

Diterima  
13 Oktober 2023

Disetujui  
07 Desember 2023

Ditebitkan  
Desember 2023

DOI

## Managing Social Resilience on Outermost Small Islands Through Cross-Border Cooperation: A Study of The Marore Islands, Indonesia

### (Pengelolaan Ketahanan Sosial di Pulau Kecil Terluar Melalui Kerja Sama Lintas Batas: Studi Kepulauan Marore, Indonesia)

Sandy Nur Ikfal Raharjo<sup>1</sup>, Bayu Setiawan<sup>2</sup>, Esty Ekawati<sup>3</sup>, M. Fakhry Ghafur<sup>4</sup>

<sup>1,2,3,4</sup>National Research and Innovation Agency (BRIN), Jakarta, Indonesia

 [sandy.raharjo@gmail.com](mailto:sandy.raharjo@gmail.com)<sup>1</sup>

**Abstract:** Small island communities have become one of the most vulnerable groups to climate risks and natural disasters, including in the Marore Islands located on the border between Indonesia and Philippines. The people of Marore face vulnerabilities such as geographic isolation, extreme weather, limited infrastructure and transportation, low levels of education and healthcare, and high poverty rates. This research aims to analyze the role of cross-border cooperation between Indonesia and Philippines in enhancing the social resilience of the Marore Islands community. Through a qualitative approach, data was collected through interviews, focused discussions, and observations. This study found that the implementation of cross-border cooperation in the form of the Border Crossing Agreement (BCA) and Border Trade Agreement (BTA) positively contributes to the improvement of four out of six dimensions of social resilience, namely human, financial, social, and political. However, this role is still hindered by the unequal political will of both governments, institutional weaknesses in the implementing agencies, and the outdated provisions of agreements made in the 1950s-1970s. Therefore, the BCA and BTA need to be reevaluated, especially regarding the objectives of cross-border activities, the geographic scope, the threshold value for customs duties, and the types of traded commodities.

**Keywords:** Cross-border cooperation, outermost small island, and social resilience

**Abstrak:** Masyarakat pulau-pulau kecil menjadi salah satu kelompok yang paling rentan terhadap risiko iklim dan bencana alam, termasuk di Kepulauan Marore yang terletak di perbatasan Indonesia dengan Filipina. Masyarakat Marore menghadapi permasalahan kerentanan seperti isolasi geografis, cuaca ekstrem, terbatasnya infrastruktur dan transportasi, rendahnya tingkat pendidikan dan kesehatan, serta tingginya angka kemiskinan. Penelitian ini berupaya menganalisis peran kerja sama lintas batas antara Indonesia dan Filipina terhadap ketahanan sosial masyarakat Kepulauan Marore. Melalui pendekatan kualitatif, data dikumpulkan melalui wawancara, diskusi terfokus dan observasi. Studi ini menemukan bahwa implementasi kerja sama lintas batas dalam bentuk Border Crossing Agreement (BCA) dan Border Trade Agreement (BTA) berkontribusi positif terhadap peningkatan empat dari enam modal ketahanan sosial; yaitu manusia, keuangan, sosial, dan politik. Namun, peran tersebut masih terhambat oleh ketidaksetaraan kemauan politik kedua pemerintah, kelemahan institusional pada lembaga pelaksana, dan pasal-pasal perjanjian yang dibuat pada tahun 1950-1970an yang sudah ketinggalan zaman. Oleh karena itu, BCA dan BTA perlu dikaji ulang terutama pada masalah tujuan kegiatan lintas batas, cakupan wilayah, nilai ambang batas bea cukai, dan jenis komoditas perdagangan.

**Kata kunci:** Kerja sama lintas batas, ketahanan sosial, dan pulau kecil terluar.

## I. INTRODUCTION

As the world's largest archipelagic nation, Indonesia has many regions that share borders with other countries, both on land and at sea. In terms of maritime borders, Indonesia's territory adjoins that of India, Malaysia, Singapore, Thailand, Vietnam, Philippines, Australia, East Timor, Palau, and Papua New Guinea (Raharjo et al., 2018) The maritime border area encompasses 111 remote small islands scattered across 22 provinces (Indonesian President Decree Number 6 of 2017 on the Determination of Outermost Small Islands, 2017).

Out of those 111 remote small islands, some are inhabited by communities. However, unfortunately, the small island communities in the border regions of Indonesia generally face limitations in various areas. Common issues that arise include lagging education and healthcare levels, limited access to water and other resources, low economic development, as well as minimal infrastructure and transportation facilities. In addition to these challenges, small island border communities also have to contend with external pressures, such as local small-scale fishermen competing with larger fishing vessels from both domestic and neighboring countries (Alami & Raharjo, 2017).

The above conditions depict the potential vulnerability of small island border communities in building and maintaining their social resilience. To address these issues, the Indonesian government itself has limitations in its ability to tackle all of these challenges independently. Amidst the various issues mentioned above, one interesting aspect of border regions is the relatively strong family, ethnic, and cultural ties between border communities on the Indonesian side and those on the neighboring country's side.

One of the border regions experiencing the aforementioned conditions are the Marore Islands which shares a border with Philippines (Ulaen,

2003). The Marore Islands are one of the districts in the Sangihe Islands Regency, North Sulawesi. This district consists of three main villages/islands, namely Marore Village, Kawio Village, and Matutuang Village. Marore Island and Kawio Island are the outermost small islands of Indonesia directly facing Balut Island and Sarangani Island in Philippines (Statistics of Kepulauan Sangihe Regency, 2023a). The Marore Islands have a population of 1,633 people in 2022, of which 51.9 percent are men and 48.1% are women. With an area of only 4.45 square kilometers, the population density of the islands reaches 367 people per square kilometer. The Marore Islands have advantages in marine resources, especially finfish, yellowfin tuna, tuna and skipjack. This condition makes the majority of residents work as fishermen with the majority using motorized boats or pumpboats and a small number using boats without engines. Apart from that, this sub-district also produces coconut, banana, tangerine, papaya, water spinach and orchid (Statistics of Sangihe Regency Islands, 2023b).

To facilitate cross-border activities, the governments of Indonesia and the Philippines signed the Border Crossing Agreement (BCA) in 1956. The BCA accommodates cross-border activities for purposes such as business, family visits, religious pilgrimages, and recreation. In addition to the BCA, another form of cross-border cooperation is the Border Trade Agreement (BTA), specifically the 1974 Indonesia-Philippines BTA. The BTA stipulates that certain quota-bound items carried by border crossers are exempt from customs duties.

The existence of cross-border cooperation can be leveraged to enhance the components of social resilience. This cross-border cooperation has an advantage because the resources used to achieve social resilience in small island border communities come from two countries simultaneously. Therefore, cross-border

cooperation can provide additional benefits, as some factors that were once considered external threats can be transformed into elements of social resilience. This rationale underlines the importance of studying cross- border cooperation in improving social resilience in the small island border communities of Indonesia. Based on the explanations above, this research focuses on the impact of cross-border cooperation on the social resilience of the small island communities in Marore.

## II. METHOD

### A. Conceptual Frameworks

This research focuses on two concepts, namely social resilience and cross-border cooperation. The first concept, social resilience, refers to the ability of a group or community to withstand external disturbances or changes in the social, economic, political, and environmental aspects that can alter the community's order or social structure (Adger,

2000). Communities have the ability to anticipate risks, mitigate impacts, and swiftly recover in the face of change through various means to ensure their survival, adapt, evolve, and grow (Community & Regional Resilience Institute, 2013).

There are several known methods for measuring social resilience. For instance, Food and Agriculture Organization (FAO) introduced the concept of a 'resilience score' to assess the level of resilience within a community based on household units. However, the resilience referred to by FAO here is more related to food security (Food and

Agriculture Organization, n.d.). Another commonly used concept is the Sustainable Livelihood Approach/Theory. This model measures social resilience based on the assets it possesses, which include five types: 1) natural

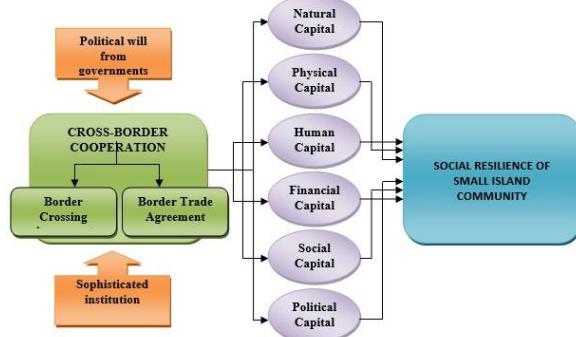
capital (environment), such as land, water, wildlife, biodiversity, and environmental resources; 2) physical capital, encompassing basic infrastructure (water, sanitation, energy, transportation, and communication), housing, and production tools; 3) human capital, which includes health, knowledge, skills, information, and the ability to work; 4) social capital in the form of trust relationships, group membership, networks, access to broader institutions, and more; 5) financial capital, including regular income/pension funds, savings, and credit supply (Majale, 2002). In addition to the five main capitals mentioned above, there are several additional versions of capitals. For instance, McLeod added two more, namely institutional knowledge and political capital (McLeod, 2002). The measurement model used in this research primarily relies on the Sustainable Livelihood Theory, augmented with an additional asset from McLeod, which is political/governance capital.

The second concept is cross-border cooperation, defined by Gerfert as one form of international cooperation carried out bilaterally or multilaterally between countries or regions, whether they share direct borders or not, with the aim of achieving mutual benefits or objectives (Gerfert, 2009). Meanwhile, Sousa, in a more operational sense, defines border cooperation as any kind of joint action between public or private institutions from two or more countries driven by geographical, economic, cultural/identity, and political/leadership factors, with the aim of strengthening good neighborly relations, addressing shared issues, and managing shared resources through various available mechanisms (Sousa, 2013).

Regarding its role, Lee and Forss state that cross-border cooperation can play a role in removing physical and psychological barriers, thus strengthening the socio-economic well-being of local communities towards regional integration (Lee & Forss, 2011). From the explanation,

several potential roles of border cooperation can be identified. First, it can eliminate physical and psychological barriers among border residents. Second, it can enhance the socio-economic well-being of border communities. Regarding its implementation, several factors have been identified as influencing the success of border cooperation, including strong political will and the sophistication of its institutions, and the level of strategic significance of the border region (Starr & Thomas, 2005; Thao, 1999).

The two concepts mentioned above are then used to formulate the framework for this research as follows:



**Figure 1.**  
Conceptual Framework

This is descriptive-analytical qualitative research. There are four data collection techniques employed: 1) interviews to gather primary data from government officials, border island community members, and academics; 2) observations to observe research objects in the field, documented through photos, videos, and field notes; 3) focused group discussions (FGD) to cross-validate data from multiple informants, and 4) literature review to collect secondary data, including government documents, books, research reports, journals, and internet articles.

Data analysis involves several stages: 1) sorting primary and secondary data according to the

research topic; 2) classifying the sorted data into clusters based on social resilience assets and cross-border cooperation clusters (according to the research questions asked); and 3) discussing the sorted and clustered data using reference to the concepts explained in the conceptual framework section.

### III. RESULT AND DISCUSSION

#### A. Cross-Border Cooperation in the Marore Islands

The governments of Indonesia and the Philippines have engaged in cooperation outlined in various agreements. On July 4, 1956, both governments signed a cooperation agreement that regulates border crossings (Agreement between the Republic of the Philippines and the Republic of Indonesia on Immigration, 1956). Then, on September 14, 1965, in Manila, the Joint Directives and Guidelines for the Implementation of the Immigration Agreement on Repatriation and Border Crossing Arrangement between the Republic of Indonesia and the Republic of the Philippines were signed. This agreement governs the mobility of cross-border individuals and the value and types of items allowed as personal belongings, which are items for daily living with a value below 500 pesos per person. This agreement was further continued with an Exchange of Notes signed on January 31, 1966.

Efforts to improve the agreements have continued to ensure ease and benefits for the border region's residents. As a follow-up to the meeting between President Soeharto and President Marcos in Manado on May 29-30, 1974, an agreement to enhance the cross-border agreement between Indonesia and Philippines was reached in Jakarta on March 11, 1975. This cross-border cooperation agreement expanded the border posts that could issue border crossing cards or passes, as well as the scope of cross-border areas for people and goods to the Sangihe and Talaud regions and

the Philippines. On July 1, 1975, an agreement was reached that resulted in various regulations for border crossers, known as 'The Implementing Rule and Regulation on Border Crossing.' The cross-border cooperation agreement aimed to facilitate supervision and maintain order and security in the border region.

Another crucial cooperation is related to trade. Negotiations between the Indonesian government and the Philippine government on July 29, 1971, in Manila resulted in an agreement on cross-border trade between the two countries. This was followed by the issuance of Presidential Decree of the Republic of Indonesia Number 23 of 1972 regarding the Ratification of the Agreement on Border Trade between The Government of the Republic of Indonesia and the Government of the Republic of the Philippines. This cooperation agreement primarily emphasizes trade cooperation, which also regulates traditional trade conducted by traditional border crossers. The items carried by border crossers are actually meant to be personal belongings with a value not exceeding

500 pesos. However, in reality, the carried items can exceed the allowed value.

Furthermore, on August 8, 1974, an agreement on cooperation between the Indonesian government and the Philippine government concerning cross-border trade was reached (Agreement on Border Trade between the Government of the Republic of Indonesia and the Government of the Republic of the Philippines, 1974). This agreement served as an improvement over the previous agreement and referred to the Basic Agreement on Economic and Technical Cooperation. The agreement stipulated that border trade encompasses the following areas: in Indonesia, it includes the Nanusa Islands, Kawio, and Bukide, while in Philippines, it covers the Balut Island Group. The ports for entry and exit of goods are in Mabila (Balut Island) and Miangas (Nanusa Islands), as well as Marore (Kawio and Bukide Islands). The

value of traded goods should not exceed 1,000 pesos or the equivalent of US \$150 per person on a single journey or in a boat, not exceeding 10,000 pesos or the equivalent of US\$1,500. Items traded from Indonesia include agricultural products and various local products in the border region, excluding mining and oil. Meanwhile, items traded from Philippines include daily consumer goods and various equipment needed in the Indonesian border region.



**Figure 2.**  
Border Crossing Station in  
Marore Island  
Source: author's documentation

The framework of the aforementioned cooperation can be utilized by the border residents of Marore to sustain their lives amidst various limitations in the outermost small islands. As of October 2023,

when this paper was written, there have been no revisions to the Border Crossing Agreement (BCA) and Border Trade Agreement (BTA) between Indonesia and Philippines. Both countries are still in the discussion phase to revise both agreements. For comparison, Indonesia and Malaysia successfully completed the revision of the BCA and BTA in June 2023 after negotiations that began in the mid-2010s.

### **B. The Impact of Cross-Border Cooperation on the Social Resilience of Marore Communities**

Lee and Forss state that cross-border cooperation can play a role in removing physical and psychological barriers, thus strengthening the socio-economic well-being of local communities towards regional integration (Lee & Forss, 2011). However, the analysis in this writing doesn't only focus on social and economic aspects but encompasses all six social resilience capitals.

For natural capital, the BCA and BTA initiatives in Marore didn't significantly alter the existing conditions because the cooperation didn't facilitate, and perhaps couldn't facilitate, improvements in the natural capital. Even if there were changes in the availability of drinking water, it was more a result of the central Indonesian government's assistance in providing water wells for each household there.

For physical capital, in the implementation of cross-border cooperation in Marore, this aspect hasn't been a prioritized area of collaboration. However, there is potential for cooperation, such as by establishing a passenger ship route between Tahuna and General Santos that would pass through the Marore Islands. The idea of a cross-border passenger ship has been discussed but was abandoned because it was deemed uneconomical due to the anticipated low passenger numbers, which would result in financial losses. If the private sector is unwilling to undertake this, both

governments would need to fund the development of the cross-border ship route. For commodities movement, Indonesia and Philippines once opened a cross-border Roll-on/Roll-off shipping route from the ports of Davao and General Santos in Philippines to the port of Bitung in Indonesia on April-May 2017. However, this shipping route only operated once due to low container occupancy and has not been resumed.

For human capital, the BCA cross-border cooperation itself doesn't explicitly mention that activities related to education and health are part of the facilitated activities. However, some individuals independently utilize the cross-border convenience. Based on interviews with local people, there are residents of Matutuang Island who choose to study in General Santos, Philippines. Additionally, some sick residents also prefer to go to Philippines for medical treatment rather than to the county capital. The field of human resource development in education and health sectors has the potential to be included in the focus of future cross-border cooperation between Indonesia and Philippines. Incentives for this may include not requiring student visas for border residents of both countries who want to study in neighboring country's educational facilities. What should be monitored is that cross-border cooperation also opens the opportunity for the entry of alcoholic beverages from Philippines into the Marore Islands, which could potentially harm the human resources of Marore, especially its younger generation.

For economic and financial capital, some individuals in the Marore Islands utilize cross-border cooperation to become fish collectors, gathering fish caught by local fishermen. Once a sufficient amount, approximately 300 kg, has been collected, these collectors will take them across to Philippines to sell. Marore fishermen make bigger profits by selling fish to the Philippines. The regular selling price of fish in Marore is IDR

15,000 per kilogram, while the selling price of fish in the Philippines reaches PHP 75 or equivalent to IDR 21,000. Thus, there is a profit difference of IDR 6,000 per kg of fish. Apart from that, traders in the Philippines are still willing to buy fish in bad condition, while local Indonesian consumers are not willing to accept it. The proceeds from these sales in peso are used to purchase fishing necessities like hooks, paint, plywood, and nails for resale in Marore. Furthermore, there are also Filipino border crossers who use vessels coming to Marore to buy fish directly from the fishermen. Through these activities, fishermen gain profits from selling their fish, while the collectors generate profits from selling Filipino-made goods.

**Figure 3.**

Cross-Border Trade Commodities from Marore (Fish) and Balut-Sarangani (Fishing Utilities)

Source: author's documentation

For social capital, these cross-border visiting activities are increasingly gaining legal assurances and protection. The most active participants are Indonesian citizens, followed by Indonesian residents in Philippines, and then Filipino citizens. Cross-border activities peak during the dry season when the sea is relatively calm, typically in the months of May and June. Cross-border activities also become lively again in November and December, particularly during the Christmas season. The quietest month is January, as the waves are usually quite high during that time. With the continuity of these cross-border activities, the social relationships between the Marore community in Indonesia and the Sarangani and Balut

communities in Philippines remain intact. These relationships are often utilized when Indonesian citizens visit Philippines, as they will stay in their relatives' homes, and vice versa. This finding is based on the statement of one of informant working as fish collector in Marore island.

For political or governance capital, what seems related to this capital is the good relationship between the Marore Islands Sub-District government and the city government in Sarangani. Typically, every Philippine Independence Day, they invite the Marore Islands Sub-District government to come to Philippines, with accommodation and meals provided. This good relationship serves as valuable capital, where both local administrations can support each other and share information regarding various issues they must address at the border. It's worth noting that any policies or decisions they make at the local government level must receive approval from their respective national governments.

In summary, the case in Marore demonstrates that cross-border cooperation has a positive impact on the aspects of Human Resources, Economics and Finance, Social, and Political/Institutional capital.

Meanwhile, cross-border cooperation appears to have no impact on natural capital. Finally, cross-border cooperation can even have a negative impact on Human Resources capital, especially concerning the growing prevalence of alcohol consumption. The impact also depends on which areas are included in cross-border cooperation. Furthermore, the analysis above also outlines that there is potential for further development of cross-border cooperation in the future.

#### IV. CONCLUSION

This research focuses on the impact of cross-border cooperation on the social resilience of the community. This cooperation broadly consists of two types. First, the Border Crossing Agreement, where Indonesia and Philippines agree to facilitate traditional border crossings for visits by residents in the border areas for family visits, religious pilgrimages, cultural and social activities, and recreation. The second type of cooperation is the Border Trade Agreement, where Indonesia and Philippines exempt customs duties for goods carried by border crossers with specific quotas. For Indonesia-Philippines in the Marore Islands, the quota is set at US\$150 per boat/trip or US\$1,500 per small boat or US\$250 per person per month.

The case in Marore demonstrates that cross-border cooperation has a positive impact on human, economic and financial, social, and political/governance capital. Meanwhile, cross-border cooperation appears to have no impact on natural and physical capital. Finally, cross-border cooperation can even have a negative impact on human capital, especially concerning the growing prevalence of alcohol consumption. The impact also depends on which areas are included in cross-border cooperation. Furthermore, the analysis above also outlines that there is potential for further development of cross-border cooperation in the future.

Ultimately, one prominent aspect that needs serious attention is the discourse to optimize cross-border cooperation, one of which is through the reformulation of cross-border trade quotas. If there have been objections from several ministries/agencies because statistically the data does not support an increase in quotas, this research shows that statistical data sometimes does not accurately represent the real conditions on the ground. Therefore, to determine whether or not to increase cross-border trade quotas, don't rely solely on statistical data, but also utilize qualitative data to gain a comprehensive understanding of small border islands.

#### V. ACKNOWLEDGEMENT

This research was funded by LIPI (BRIN) through Outstanding Activity Scheme, Sub-Activity Social Resilience.

#### REFERENCES

Adger, W. N. (2000). Social and ecological resilience: are they related? *Progress in Human Geography*, 24(3), 347–364. <https://doi.org/10.1191/030913200701540465>

Agreement between the Republic of the Philippines and the Republic of Indonesia on Immigration, Agreement between the Republic of the Philippines and the Republic of Indonesia on Immigration (1956).

Agreement on Border Trade between the Government of the Republic of Indonesia and the Government of the Republic of the Philippines, (1974).

Alami, A. N., & Raharjo, S. N. I. (2017). Recognizing Indonesian fisherwomen's roles in fishery resource management: profile, policy, and strategy for economic empowerment. *Journal of the Indian Ocean Region*, 13(1), 40–53. <https://doi.org/10.1080/19480881.2016.1275329>

Community & Regional Resilience Institute. (2013). *Definitions of Community Resilience: An Analysis*.

Food and Agriculture Organization. (n.d.). *Measuring Resilience: A Concept Note on the Resilience Tool*. <Https://Www.Fao.Org/3/Al920e/Al920e00.Pdf>. Pdf. Retrieved October 13, 2023, from <Https://Www.Fao.Org/3/Al920e/Al920e00.Pdf>

Gerfert, S. (2009). *Cross-Border Cooperation; Transforming Borders*. <Http://essay.utwente.nl/60149/>

Indonesian President Decree Number 6 of 2017 on the Determination of Outermost Small Islands, (2017).

Lee, S., & Forss, A. (2011). *Dispute Resolution and Cross-border Cooperation in Northeast Asia: Reflections on the Nordic Experience* (Asia Paper).

Majale, Mi. (2002, January). Towards Pro-Poor Regulatory Guidelines for Urban Upgrading. *International Workshop on Regulatory Guidelines for Urban Upgrading*.

McLeod, R. (2002, January). The Impact of Regulations and Procedures on the Livelihoods and Asset Base of the Urban Poor: A Financial Perspective. *International Workshop on Regulatory Guidelines for Urban Upgrading*.

Raharjo, S. N. I., Setiawan, B., Ekawati, E., Ghafur, M. F., & Masyhari, A. W. (2018). *Ketahanan Sosial Masyarakat Pulau-Pulau Kecil Terluar: Studi Kepulauan Marore dan Pulau Sebatik* (S. N. I. Raharjo, Ed.). Lembaga Ilmu Pengetahuan Indonesia.

Sousa, L. De. (2013). Understanding European Cross-border Cooperation: A Framework for Analysis. *Journal of European Integration*, 35(6), 669–687. <Https://doi.org/10.1080/07036337.2012.711827>

Starr, H., & Thomas, G. D. (2005). The Nature of Borders and International Conflict: Revisiting Hypotheses on Territory. *International Studies Quarterly*, 49(1), 123–139. <Http://www.jstor.org/stable/3693627>.

Statistics of Kepulauan Sangihe Regency. (2023a). *Kepulauan Marore Subdistrict in Figures 2023*. Statistics of Kepulauan Sangihe Regency.

Statistics of Kepulauan Sangihe Regency. (2023b). *Kepulauan Sangihe Regency in Figures 2023*. Statistics of Kepulauan Sangihe Regency.

Thao, N. H. (1999). Joint development in the gulf of Thailand. *IBRU Boundary and Security Bulletin, Autumn*, 79–88.

Ulaen, A. J. (2003). *Nusa Utara: dari Lintasan Niaga ke Daerah Perbatasan*. Sinar Harapan