our research participants, we used pseudonyms to refer to the individuals we interviewed.

Results and Discussion

Sense of Community

This first part addressed the importance of network structures. It is the basis that embodies the character of 'sense of community'. The Nyegol are made up of close kin and they share similar experiences of being displaced due to the Bengoh Dam. This experience has shaped what Chaskin *et al.* (2001) suggested as the "mutuality of circumstances" (p.14). Their displacement led them to a common goal that is to ensure the sustainability of their livelihood in Nyegol. It was only made possible through collective involvement in both the decision-making process and actions (Bowen *et al.*, 2000). The recent global pandemic had further strained their capacity to cope especially with the absence of the 16 people from their village who were unable to return from Johor Bahru. Furthermore, among the 16 people were the influential village headman and other key persons who usually decision-makers within the community.

In the morning when all 16 people left for Johor Bahru, there was no Sunday church service for the village. Sunday service is held weekly at the village's newly built chapel. The chapel also acts as space for the villagers to gather and have community meetings. In one of our interviews with the village headman:

"Masa itu sahaja yang ada untuk sampaikan pengumuman atau perkongsian pasal kampung, sebab hari lain tidak mau ganggu mereka sibuk dengan kerja lain."

(During Sunday service is when announcements or conversation on matters pertaining the village are brought up since on ordinary days many preferred not to be disturbed as they are occupied with their own farming works.)

The headman was seen as more than a village leader. He is also the church leader for both Nyegol and the neighbouring village, Sting. Besides the Sunday service, they held a weekly fellowship every Saturday night and each household took turns to host the fellowship in their house. Consequently, all religious activities were halted during the MCO due to the absence of the village headman.

On the other hand, we also observed the intricacy of mobilising the community in the absence of their headman. Their ability to adapt and cope in their new settlement is made possible through their *royong* activities. In Nyegol, farming customs entail the participation of every household member. But occasionally, an extra hand is needed in another household's farm depending on the circumstances, such as the size of their farm. The foundation of *royong* requires communal cooperation, and this practice is governed by their local institutions and social networks. One example is the establishment of the Persatuan Masyarakat Nyegol Sting Padawan (PMNSP) by both Nyegol and Sting communities which oversee their *royong* activities.

Aside from local assistance among the PMNSP members, a number of non-governmental organisations (NGOs) have volunteered to assist these two villages. For example, some local NGOs have assisted in sponsoring the micro-hydro turbines, donation of pipings for the gravity-feed water system, the building of a church, and a homestay. Although they received these assistances from the NGOs, it is their collective decision and action that had led to many *royong* activities. Regarding the village's micro-hydro facility, the PMNSP requires each household to participate in its building and maintenance activities. Furthermore, every month two persons from the PMNSP collect maintenance fees of RM0.50 per electric socket from each household. The fees collected are managed by the PMNSP for future maintenance of the micro-hydro. This ensures that they do not have to continuously depend on the NGOs or donations from local

politicians in the future. The *royong* activity is instrumental for these two communities, which recognise the “shared circumstance based on investment or use – that allow people to come together in ways that support a common good” (Chaskin *et al.*, 2001, p.16). *Royong* is a long-term resolution within the community, which exhibits the importance of informal networks in contributing to the community’s capacity.

Commitment to The Community Among its Members

This second part continues to address *royong* in reference to the “responsibility that particular individuals, groups, or organizations take for what happens in the community” (Chaskin *et al.*, 2001, p.15). One example was when Nyegol’s headman and his wife went to Johor Bahru to attend their niece’s wedding right before the country’s MCO. When the nationwide lockdown was suddenly put in place, they were unable to travel back to Sarawak. Their initial plan was to return home to Nyegol to continue harvesting their paddy immediately after the wedding. In support of Norris *et al.* (2008) on the importance of social capital, the following findings demonstrated the three elements of social support, social participation, and community bonds.

There are two important figures which mirrored the informal network. Both held an important role in the decision-making process during the absence of their headman. They are the headman’s sister (N6) and a village elder (U7) who stayed in Nyegol while the village headman and 16 others were stranded in Johor Bahru. Concerned with the headman’s unharvested paddy, N6 initiated the *royong* the night before with the household members who did not attend the wedding. The news about the *royong* spread immediately in the village by word of mouth in one night. Early next morning, they went to the headman’s paddy field and pepper garden in Lahui, a two-hour walk from Nyegol. The *royong* was attended by 18 people who voluntarily helped to harvest the paddy. While harvesting, everyone followed the

instructions of U7. For example, he organised them into groups based on the types of paddy or making sure that the types of paddy were not mixed into their *juah* (baskets). By noon, the paddy was completely harvested. As a gesture of appreciation, lunch of rice wrapped in leaves and wild boar soup was prepared by the headman’s daughter for those who came for the *royong*. Not only did they help with harvesting, after their lunch break, they carried on with other tasks which included *nyehik* (threshing) and *bahu* (winnowing) the harvested *pedi* (paddy).

Social capital entailed important participation among its members. Bowen *et al.* (2000) emphasized community capacity as “people not only have a sense of community but also a feeling of how the community will respond should the need arise” (p.9). U7 is a respected village elder. In support of N6, the *royong* was considered necessary and during our interview with U7, he mentioned without hesitation that:

“memang patut kita tolong dia (village headman), sebab dia sudah banyak membantu dan berkorban untuk kampung kita”.

(We should help him [village headman] because in the past he has helped us and sacrifice his effort for our village.)

U7 was referring to the headman who led the resistance against the government’s order for them to be resettled in BRS. Instead, the headman led his followers to establish their own new settlement above the flooded perimeter in Nyegol. Not only that, he and the headman of Sting represented their village members to file a civil suit against the state government in 2009. From this civil suit, they gained recognition of NCR (Native Customary Rights) over their land in Nyegol and Sting in 2014 (Ling, 2014). Hence, the Nyegol community members felt that helping the headman to harvest his paddy was a sign of respect and trust they have towards him.

Other than the conventional *royong* activities conducted for the general welfare of the village, another act of labour reciprocity

is called *nyilih-lapaes*. *Nyilih* in the Semban language is to express the act of helping others and this is applied to farming activities and sometimes in any physical work. Reciprocating the *nyilih* is called *lapaes*, which means repaying the favour. One example, in particular, is during paddy harvest. After one *nyilih* at his or her paddy field, he or she needs to *lapaes* i.e., reciprocate the gesture at the other person's paddy field. However, this is also applicable in other activities that require physical labour. This act of *nyilih-lapaes* is commonly practiced to demonstrate social cohesion, which has been embedded in their farming culture. When it comes to farming, the division of labour within a household consists of the husband and wife with their children. However, when they could not plant or harvest paddy on their own, and if help is needed, they could hire other household members who would agree to *nyilih*.

Although the *royong* to harvest the Nyegol headman's paddy while he was in Johor Bahru is an act of social support, it is not considered to be *nyilih-lapaes*. It reflected a sense of community and a collective commitment to express their gratitude to him for leading them to establish the settlement in Nyegol instead of resettling at BRS. The act of *royong* is usually done for the general welfare of the village, such as the weekly church building, cultivating the *musang king* durian for their Ladang Komuniti Nyegol-Sting, the maintenance of the village's micro-hydro facility or the clearing of grass around *penu lan laya* (pathways). During the *royong*, the respondents emphasized that they never came together to harvest someone else's paddy and that they intended to voluntarily help their headman. Making time especially on a Saturday to conduct *royong* activities for a particular person in the community demonstrates a supportive environment as to which has developed community resilience. Adger et al. (2003) stated that the outcomes of society can be explained through the principle of social capital as it captures the nature of social relations.

The Ability to Solve Problems

The community in Nyegol has access to local broadcast news on television and the internet through smartphones concerning the preventive measures during the COVID-19 pandemic. Without these, the community had little knowledge about the virus, its symptoms, and also the long-term implications. The Malaysian government regularly broadcast information and provided daily updates on this pandemic. Restriction imposed in the village was quick once the villagers were aware of the contagious nature and the health risks of this virus. "*Orang luar tidak boleh masuk kampung, walaupun mereka saudara*" (Outsiders are not allowed to enter this village, even if they are our relatives or family members), said U7. N6 also supported the idea as she scolded her son, not to take the boat to fetch anyone who wanted to come to the village. This became an important decision as it determined the general safety and health of the entire village. Although this instruction did not come from the Nyegol's headman, the villagers abide by it and became cautious with the pandemic as they remained in the village. Another reason for this decision to declare Nyegol's own lockdown was to reduce their fuel consumption as they are aware that getting fuel is difficult during the MCO period. The pandemic has three ramifications: The first was the lack of access to public services and amenities, the second was the decline in the village's eco-tourism business, and lastly, they are marginalized from government aid.

Apart from the difficulty in acquiring fuel supply, the community ran low on cash during the MCO. When the necessities in the households were running low, purchasing items is a challenge. But they also said that living in a rural setting like Nyegol can further sustain their livelihood as they can be dependent on subsistence farming and forest produce. Their food diet was mainly from jungle products and farming. They would usually have wild boar meat, fresh fish from the nearby rivers, and collecting wild vegetables or vegetables they planted on their farms. For example, when

one killed a wild boar, they would either sell it for money or barter with other household necessities. Access to local resources such as jungle and farming products has been the main source of food and as well as cash income.

During the MCO, getting out of the village was difficult for the single-headed household. For example, among the 16 people that got stranded in Johor Bahru are two men whose wives and children were left at home in Nyegol. Although they have completed their harvest before the trip to Johor Bahru, their wives had to continue the *dewan pedi* (sun-drying the paddy). For one wife (W1), it was rather difficult as she had to care for their new born child. Meanwhile, the other woman (W2) continued to go to the farm on her own as their paddy was still kept at the farm hut for drying. But going alone means going back to the village in the evening as she was afraid to stay overnight alone at the farm hut. W2 expressed her struggle to start the boat as it was left unattended since her husband left for Johor Bahru. She needed the boat to load the many sacks of paddy. The carrying and loading of paddy sacks were done alone and it took her many days. She was reluctant to get help from others as they are also occupied with their farm activities and that also would require payment.

For both W1 and W2, when household necessities were low in supply, their relatives would help them to buy what was needed. In Nyegol, there is one sundry shop but during the MCO, the supplies ran out as the shop owner was also away in Kuala Lumpur. This forced them to rely on another sundry shop in a nearby village, Bengoh. But this would require them to leave Nyegol, take their boats to the dam and then, a motorbike ride to Bengoh. Fuel was another issue as the MCO restricted them to move even beyond Bengoh. They could buy fuel in Bengoh but it is pricier in the village due to transportation costs. Alternatively, they could go to the nearest petrol stations in Kota Padawan or Siburan towns, more than 20 km from Bengoh. But movements were restricted during the pandemic.

Thriving eco-tourism activities in the area have become an important source of cash income for the people in Nyegol and Sting. The Bayan Atuh Eco-Tourism is a community-based tourism cooperative under the PMNSP, jointly managed by the Nyegol and Sting communities. For both Nyegol and Sting, managing tourism on a commercial scale is a new undertaking. But the COVID-19 pandemic cancelled all tourism activities. The decline in tourism was a huge loss as the communities had prepared tourism activities weeks in advance.

As mentioned earlier, the Nyegol community is often marginalized from government aid. During the COVID-19 pandemic, while the village headman was still in Johor Bahru, his son and daughter sought assistance from a local politician. As required, they submitted the household information for government aid. Two weeks later, each household received 10 kg of rice, 1 kg of sugar, coffee powder, 1 kg of cooking oil, and 1 kg of salt. These items were delivered to the dam for the community to collect. In Nyegol, they distributed the food rations to each household. But because the duration of the pandemic and MCO was uncertain, this food aid was only able to sustain them temporarily. For those with a larger family, the items distributed were not sufficient.

Access to Resources

Despite the MCO during the pandemic, the community in Nyegol is capable of sustaining their livelihood by depending on their surrounding natural and cultivated resources. One significant advantage this community has, especially resulting from their successful civil suit in 2014, is that their customary rights and control over the vast natural environment were recognized by the law and state government. Although their relatives in the BRS are provided with the benefits of an urban lifestyle, their decision to remain in Nyegol was determined by the prospect of a sustainable livelihood based on available natural resources. The Nyegol community recognize themselves as subsistence and traditional farmers. Moving to

a resettlement scheme was not an option as they feared being over dependent on cash economy in the BRS due to their lack of formal education and professional skills. Therefore, their choice to remain in Nyegol's familiar environment gave the advantage of access to natural capitals which in turn, became a foundation for their social organisation.

Earlier, we have discussed the important characteristic of community resilience, which is social capital. In the case of Nyegol, we see that social capital comprise their social organisation and networking plays a significant role in making coping and adaptation possible. It is the first step to mobilise the process of resilience. According to Magis (2010), social capital is about achieving a common objective through participation – or *royong* in Nyegol – among its community members. This highlights the importance of local institutions that govern their social organisation and management of natural resources. Mardiasmo and Barnes (2015) explored the spirit of *gotong royong* – i.e., “the cooperation within and between social networks” (p.2) – in a Javanese village as a cultural operating mechanism in response to disaster management planning and practice.

Similar to many indigenous communities in Sarawak, the *royong* activities for the Nyegol community require the involvement of multiple actors to ensure sustainable use of their natural resources. In his study of *gotong royong* in Indonesia, Bowen (1986) said this form of mutual assistance and reciprocal exchange is crucial in ensuring “a general ethos of selflessness and concern for the common good” (p.546). Vivian (1992) argues that resource management practices by “people's participation in local-level environmental activities” (p.51) can ensure a more constructive approach to sustainable development and the conservation of their environment.

Egger and Majeres (1992) stated that

“people's participation is perceived today as an important dimension of an environmentally sustainable pattern of

development. There are two reasons for this. When participation rests on some form of organization, it can encourage the direct management of local resources by the users. Secondly, such responsibility can be exercised in the collective interest embodied in the organization” (p.304).

Conclusion

Like many other communities around the world, the community in Nyegol was not prepared for this COVID-19 pandemic. However, this research has provided insights into how local resources and institutions influence community resilience during the COVID-19 pandemic. The Nyegol community's collaboration and ability to engage with their resources were critical in addressing the importance of adaptive capacity, especially during the nationwide MCO. Without depending on direct government interventions, they reflected Magis' (2010) notion of resilience as a community's ability to plan their actions and initiate change in response to disruptive events. As described in this paper, the community effectively mobilised both mechanisms and resources located within their social organisation as they engaged with the challenges and issues associated with the pandemic. This is partly possible because they have dealt with issues related to their displacement due to the dam in the past. The experience gave them their own autonomy. They were able to mobilise what Chaskin *et al.* (2001) describe as the four bases of action in community capacity, and these were activated through three levels of social agency: individuals, organisations, and networks.

This perspective is important for policy makers and also for future researchers who are concern about local community's adaptive strategies in the face of social, political and economic restructuring. As it is, for the Nyegol community, the management of their natural and cultivated resources in the face of impacts of social change resulting from government plans for economic and social development and as a result of disruptive circumstances depends

very much on them “coming together” as a unit. It can signify their intention to progress/move forward and at the same time to meet their community needs by being interdependent of each other in the community. As described in this paper that their geographical remoteness provided a natural buffer from contracting the virus, at the same time working together through their formal and informal networks like PMNSP, kinship system and *royong* activities, have augmented their capacity to cope and adapt to the challenges that accompanied the COVID-19 pandemic especially the nationwide MCO.

Acknowledgements

We would like to extend our gratitude to the Nyegol community in Upper Bengoh for their immense support towards this research. Without their support and acceptance of our presence in their villages, this manuscript would not have materialised. This anthropological based research is also part of Evvia’s dissertation which was submitted as partial fulfilment to meet requirements for the degree of Master of Social Sciences at Universiti Malaysia Sarawak.

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