Turkish Online Journal of Qualitative Inquiry (TOJQI)

Volume 12, Issue6, July, 7166-7178

Research Article

Rethinking new strategies of river management and sustainability in the Inanam-Likas River Basin, Kota Kinabalu, Sabah (Malaysia)

Eko Prayitno Joko¹, Adi Jafar², Ramli Dollah³, Marsitah Mohd Radzi⁴

Corresponding author: ramlid@ums.edu.my

Abstract

In the last two decades we have witnessed the problem of river pollution becoming a discourse among social and humanitarian scientists. These developments have seen the emergence of various approaches in trying to solve the problems. However, until now the problems that plagued the world have not been resolved, while millions of dollars have been spent with hundreds of thinkers have been included, no success results have been shown. That is why this paper argues that the discourse related to river sustainability needs to go against the flow (reverse) by making changes of thought as the mainstay to realise it. Using Braudel's approach to the concept of time and space, the author argues that the archipelago's maritime paradigm needs to be redeveloped as a "space" that has long been marginalised to be restored to its proper place like the heyday of maritime civilisation. The expansion of this maritime paradigm allows the community to view the river as a "space" that needs to be preserved due to the function that the river plays in human life which has never changed. At the same time, the author also argues that with the development of the maritime paradigm allows the role of coastal communities to be included in carrying out their responsibilities as agents of change which has long been nominated as a causative factor of river pollution. Furthermore, the role will be complemented by the presence of the authorities as the driving force in ensuring that the problem of river pollution can be solved through enforcement. Even so, the author argues that the authorities need to change the mentality of those who have long considered the coastal community to be "enemies" to "friends", thus the presence of the community along the river board is an "asset" rather than a burden. The relevance of this difficult "three-layer" role is presented by the author so that the goal of preserving the Inanam - Likas river basin can be realised as much as possible.

Keywords: Authorities, Coastal Communities, Inanam-Likas River Basin, Maritime, Malaysia

¹ Eko Prayitno Joko, Programme of History, Faculty of Social Sciences and Humanities, Universiti Malaysia Sabah, 88400 Kota Kinabalu, Sabah, Malaysia

² Adi Jafar, Geography Programme, Faculty of Social Sciences and Humanities, Universiti Malaysia Sabah, 88400 Kota Kinabalu, Sabah, Malaysia

³ Ramli Dollah, International Relations Programme, Faculty of Social Sciences and Humanities, Universiti Malaysia Sabah, 88400 Kota Kinabalu, Sabah, Malaysia

⁴ Marsitah Mohd Radzi, Sociology and Anthropology Programme, Faculty of Social Sciences and Humanities, Universiti Malaysia Sabah, 88400 Kota Kinabalu, Sabah, Malaysia

Introduction

The historical theatre in Malaysia has taken various paths to offer criticism intended for the national historiography, which is perceived as disoriented, narrow-minded, lacks openness to the diversity of study themes, and limited in the use of resources. Although local historians diligently develop goals and stages in the historiography of national history when moving from a "colonial to local" perspective and from "history from above" to "history from below", democratisation from the approach aspect has not been achieved so it tends to be monographic. Whereas the recommendation of a multidisciplinary approach has been put forward since the 1980s when social history was gaining more attention among historians which enabled the documentation of new "social facts" based on the position of historical knowledge as "a common market of the humanities" (Abdullah, 2011; 56). Therefore, efforts to develop the Inanam - Likas river basin in Kota Kinabalu, Sabah (Malaysia) as a balanced ecosystem in the context of "modern" history requires a multidisciplinary approach by highlighting nature and geography, not as a historical stage, but as part of the historical process. Thus, the debate to redevelop the Inanam-Likas river basin is done by tearing down the "wall" that limits the study of history from the study of geography, international relations, industrial relations or other disciplines. In other words, this writing is a reverse in the discourse of the development of the Inanam - Likas river basin, not through high-profile theories, but with "facts" and "examples".

Research Methodology

The process of knowledge-seeking is an important essence in determining the findings and arguments of research. Therefore, the process of knowledge-seeking in the study involves two forms, namely (i) abstract and (ii) empirical so that the writing produced later could describe the idea and reality regarding the development of the Inanam-Likas rives basin which has long been deliberately "abandoned". In its abstract form, the debate of this study depends heavily on the history knowledge discipline paradigm which touches the time and space concept as the change of "time" not only causes "space", but also the thoughts and perspective of the society. Hence, the meaning of history based on the "time and space" concept will use the thoughts of Fernand Braudel, a renowned Annales historian in his writing regarding the question of "space" in the Mediterranean and the Mediterranean coast, before the establishment of various nations today (Braudel, 1966). Braudel's framework of thinking would later allow an understanding of how the restaging of the past is not about "occurrences" as events that must be reconstructed and explained but is a part of a demonstrated structural formation. In other words, Braudel's thought place's structure not as historical background, but the history itself that presents "social facts" through the context of connectivity in the relational pattern of a historical event. Indirectly, the said framework of thinking allows some knowledge - historical writing that is produced that can present history as a knowledge that is "understanding" and analytical.

The empirical methodology in this study, meanwhile, is in the form of a case study by raising debate regarding the development of the Inanam-Likas river basin as one of the ecosystem balances in Sabah. The search of these efforts was done by conducting external studies to understand the community system and the environment of the area that is being studied. This effort was done through the participatory observation method which aims to collect ethnographic data about "social facts" (social relations) to explain the empirical reality of the community and its surrounding along the Inanam-Likas river basin. Although this study uses the observation method and oral history as the main thrust of information collection, its production still depends on the existence of document sources that consist of primary and secondary sources. In the context of this study, primary sources in the form of documents used comprised official records in the National Archives of Malaysia, Sabah State Archives, and the State Legislative Assembly, while the secondary sources are obtained through reading books, journal articles, theses (master's and doctoral) and from related magazines that are available in public and university libraries. The primary and secondary data gathered in this study are related to the history of population, pictures, and statistics of the

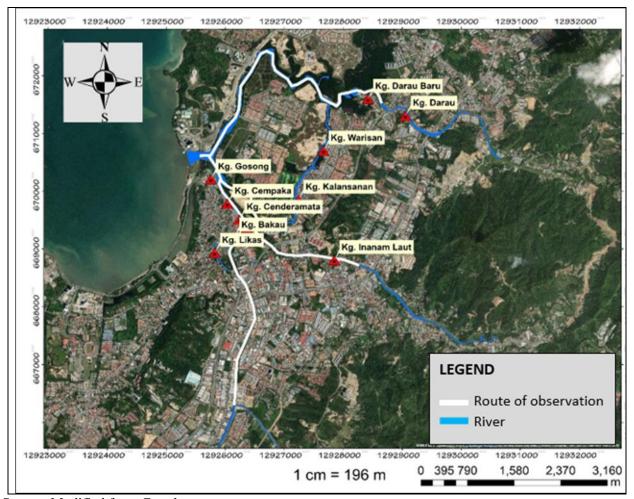
community population along the Inanam-Likas river basin that has been recorded or published before. Reading on the source can highlight the position of history as an "explanatory" knowledge in describing the development of the Inanam-Likas river basin. This situation, at the same time, enables understanding on the need to involve the community as agents of change and the authorities as the agents of urgency in the effort to sustain the Inanam-Likas river basin in this study.

Research Location

In general, this study was conducted along the Inanam-Likas river basin in Kota Kinabalu, Sabah (Malaysia). This river basin connects Inanam, Menggatal and Sepanggar districts in the same river circle. In the context of traditional history, the region is an area of the Tulen River owned by Sultan Abdul Momin (Inanam-Sepanggar) and Pengiran Kahar Pengiran Daud (Menggatal) as owners of power in that area. Therefore, the Tulen River area has a significant historical journey in the context of the handover of territorial sovereignty from the Sultanate of Brunei to the British North Borneo Company (BNBC). This fact is evident when the Menggatal-Inanam district became the history of meetings regarding the peace agreement between BNBC, which was represented by W.C. Cowie, and Mat Salleh in the year 1989 at Pengiran Kahar Pengiran Daud's residence. Through this Menggatal Agreement, it required Mat Salleh to stop his objection towards BNBC while he would be permitted to stay in and administer the Tambunan district (Tregonning, 1970: 165; Hamdan & Syahrin, 2016: 287 & Eko Prayitno, 2014). However, the content of the arrangement agreed upon by both parties resulting in the attack of Tambunan to eliminate Mat Salleh's objection, thus leading to his death in 1900. This historical event would surely be beneficial should it be used as a "historic area" as done by Melaka of its "historic city".

Meanwhile, in the context of contemporary history, the Menggatal-Inanam district is an industrial area which houses many factories. The presence of industrial factories in the area contributes to the pollution in the Inanam river basin as the solid waste from the plant is not well-managed. Due to that, Datuk Masidi Manjun during his tenure as Minister of Tourism, Culture and Environment (2012) stated that his ministry would monitor the quality of river water in 36 river basins in Sabah, involving 115 monitoring stations, to detect pollution, including the Inanam river (Malaysiakini, 23 October 2012). This matter is further exacerbated as there are at least 10 villages along the Inanam-Likas river basin comprising thousands of houses, which at the same time becomes the agent of pollution in that area. There are several villages for illegal immigrants (PATI) in this area that are not provided with garbage disposal and collection services, causing a group of residents to arbitrarily dispose garbage into the Inanam-Likas river (see for example Wan Shawaluddin & Ramli, 2013 and Ramli & Kamarulnizam, 2018). This ongoing problem needs to be resolved by re-raising the importance of the river to the ecosystem and economic development of the community along the Inanam-Likas river basin.

Figure 1: The Inanam River Basin-Likas, Kota Kinabalu, Sabah



Source: Modified from Googlemap

Reimagination of the Malaysia Maritime Vision: New Narrative of the Inanam-Likas River Basin

Recent world political developments have led to conflicts in the territorial waters which then comes the effort to redevelop the maritime paradigm in the national development framework and achieve common prosperity. It is hence not surprising when the national maritime discourse re-emerges as a reaction towards the violation of territorial sovereignty between countries in the Archipelago related to illegal fishing, territorial (island) disputes, and border conflicts that are increasing from time to time (Liss, 2011). In such a situation, it is necessary to redevelop the maritime paradigm of the archipelago as a pattern of thought and way of viewing oneself (country) and its environment in order to bridge the disconnection maritime identity (time) of the traditional era (Sulistiyono, 2016 and Pradjoko & Sulistiyono, 2018). The collective memory of success in the sea and rivers of the maritime civilisation era can be used as a guide to restructure national development based on sea-river through ways of thinking (cognitive), attitude (effective) and behaviour (cognitive) (Lapian, 1992 & 2009). Efforts to reimagine based on the maritime paradigm as one of the important "spaces" in the modern-world political context can be seen when the Japan's Prime Minister, Shinzo Abe (2007), delivered a speech entitled "Confluence of the Two Seas" which introduced the term "Indo-Pacific" as Japan's new geopolitical concept in facing the competition of the world's modern maritime civilization (Choiruzzad, 2020). Similarly, the presence of Obama (2011), the President of the United States of America who introduced laws related to "Pivot to the Pacific" or "Rebalancing Towards Asia" in response to the rise of China as a major power in Asia-Pacific (Tan, 2015 & Meijer, 2015). After that, Xi Jinping (2013) as the President of China responded by announcing the opening of the "Maritime

Silk Road" as its new maritime focal that will develop maritime infrastructure from China across Southeast Asia and South Asia, Middle East, Europe and Africa (Len, 2015). The development of this maritime route will be borne by China to provide for the construction of deep seaports in strategic areas passing through the "Maritime Silk Road". This paradigm shifts also attracted attention from Indonesia by developing the "maritime axis" concept as a new hope for the resurgence of its national history.

Indirectly, the changes in political and economic policies shown by the world's major powers involved are also welcomed by Malaysia because its position is also covered by the world's sea-river as a link. Malaysia's determination to develop its maritime area was evident when the Malaysian Maritime Enforcement Agency (MMEA) was established in 2006 and was actively involved in the 2013 APEC Focus Group Discussion which made the debate on maritime communication lines as its main agenda (Hamid Khin Maung Sein, et. al., 2016). The same is shown in the ASEAN context when Malaysia plays an important role in the effort to expand the maritime transportation system plan to link shipping lanes in the Southeast Asian (Archipelago) waters as part of the main plans of ASEAN Connectivity. Malaysia's seriousness in managing its maritime matters is also influenced by rising security issues related to sovereignty due to the emergence of claims over islands in the South China Sea and also in Celebes Sea (Wu & Zou 2014; Ramli, et. al. 2016; Storey, 2018; Abdul Rashid & Ramli, 2020; Alverdian, Joas, & Tynkkynen, 2020; Hamzah, 2021)). Apparently, this maritime territory is rich with mineral resources and become crucial maritime shipping route. The economic potential that also involves security matters which then puts the struggle of Malaysia in placing itself as one of the world's maritime axis. In this regard, Hans Dieter Evers, prominent scholar on Southeast Asia politics is of the view that Malaysian maritime reimagination should be developed based on the concept of the archipelago to formulate a Malaysian maritime policy (Evers, 2017: 8-11). Therefore, Malaysia's maritime reimagination was developed in opposition to the old arrangement that marginalised the sea area as part of its regional development. With that, it would later be able to raise awareness that there are anomalies in Malaysia's development policy which has long been too land-oriented, while the shape of its territory is an archipelago.

The development of the maritime paradigm in Malaysia includes the development of rivers as it contributes directly to the economic development of the country (Berita Harian, 20 August 2020 and 4 February 2021). In this regard, the government has launched the National Water Resources Policy (NWRP) between 2010 and 2050 which is a vital effort of the government to ensure that the country's water supply is guaranteed in the era of economic development, particularly the agriculture and industrial sector, urban growth, and rapid population growth (Mstar, 25 March 2012). This is because most rivers in Malaysia experience severe levels of pollution which are difficult to treat due to development and rapid population growth. Whereas the government has spent millions of ringgits while many management agencies and river basins have been established to ensure that the sustainability of the river can be restored, but river pollution continues to occur (Ang Sek Chuan et. al., 2013: 96-97 and Marthelreda Choo et. al., 2017: 75-77). This situation has caused polluted rivers to be a serious problem in the development of the country due to the increasing frequency of floods, reduction in irrigation and water availability as well as environmental degradation (Adi, M. Tahir, Nordin, 2012 & Adi et. al. 2020). Apparently, Sabah has become one of the states that experience critical river pollution in Malaysia. Therefore, river pollution is often displayed in newspapers, such as in Moyog River, Segaliud River, Mongkusilad River, Muanad River, Kalumpang River, Pang Burong River, Segama River, Darau River, Likas River and Menggatal River. Although the Integrated River Basin Management (IRBM) is used as a framework in addressing river pollution and water management in Sabah, it still shows fewer effective results. This fact can be seen in the context of management of the Inanam-Likas river basin which connects the Likas River, Darau River, and Menggatal River when it shows severe levels of pollution, despite how its location is very close to the city centre and the state government administrative centre. In general, the Inanam-Likas river basin has the potential to be developed as a geo-tourism area due to its strategic position and its own historical value. This goal will be able to be realised as there is a turning point in the discourse of river sustainability in Sabah which also involves the management of the Inanam-Likas river basin, among others, as follows:

First Method: Reimagination of the Maritime Paradigm in Sustaining Rivers

The change of "time" has indeed changed the importance of space in the context of Malaysian nation. The change of "time" associated with Malaysia's independence from the British is actually still centered on the continuity of political and economic development of its society based on a land -based economy. This situation highlights the importance of sea and river as a vital "space" during the maritime civilisation era which now appears to be opposite. Hence, most of the regional development policy in Malaysia is more specific to land based as it is considered to be more beneficial to community life and national development. While in the reality, the importance of sea and river in human life has never changed its function when acting as a "source of human life" including beverages, food, transportation, and the economy of the surrounding community. Although it is recognised that the existence of the sea and rivers is very beneficial to the surrounding ecosystem, the changing of "time" has caused the "space" of the involved region to be "marginalised" deliberately. As a result, the "space" faces the danger of pollution caused by humans with the rapid development and increasing liveability of communities along the river, thus making it difficult to maintain the cleanliness of the river. However, since the world's economic powers sought to re-establish the role of the sea as an important regional "space" in the context of modern political and economic development, efforts to preserve the river have also been carried out actively. This aspiration is fulfilled by the development of a maritime paradigm that prioritises the way of thinking (cognitive), attitude (effective) and behaviour (cognitive) towards the position of the river as part of the regional "space" of the modern maritime civilisation. Therefore, in recent times, the reimagination of the Malaysia maritime paradigm has been voiced out by activists, litterateurs, and social scientists. The concern of the activists, for example, can be seen through their direct involvement in standing up for the existence of clean and sustainable rivers for the benefit of the community in the future. This effort is voiced by the Pangrok Sulap collective work entitled "Sungai adalah Icebox Kita" (The river is our Icebox) which is symbolic of the importance of river as the lifeblood because it is able to provide basic human needs (Malaymail, 17 March 2017 and Eko Prayitno et. al., 2020: 340). In other words, this works seeks to highlight the need to preserve the river from being polluted by irresponsible human actions who are fascinated by the progress and construction at the expense of the environment.

At the same time, this collective is also active in mobilising the local community to protect rivers from being destroyed to meet the demands of development and greedy capitalism. This effort is done by conducting an extensive awareness campaign to the community surrounding the Papar river basin and the people of Sabah in general through production of posters entitled "Stop Papar Dam" and "Hentikan Empangan: Hari ini dan akan Datang" (Stop the Dam: Today and Future) (Thestar, 5 November 2014 and Issarezal dan Humin, 2019: 44). In this case, the collective is not against development but rather concerned about the unbalanced delays in development that could affect the community and its surrounding. To some extent, the call from Pangrok Sulap as a community activist received attention not only from the government but also global attention. Their success can be used as a platform to sustain the Inanam-Likas river basin due to the increasing awareness on the importance of river as a "source of human life" for the community. The paradigm change brought by the Pangrok Sulap also penetrated to the younger generation as their artwork is considered unique (woodcut), local and able to convey its political message. The expansion of awareness that also involves young people would undoubtedly reshape the maritime paradigm of the archipelago, which emphasises land matters and water matters as part of the "space" of national development. This issue is becoming increasingly important as the centralisation to the land alone is not in line and contrary to the Malaysia's national philosophy which was formed based on the question of 'tanah air' (archipelagic homeland) (Teo Lee Ken, 2020: 223). Therefore, marginalizing one of them will affect

the history of national and polity in the state. The importance of this matter can be traced through the work of Pramodeya who revealed that efforts to restore the glory of the national civilisation of Malay Archipelago which is too land oriented can only be done if the reimagination of the maritime paradigm is developed as a new vision of community life (Toer, 1995). Therefore, the interest of authorities, non-governmental organisations, academics, and litterateurs in realising the maritime vision of the archipelago in the current context provides an opportunity to preserve rivers in the Kota Kinabalu area, including in the Inanam-Likas river basin.

Second Method: Communities as River Conservation Agent

After World War II ended, there emerged a non-traditional security concept which shifts the role of the state to society as one of the agents of change. These changes then gained attention from social scientists in understanding the human security matter as it is often manipulated and affected by the will of the nation which centred on the traditional security. This paradigm shift allows the role of human beings as group or community in a region to be important in revealing the issue of national security. Therefore, community concept is developed as an agent of change as everyone in the society lives in the "community". Study by Bell and Newby on the concept of community found that there are 94 definitions of community (Bell & Newby, 1971: 27; and Gusni, 2019: 54; Hamidi et. al., 2011: 7-10 & Kalsom & Nor Ashikin, 2006: 77-102). However, community refers to a group of society living together in an area with various characteristics connected by social bonds, sharing common perspectives, and involved in joint actions in the same geographical location (MacQueen et. al, 2001; Martin dan Mcheimech, 2016: 186-188). The parallel definition was also highlighted by Mohd Syariefudin et. al. (2017) who argued that a community is a group of people who inhabit an area with similar interests. Meanwhile Claridge (1997) opines that a community consists of individuals or groups that play a major role in the management of natural resources.

In the Malaysian context, one of the social scientists who frequently uses community as an agent of change in society and its surrounding is Gusni Saat. He divides community into two forms namely (i) generic and (ii) specific (Gusni, 2019: 56-57). Usually, "generic community" refers to solidarity bond of a group of people based on socio-cultural and economic activities, regardless of ethnic, cultural, religious and place of residence. The solidarity bond is said to occur as a form of social relationship when a group of generic community carry out similar activities, though not knowing each other, but united in the same goals. Among them are the fishing community, trader community, farmer community and academic community. Similarly, a "specific community" refers to a group of people bound by family ties, kinship, and ethnic, and live collectively in an area. Thus, one of the main features of a specific community is that it involves matter of space, that is, where the community occupies a limited of territory and used it collectively to obtain resources for survival. This factor also causes the main source of solidarity of specific community which is based on ethnics relations and kinship marked by social and cultural organisations (Gusni, 2019: 57). It indirectly shows that most of the community-based activities, be it "generic community" or "specific community", is centred to community and the community interests should come first (Gusni, 2010).

Based on the concept of community discussed above, it is not an exaggeration to acknowledge that a "community" is apparently has become an agent of change in the context of national development. This is because, each community has a framework of shared beliefs, interests, and commitments as a blueprint in uniting community members comprising of various races, beliefs, occupations and living standards. Interaction between these communities not only benefit to the community members, but also to their environment because "community care means caring for the environment" and "environmental care also means caring for the community". Therefore, community involvement is considered important in ensuring the success of any programme or policy that have been planned by either the authorities or community

involved (Kalsom & Nor Ashikin, 2006). In this context, a Community-Based Approach is important to understand the role of community as an agent of change to preserve or conserve the sustainability of the river. Understanding the issue is critical because the community that reside at the Inanam-Likas river basin is one of the factors that causes river pollution. Hence, the direct involvement of communities along the Inanam-Likas river basin is crucial as their active involvement in welcoming the reimagination of maritime paradigm which is put forward by the authorities will help to solve problem related to river pollution in this area. Although this approach has been widely applied especially in the area of community involvement and tourism sector (Kalsom & Nor Ashikin, 2006; Butler & Hinch 2007), environmental issues and river management (Mullikin & Smith, 2002; Ablah, et. al., 2016; Commodore, et. al. 2017; Kailasam, 2019); conflicts and natural disasters (Maskrey, 1989; UNHCR, 2008; Kelman & Mercer, 2014; Haliza, 2018), it is still poorly applied in understanding the role of coastal communities especially squatter communities in river basins. Therefore, the coastal community in the Inanam-Likas river basin needs to be educated and made aware through way of thinking (cognitive), attitude (effective) and behaviour (cognitive) towards the importance of river as a "source of human life". This effort, for example, can be done by setting up (i) informal administrative institutions in squatter settlements and (ii) making squatter communities not only as "eyes" and "ears", but also "hands" to the authorities in ensuring the sustainability of the Inanam-Likas river basin.

Third Method: Authorities as Agents of Urgency in River Sustainability

Efforts to preserve the river also require support and concern from the enforcement (authorities). This situation is because there is still a mentality among the general public that considers environmental management and cleanliness is the responsibility of the enforcement authorities alone. As a result, without realising it, the responsibility of maintaining cleanliness faces shortcomings as it is one-sided because the rules and policies that have been enforced by the authorities are not welcomed by the community. At the same time, most of the rules and policies enforced by the authorities are inconsistent and seasonal as they are influenced by several factors such as financial issues and the inability to implement a programme as well as lack of staff from the authorities to carry out their duties. These constraints are increasing as enforcement rules and policies are also constantly changing as they are influenced by the priorities set by the alternate Heads of Department and Directors. This issue demonstrates that the implementation of rules and policies is not an easy matter. In the context of the sustainability of the Inanam-Likas river basin for example, it was found that similar problem also occurred, causing the efforts carried out by the Kota Kinabalu City Hall (DBKK) to fail. In this case, only DBKK is seen as serious in addressing the problem through enforcement and some activities that it has planned. It is also very unfortunate because on the part of the DBKK, there is a mentality that sees the squatter community as a contributing factor to the pollution problem in the Inanam-Likas river basin. Not surprisingly when the authorities consider the community as their "number one enemy". At the same time, there is an over-belief in the ability of technology in solving the problem of river pollution in this area that the authorities are willing to spend millions of ringgits to get the technology they need (Sakaran dan Mohamad Tahir, 2017).

Although all these measures have been carried out by the authorities, the problem of pollution in the Inanam-Likas river basin is still unresolved. Therefore, the presence of the authorities as a driving force in preserving the Inanam-Likas river basin requires a new approach. However, even though enforcement is important in this issue, however, at the same time mentality of the authorities towards the community also need to be changed. This is because, the enforcement of regulations related to fines against litter bugs still needs to be implemented as a channel of awareness to the surrounding community. Similarly, general cleaning activities that involve collaboration between the authorities and the community need to be intensified as these activities have shown encouraging success throughout the year 2019. However, the target needs to be changed so that it does not only focus on coastal areas where the community does daily leisure activities, but also, around river basins identified as places of that trapped and accumulate waste of the surrounding area. The same needs to be done with a series of house-to-house campaigns with DBKK to

focus not only on the gazetted villages, but also the squatter villages along the Inanam-Likas river basin. Here, the authorities should provide a place or rubbish disposal bin for squatter villages even though their area is not gazetted to avoid the widespread dumping of rubbish into the river. In the meantime, effort to relocate squatters in the Inanam-Likas river basin to new settlement areas certainly will not solve the problem of river and environment pollution, instead this policy will only export the same problem to other areas. Therefore, the mentality of the authorities needs to be changed by seeing the squatter community or coastal residents of the Inanam-Likas river basin as "friends" and not "enemy", thus making the community as an "asset" to solve the problem of river pollution. By doing so, it is hoped that these communities will work with the authorities in ensuring that the sustainability of the river that can benefit the present and future generations.

Conclusion

From the discussion presented above, it shows that the effort to preserve the Inanam-Likas river basin is not an easy task. Apparently, such effort requires the development of ecosystem that supports each other in the aspect of thinking (abstract) to the aspect of physical (empirical). Therefore, this paper suggests that success to realise these goals must begin with developing the maritime paradigm that resources the position of the sea-river "space" as part of a crucial area of national and human life. This effort has become easier to implement as the authorities have re-centralise Malaysia's political and economic development on the marine based activities in response to the changing orientation of world economic powers which are now shifting towards maritime paradigm. However, this change and expansion of the maritime paradigm needs to involve coastal communities in the Inanam-Likas river basin as they are a valuable "asset" in addressing the lack of regulations and inconsistent policies. This is realistic to be translated into practical form because the coastal community also has an interest behind the rich ecosystem of the Inanam-Likas river basin in terms of its economy and habitability. Nevertheless, this effort requires direct support from the authorities as the third method in the form of enforcement. However, at the same time, their effort must be carried out jointly with the community by changing the mentality of authorities of those who have long considered coastal communities or squatter villages as "enemies". Finally, the three methods highlighted in this paper are the reverse discourse of the Inanam-Likas river sustainability which has long been stuck with actions of a purely physical nature, thus ignoring the aspect of thought as its mainstay.

Acknowledgement

The authors would like to extend enormous gratitude to all the parties involved in this research. A special acknowledgement to Universiti Malaysia Sabah (UMS) and DBKK for the allocated financial assistance under the grant code No. GKP0029-2019 for this research.

References

- 1. Abdul Rashid Abdul Hamid & Ramli Dollah. (2020). Dari 'Mundu' ke Penculikan Untuk Tebusan: Evolusi ancaman keselamatan maritim di Pantai Timur Sabah. Jurnal Kinabalu. 26(1), 1-22
- 2. Abdullah, T. (2011). Lombard, Mazhab Annales dan Sejarah Mentalitas Nusa Jaya (Lombard, Annales School and the History of Nusa Jaya Mentality). In Henri Chambert-Loir dan Hasan Muarif Ambary (eds.). Panggung Sejarah: Persembahan Kepada Denys Lombard (Historical Theater: A Performance to Denys Lombard). Jakarta: Pustaka Obor.
- 3. Adi Jafar, et. al. (2020). Pengaruh Monsun Terhadap Bahaya Banjir: Kajian Kes Dataran Banjir Beaufort, Sabah (The effect of Monsoon towards flood hazard: Case study of flood plains in Beaufort, Sabah). Jurnal Kinabalu, 26(2), 165-182

- 4. Adi Jafar, Mohammad Tahir Mapa, Nordin Sakke (2012). Impak aktiviti pembangunan terhadap trend kekerapan dan magnitud banjir di lembangan sungai Menggatal, Kota Kinabalu, Sabah (Impact of development activities on the trend of frequency and magnitude of floods in the Menggatal river basin, Kota Kinabalu, Sabah). Jurnal Kinabalu, 18, 97-116
- 5. Alverdian, I., Joas, M., & Tynkkynen, N., (2020) Prospects for multi-level governance of maritime security in the Sulu-Celebes Sea: lessons from the Baltic Sea region, Australian Journal of Maritime & Ocean Affairs, 12(2), 108-122, DOI: 10.1080/18366503.2020.1770944
- 6. Ang Sek Chuan et al. (2013). Cabaran Dalam Kemapanan Pengurusan Sungai di Malaysia (Challenges in the Sustainability of River Management in Malaysia). Prosiding Seminar Serantau ke-2 Pengurusan Persekitaran di Alam Melayu. Riau: Pekan Baru.
- 7. Asyhadi Mufsi Zadlazi. 2019. Hulu ke Hilir: Jaringan dan Sistem Perniagaan Sungai Kerajaan Srivijaya (Upstream to Downstream: The Srivijaya Government River Business Network and System). Jurnal Kajian Budaya, 9(1), 61-82.
- 8. Bell, C. & Newby, H. (1971). Community Studies: An Introduction to the Sociology of the Local Community. London: George Allen & Unwin LTD.
- 9. Berita Harian. (20 August 2020). Malaysia Perlukan Kementerian Hal Ehwal Maritim?. (Malaysia Needs a Ministry of Maritime Affairs ?.)
- 10. Berita Harian. (4 February 2021). Kestabilan Maritim Teras Kemakmuran Ekonomi. (Maritime Stability is the Core of Economic Prosperity.)
- 11. Boomgaard, P. (2007). A World of Water. Leiden: KITLV Press.
- 12. Braudel, F. (1966). The Mediterranean and the Mediterranean World in the Age of Philip II (Vol. I dan Vol. II). London: Harper Colophon Books.
- 13. Butler, R. & T. Hinch (eds.). (2007). Tourism and indigenous peoples. Oxford and Burlington: Butterworth-Heinemann.
- 14. Choiruzzad, S. A. B. (2020). The confluence of the two seas: The rise of the Indo-pacific region and ASEAN Centrality" In. ASEAN as a Method: Re-centering Processes and Institutions in Contemporary Southeast Asian Regionalism, In C. Ergenç (ed.). The confluence of the two seas: The rise of the Indo-pacific region and ASEAN Centrality London: Routledge.
- 15. Commodore, A., et. al. (2017). Community-based participatory research for the study of air pollution: A review of motivations, approaches, and outcomes. Environmental Monitoring and Assessment. 189(378), 1-30
- 16. Eko Prayitno Joko, M. Helmy Abdul Gapar & Sharifah Nursyahidah Syed Annuar. (2020). Pangrok Sulap: Sedekad Memetakan Masa Lalu, Mengukirkan Masa Hadapan (Pangrok Sulap: A Decade of Mapping the Past, Carving the Future). Jurnal Kinabalu. 26(2), 317-354.
- 17. Eko Prayitno Joko. (2014). Isu Pemilikian Wilayah Pantai Timur Sabah: Satu Penelusuran Daripada Sudut Sumber Sejarah (The Issue of Ownership of the East Coast Region of Sabah: A Search from the Perspective of Historical Sources). Jurnal Kinabalu. 20, 1-34.
- 18. Evers, H.D (2017). Nusantara: Malaysia dan Geopolitik Laut China Selatan (Archipelago: Malaysia and the Geopolitics of the South China Sea). (Translation. Abdul Muein Abadi) Bangi: Universiti Kebangsaan Malaysia.
- 19. Gusni Saat. (2010). Komuniti Sama-Bajau Sulawesi Selatan Dalam Kancah Urbanisasi (The Sama-Bajau Community of South Celebes in the urbanization scene). Kota Semarahan: UNIMAS Press.
- 20. Gusni Saat. (2019). "Komuniti" Sebagai Konsep dan Metode Dalam Penyelidikan Sains Sosial: Tafsiran Sosiologikal ("Community" as a Concept and Method in Social Science Research: A Sociological Interpretation). Akademika 89(3), 53-62
- 21. Haliza Abdul Rahman. (2018). Community based approach towards disaster management in Malaysia. Asian Journal of Environment, History and Heritage. 2(2), 55-66.
- 22. Hall, K. R. (1985). Maritime Trade and State Development in Early Southeast Asia. Hawaii: Honolulu University Press.

- 23. Hamdan Aziz & Syahrin Said (2016). Tuntutan Kesultanan Sulu Terhadap Sabah: Sorotan Dari Perspektif Sejarah dan Perundangan (The Sulu Sultanate's Claims Against Sabah: Highlights From a Historical and Legal Perspective). Jurnal Antarabangsa Dunia Melayu. 9(2), 279-294.
- 24. Hamid Khin Maung Sein, A. G., Mustafa, M., & Wai Mon, S. (2016). Entrusting Coast Guards with Maritime Law Enforcement Powers: Lessons for Malaysia. IIUM Law Journal, 24(1). https://doi.org/10.31436/iiumlj.v24i1.248
- 25. Hamzah, B.A (2021) Malaysia and South China Sea disputes: Applicability of international law. In K. Zou (ed.) Routledge Handbook of the South China Sea. London: Routledge
- 26. Issarezal Ismail & Humin Jusilin (2019). Karya Seni Visual Kolektif Pangrok Sulap Dalam Konteks Perubahan Sosial-Budaya di Sabah (Pangrok Sulap Collective Visual Art Work in the Context of Socio-Cultural Change in Sabah). Journal of Borneo Social Transformation Studies (JOBSTS). 5(1), 35-53.
- 27. Kailasam, K. K. (2019). River monitoring and pollution management. Paper presented at the seminar on River Pollution and Impact on Water Supply Resources, Hotel Armada, 14 August.
- 28. Kalsom Kayat & Nor Ashikin Mohd. Nor. (2006). Penglibatan ahli komuniti dalam program pembangunan komuniti: Satu kajian ke atas program homestay di Kedah (Involvement of community members in community development programs: A study on homestay programs in Kedah). Akademika. 67(1), 77-102.
- 29. Kelman, I. & Mercer, J. (2014). A knowledge integration tool for disaster risk reduction including climate change. Dalam Lopez-Carresi, M., (eds.). Disaster management: International lessons in risk reduction, response and recovery, London: Earthscan.
- 30. Kilang di Sabah Kena Kompaun RM158,050.00 (Factory in Sabah fined RM158,050.00). Malaysiakini. 23 Oktober 2012.
- 31. Lapian, A.B. (1992). Sejarah Nusantara, Sejarah Bahari (Archipelago History, Maritime History). Yogjakarta: Universitas Gajah Madah.
- 32. Lapian, A.B. (2009). Orang Laut- Bajak Laut-Raja Laut: Sejarah Kawasan Sulawesi Abad XIX (Sea People-Sea Pirate-King of the Sea: The History of the Celebes Region in the XIX Century). Jakarta: Komunitas Bambu.
- 33. Len, C. (2015) China's 21st Century Maritime Silk Road Initiative, Energy Security and SLOC Access, Maritime Affairs: Journal of the National Maritime Foundation of India, 11(1), 1-18
- 34. Lewis, D. (1970). The Growth of the Country Trade to the Straits of Malacca 1760-1777. JMBRAS. 43(2), 144-130.
- **35.** Liss, C. 2011. Oceans of Crime: Maritime Piracy and Transnational Security in Southeast Asia and Bangladesh. Singapore: ISEAS
- 36. Lombard, D. (2010). Pandangan Baru Terhadap Para "Lanun Melayu": Separa Pertama Abad ke-19 (A new view of the 'Malay Pirates': First half of the 19th century). In. D. Perret (ed.). 2010. Selat Melaka di Persimpangan Asia: Artikel Pilihan Daripada Majalah Archipel (Straits of Malacca at the Asia Crossroads: Selected articles from Archipel Magazine). Kuala Lumpur: Jabatan Muzium Malaysia dengan Kerjasama Ecole Française D' Extreme Orient.
- 37. Malaymail. (17 Mac 2017). So, What is Pangrok Sulap Art Colletive or Social Activist or Both?
- 38. Malaysiakini, (23 Oktober 2012). Kilang di Sabah Kena Kompaun RM158,050
- 39. Marthelreda Choo, Gaim Lunkapis & Ann Anton. (2017). Penglibatan Komuniti Dalam Melestarikan Sungai Melalui Program Penambahbaikan Stock Udang Galah: Kajian Kes di Sungai Petagas, Sabah (Community participation in preserving Rivers Through Lobster Stock Improvement Program: A Case Study in Sungai Petagas, Sabah). Journal of Borneo Kalimantan. 3(2), 73-90.
- 40. Maskrey, A. (1989). Disaster mitigation: A Community Based Approach. Oxfam: Oxford

- 41. Meijer, H. (ed.) (2015) Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions. NY: Palgrave Macmillan
- 42. Mohamad Raduan Mohd Arif. (1995). Penulisan dan Realiti Sejarah Asia Tenggara: Satu Persoalan (Writing and the Realities of Southeast Asian History: A Question). JATI. 1, 131-150.
- 43. Mohamad Tahir Mapa (2017). Pengurusan Sisa Pepejal Mapan: Penelitian ke Atas Dewan Bandaraya Kota Kinabalu (Sustainable Solid Waste Management: A Study of Kota Kinabalu City Hall). In U. Imang dan Mustapha Abd Talip (eds.). Isu-Isu Alam Sekitar dan Manusia di Sabah: Kajian Dari Sudut Pandang Geografi (Environmental and Human Issues in Sabah: A Study From a Geographical Perspective). Tanjong Malim: Universiti Pendidikan Sultan Idris.
- 44. Mstar. (25 Mac 2012). Dasar Sumber Air Negara 2010-2050 Pastikan Bekalan Air Terjamin: Muhyiddin (National Water Resources Policy 2010-2050 Ensure Guaranteed Water Supply: Muhyiddin.).
- 45. Muhamad Termizi Hasni et. al. (2015). Tapak Hunian Manusia Sepanjang Lembangan Sungai Muda Dari Zaman Prasejarah Sehingga Zaman Protosejarah (Human dwelling sites along the Sungai Muda Basin from Prehistoric to Protohistoric Period) Proceedings of the 8th International Seminar on Ecology, Human Habitat and Environmental Change, 21-22 September.
- 46. Mullikin, T.S & Smith, N.S. (2002). Community participation in environmental protection. UCLA Journal of Environmental Law and Policy. 21(1), 75-95.
- 47. Nordin Hussin. (2011). Perdagangan dan Peradaban di Laut Melayu (Trade and Civilization in the Malay Sea). Bangi: Universiti Kebangsaan Malaysia.
- 48. Pradjoko, P. & Sulistiyono, S.T. (2018). Peradaban Sejarah Maritim: Peranan Sungai Dalam Sejarah Peradaban Maritim di Jambi dan Riau (History of Maritime Civilization: The Role of Rivers in the Maritime Civilization history in Jambi and Riau). Jakarta: Direktorat Sejarah Kementerian Pendidikan dan Kebudayaan.
- 49. Ramli Dollah & Kamarulnizam Abdullah (2018) The securitization of migrant workers in Sabah, Malaysia. Journal of International Migration & Integration. 19(3), 717–735
- 50. Ramli Dollah, Wan Shawaluddin Wan Hassan, Diana Peters and Zaini Othman. (2016). Old Threats, new approach and National Security in Malaysia: Issues and Challenges in Dealing with cross-border crime in East Coast of Sabah. Mediterranean Journal of Social Sciences. 7(3), 178-186
- 51. Reid, A. (1988). Southeast Asia in the Age of Commerce 1450-1680: The Lands Below the Winds. Vol. I. New Haven: Yale University Press.
- 52. Rutter, O. (1930). Pirate Wind, tales of the Sea Robbers of Malaya, London: Hutchinson & Co.
- 53. Sakaran, S.S. & Mohamad Tahir Mapa. (2017). Peranan NGO Dalam Pengurusan Sisa Pepejal: Kajian Kes Kegiatan Kitar Semula Oleh Persatuan Tzu Chi di Kota Kinabalu, Sabah (The Role of NGOs in Solid Waste Management: A Case Study of Recycling Activities by Tzu Chi Association in Kota Kinabalu, Sabah), National Conference on Society, Space and Environment 2017 (MATRA 2017), Towards Realizing the Goals of Sustainable Development. Universiti Sains Malaysia, February 23-24
- 54. Shicun Wu and Keyuan Zou (eds.). (2014). Non-Traditional Security Issues and the South China Sea: Shaping a New Framework for Cooperation. London: Routledge
- 55. Storey, I. (2018). Trilateral Security Cooperation in the Sulu-Celebes Seas: A Work in Progress. Perspective. 48, 1-7
- 56. Sulistiyono, S.T. (2016). Jawa dan Jaringan Perdagangan Maritim di Nusantara Pada Perode Awal Modern (Java and the Maritime Trade Network in the Archipelago in the Early Modern Period), Proceedings of the National Conference on History. X(1)
- 57. Sutherland, H. (2003). Southeast Asian History and the Mediterranean Analogy. Journal of Southeast Asian Studies. 34(1), 1-17.
- 58. Tan, S.S. (2015). Change and Continuity in America's Asia Pivot: US Engagement with Multilateralism in the Asia Pacific. In H. Meijer (ed.) (2015) Origins and Evolution of the US

- Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions. NY: Palgrave Macmillan
- 59. Teo Lee Ken (2020). Usman Awang: Justice, Literature and Society. In. Show Ying Xin & Ngoi Guat Peng (eds.). Revisting Malaya: Uncovering Historical and Political Thoughts in Nusantara. Petaling Jaya: SIRD.
- 60. Thestar. (5 November 2014) Malaysians Finally get to View Art Collective Pangrok Sulap's Controversial Woodcuts in KL.
- 61. Toer, P.A (1995). Arus Balik (Relook). Jakarta: Hasta Mitra.
- 62. Tregonning, K.G. (1970). The Philippine Claim to Sabah. JMBRAS. 43(1), 161-170.
- 63. Trocki, C. A. (1979). Prince of Pirates: The Temenggongs and the Development of Johor and Singapore, 1784-1885. Singapore: Singapore University Press.
- 64. Wan Shawaluddin Wan Hassan dan Ramli Dollah (2008). Isu-Isu Keselamatan Sabah dan Impak Kepada Malaysia (Sabah Security Issues and Impact on Malaysia). JATI. 13, 49-67.
- 65. Wan Shawaluddin Wan Hassan dan Ramli Dollah (2013). Pendatang dan Isu Keselamatan di Sabah (Migrants and security issues in Sabah). Kota Kinabalu: Universiti Malaysia Sabah
- 66. Zuhdi Susanto. (2006). Laut, Sungai, dan Perkembangan Peradaban: Dunia Maritim Asia Tenggara, Indonesia dan Metodologi Srukturis (Seas, Rivers, and the Development of Civilizations: The Maritime World of Southeast Asia, Indonesia and Structural Methodology) National Historical Conference VIII. Jakarta. 14-16 November.