Implementation of Information Resilience of Indonesia-Malaysia Border Region in Riau Province

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ABSTRACT

Indonesia's border area is located along the Indonesian border with other countries. In general, border areas are still lagging behind other regions in Indonesia. Besides the minimal basic needs, other needs have not been appropriately met, namely the need for information in the country and the penetration of television broadcasts from Malaysia. This study aims to describe the implementation of information security in border areas, especially in Riau province, through the operational concept of David L. Weimer and Aidan R. Vining. This research used a qualitative approach through a case study, namely Rupat Island. The data collection method in this study was through observations in border areas and interviews with government employees of Bengkalis Regency and border communities, which were carried out from January 2021 to November 2021. The results show that information security in border areas led to improved telecommunications infrastructure, which proliferated. Apart from that, local governments continue to build access to public information. However, border communities are still lagging in television and radio broadcasting. In addition to the ease of accessing Malaysian television channels, the socio-cultural life of people in border areas is generally constructed from the Malaysian television channel programs they enjoy.

INTRODUCTION

Every country globally has territorial boundaries with other countries, including sea, land, and air boundaries. National borders are needed to carry out state rights and obligations under national and international law. As a country with territorial boundaries connected to 10 countries in Southeast Asia and

Australia, Indonesia makes it a strategic geopolitical position because the border area is closely related to the representation of a country, self-esteem, and is related to maintaining the country's sovereignty (Harvey, 2006). Therefore, it is imperative to maintain the security of the border area, which in turn helps maintain national defense. According to (Muradi, 2015), there are two important things as the foundation for securing border areas: the development of border areas and defense and security. Management and defense issues in border areas are closely related to the state's fundamental conception as an entity with sovereignty, population, and territory, as well as the interpretation or perception of threats (Mangku & Herman, 2016).

In general, the condition of border areas in many countries socio-economically lives in limitations or identical to poverty (Pineda & Bennett, 2019). Likewise, in the border areas of Indonesia, poverty is caused by relatively low human and natural resources (Listyawati & Ayal, 2018). In addition, the minimal infrastructure includes roads, educational facilities, health, religious facilities, transportation, and other facilities that are inadequate and do not meet standards, making border communities face a slow development process compared to other cities (Jesly, 2016).

In addition, border communities also face limitations on the need for information (Arifianto, 2014). It is still found in the border area, which is in the blank spot area, a condition not covered by the signal (Yusuf, 2015). This situation is caused by the quality of human resources related to e-literacy, the economy, and the availability of the infrastructure itself (Yusrizal, 2016) (Pangaribuan, 2015). In addition, the lack of facilities and infrastructure such as transmitters, radio and television transmissions, and telephones in border areas is relatively minimal. So infiltration through electronic mass media, especially television and radio, cannot be avoided, especially with the practical and efficient side of relaying broadcasts from Malaysia, easily captured and accessed with clear sound and picture quality.

It can be seen how society uses mass media as a source of information which ultimately plays a role in building values in border communities and several aspects of life. In other words, people in border areas will know more about foreign countries than their own country or feel more part of that foreign country than being part of their own country. If the vulnerability to information in the border area continues, it will cause division, endanger unity, diversity, and the emergence of radicalism. Therefore, it is necessary to have information security in border areas.

Information security requires the ability of the public to choose news and be wise in responding to it. Information security is the nation's resilience in terms of infrastructure, superstructure, and community character in managing and responding to the development of information technology not to endanger the integrity, identity, and survival of the Unitary State of the Republic of Indonesia (Suprianto & Ependi, 2020). It is easy to obtain information from outside countries, not by the Indonesian state's regulations and culture. Not all people

in the border areas can filter the information they receive, so it can threaten the values of national unity and integrity. Information security, especially in border areas, has a vital role in Indonesia's national security. Strong information security will increase national resilience through national development, mainly to ensure territorial integrity and sovereignty, national security defense, and improve people's welfare (Irdayanti, 2017). Therefore, the development of information technology at the border is expected to play a role in fulfilling information and community communication in border areas and being a social control and able to contribute to national development.

METHODS

Based on data released by the government, the development and management of border areas, including the small outermost islands, has so far not been well integrated, even though the government, through Law Number 26 of 2007 concerning Spatial Planning, in which border areas are designated as National Strategic Areas. (www.bappedaprov.riau.go.id, 2016). In some border areas, including the outermost islands, considerable natural resources can be utilized optimally to improve welfare. Therefore border development is essential.

In addition to its remote location and far from the center of economic growth, in this case, urban areas. So that border communities have very little access to accurate information about world developments. People in the border area close to Malaysia are more vulnerable to being exposed to information from that country, so the need for information becomes a vital need that must be met in border areas (Kanter, 2016).

This research was conducted in Bengkalis Regency, precisely on Rupat Island, bordering Malaysia. The research uses a qualitative approach method (Creswell, 2016). The unit of analysis in this study is the border area in Riau province, which is a case study on the outer islands. This research has several data sources, namely observations in the border area and the interview method with Bengkalis Regency government employees and border communities. The data sources in this study were purposive, and the sample size was carried out by snowball sampling. Twenty-five key informants consist of 10 actors and 15 informants representing border communities. The results of this study only describe or construct in-depth interviews with research subjects to provide a clear picture of understanding the implementation of information security in the Indonesia-Malaysia border region in Riau Province.

RESULT AND DISCUSSIONS

According to David L. Weimer and Aidan R. Vining (Pasolong, 2019). Three major groups influence it, namely: (1) the logic of the policy, (2) the environment in which the policy is operationalized, and (3) the ability of the implementer.

Policy Logic

Policy logic is the basis of policy or how far is a logical relationship between goals and objectives. In this case, several reasons explain that the policies carried out by the central government and local governments have a policy basis.

Tourism Potential in Border Areas

The border area is the outermost area that borders other countries, but most of the Riau province border has potential marine tourism. One example of a border area in Riau province that has such potential is Rupat Island. Rupat Island has a beautiful beach with white sand, stretching 17 kilometers facing Malaysia. Rupat Island also has exotic value because foreign ships passing through the Malacca strait can immediately dock at Rupat (Rheza, 2019). So that amenities and accessibility must be improved through future development policies. The area is a big hope for local governments, communities, and business actors to advance their regions to impact the economy positively.

Seeing the potential area, the central and district governments have committed to building Rupat Island as the outermost island both in the National Long-Term Development Plan (RPJMD) and in the RPJPD (Regional Long-Term Development Plan) and outlined in the RPJMN (Medium-Term Development Plan). In the program plan or regional regulation, the aim is to improve the information network system through the development of facilities and infrastructure in border areas in Riau Province, especially the outermost island areas, namely: a. Indonesian Presidential Regulation No. 43 of 2020 concerning Spatial Planning for State Border Areas in Riau Province and Riau Archipelago Province, namely in article 8 paragraph 8 (b), developing telecommunications infrastructure and in-state border areas and supporting partners including inhabited PPKT. Riau Province RPJMD 2019-2024 regarding the economic growth of the Rupat Island development area; b. Medium-Term Investment Program Plan (PPIJM) for Human Settlements in Bengkalis Regency for 2017-2021 Development of basic infrastructure and facilities to encourage economic growth and improve inter-regional interaction, energy resources, telecommunications, and irrigation systems; c. Bengkalis Regency Regional Regulation No. 19 of 2004 concerning Spatial Planning for the Bengkalis Region Article II; Development and improvement of regional infrastructures such as clean water, network, power generation, and telecommunications systems.

Allocation of Funds for The Improvement of Information Telecommunications Networks in Border Areas

Building the resilience of information on sources of funds becomes an indicator that is no less important for the movement of a policy. Each program also requires staff support to carry out administrative and technical work and monitoring, which costs money. The development of several programs, such as the construction of village internet in districts/cities, is financed by the State Budget; the regional authorities in coordination that there are projects from the

Ministry of Communication and Information to build, for example, BTS together in the village. They are related to the problem of communication information technology which is the authority of the Regency. In addition, the province cooperates with the district through budget sharing.

The Bengkalis district, through the Ministry of Communication and Informatics, explained that the financial support for digital literacy development comes from the Regional Revenue and Expenditure Budget, which means that the central, provincial, and district governments have prepared budgets for the development of digital literacy in their respective regions.

Advantages and Disadvantages of Facilities and Infrastructure in Information in Border Areas

Telecommunications infrastructure as the central communication and information services has proliferated in border areas in recent years. The growth of telecommunications infrastructure development in Indonesia is stimulated by the public's increasing demand for telecommunications services. The development of telecommunications infrastructure triggers the emergence of content providers provided through telecommunications networks built by telecommunications network operators.

However, telecommunication networks and services are currently centered on "profitable" areas, namely areas where telecommunication operators think their network investment will return within a reasonable time (Tabel 1). The problem in border areas where there is still digital inequality and the government is to create integrated national connectivity so that improving and developing information systems positively impact the development of public information in border areas (www.rb.kominfo.go.id, 2016). As for the broadcasting sector, the

Table 1. Number of Telecommunication Towers/Base Transceiver Stations (BTS) That Have Permits in Bengkalis Regency up to 2019 (Unit)

Sub-district	Number of Telecommunication Towers /BTS (Unit)
Bengkalis	46
Bantan	17
Bukit Batu	10
Mandau	88
Rupat	17
Rupat Utara	5
Siak Kecil	15
Pinggir	34
Bandar Laksamana	8
Talang Muandau	9
Bathin Solapan	50
Total	299

Source: Dinas Komunikasi Informatika, dan Statistik Kabupaten Bengkalis

Chairman of the Riau Province Regional Indonesian Broadcasting Commission, H. Falzan Surahman M.I.Kom explained that:

> *"During the 80-the 90s, KPIs never touched the border areas, but now of the 106 KPIDs in Riau Province, 30 are already in the border areas. Mostly tv and radio. However, streaming TV cannot be done because it costs much money to charge content".*

Compared to other cities, the broadcasting sector in the border areas is still far behind. Based on the interview results, it is also explained that there are no broadcasting institutions in border areas, including radio broadcasters. There, the Local Public Broadcasting Institution (LPPL) is not functioning, Community Radio assisted by the Ministry of Communication and Information is off, LPPL TV in Bengkalis is off, and the infrastructure of broadcasting institutions is not adequate. The ease of accessing Malaysian television channels makes the border areas familiar and familiar with the nuances of Malaysian life. Border communities can enjoy Malaysian television programs with a modest antenna and broadcast catching equipment.

Obstacles found in regulations and structures include the licensing process, being too long, and unclear time limit. The requirements and process for licensing community radio are challenging to reach in some border areas. Then there is a lack of interest from investors in establishing broadcasting institutions in border areas. Currently, the government is working on digitizing broadcasting, which is expected to provide broadcast transmission and expand and fulfill the public's right to receive information, including blankspot areas. The policy is expected to be a forum of aspirations for broadcasters and a unifying tool for the nation. In terms of information, the role of local governments is vital as a funnel of information to forward and convey to the public about these changes, especially in border areas.

The Environment Where the Policy Is Operated

The environment is another critical factor in influencing the success of implementation. A successful policy can be implemented in a particular area but fail in others because of a different environment. The scope of the environment here is social, economic, and physical or geographical.

In general, people in border areas are isolated and left behind. Constraints in many areas of life are problems of mutual concern. In the border areas in Riau province, the development of communication technology has not been appropriately accommodated. They only find good cellphone signals in densely populated areas, such as in the middle of the city. There are still many areas in Riau province included in the blankspot area, namely a condition where a place is not touched or covered by communication signals. Suitable for analog communications such as telephone networks or digital communications such as internet networks.

If a society is open and educated, it will be relatively easy to accept compared to a society that is still closed and traditional. The programs carried out by the government provide incentives; in this case, reform and development programs,
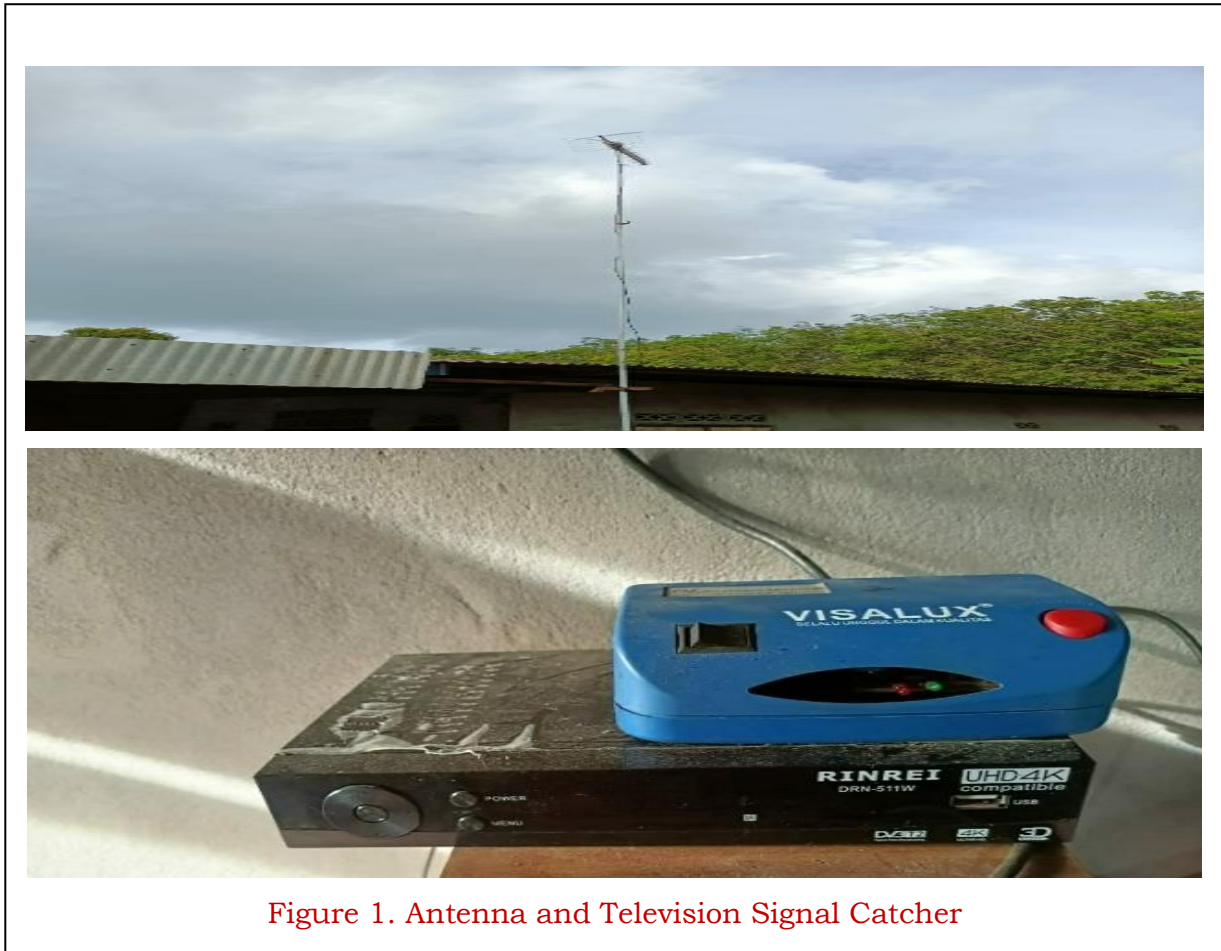
Figure 1. Antenna and Television Signal Catcher

of course, the border communities will provide support. One of the most crucial factor of the lack information in border area is geographical environment. The geographical environment of the border area is a place or area with the country's outermost boundary in the form of an imaginary line that separates the country from other countries either by land, sea, or air, which must be regulated by agreement. In the border area, including the small outermost islands between Indonesia and Malaysia in the province of Riau, everything is bordered by the sea. A border area is a place for pedestrians, population boundaries, goods, and information sharing.

As an area that becomes a boundary line with other countries, the border area becomes the center of interaction, which is already in the context of globalization activities because of the rapid flow of goods, human services, and information. So it has an excellent opportunity for a dynamic to occur in the people in direct contact with the border area. The inclusion of Malaysian television and radio broadcasts in the provincial border areas has long been enjoyed by the people there.

On the other hand, due to the distance from the central government and provincial capital cities, border areas are far behind in telecommunications and broadcasting technology. The implemented development in previous periods has focused on the island of Java as the center of development and has neglected other regions, so development has been uneven. Hence, the border area is one of the areas in Indonesia that is less affected by government development.

Policy Implementation Capabilities

The implementor's ability is the policy implementer's level of competence and skill. In the case of information security in border areas, commitment, technological sophistication, and funding significantly contribute to the program's success.

Implementer commitment

In the end, the commitment of the implementing apparatus to realize the objectives stated in the policy is the most critical factor. Implementing officials must have skills in prioritizing goals and then realizing them. The border area is in an unfavorable position in addition to the lack of telecommunications information coupled with the penetration of information in the broadcasting sector from abroad, namely Malaysia, which continues to develop with the lives of border communities in Riau. The most advanced solution is information security, which goes hand in hand with information disclosure by strengthening the digital literacy culture (Suprianto & Ependi, Technopolitic di Era Post-Truth, 2020).

As an area located on the border between countries, the border area is expected to be the country's top defense. The reality contrary to these expectations is gradually being corrected by the central and local governments. For strategic policies in border areas, all policies from the central government, if in the provinces, are only in information management, and public services and application development. For communities that involve information in developing development policies, it is the authority of the Ministry of Communication and Information Technology to disseminate information but not resilience.

From this, it can be seen that the government is committed to information disclosure to all Indonesian people, including border areas. As quoted on the page (www.kominfo.go.id, 2020), there are three strategies to address and provide accurate, transparent, and accountable information in every program and activity carried out: 1. Strengthening the role of local governments in ensuring that the information rights of their people are adequately fulfilled by establishing an information commission; 2. Strengthening the role of information and documentation management officials (PPID) in every public agency. Strengthening can be done by utilizing digital information communication technology and new media by conducting digital literacy education; 3. Accelerate the increase in knowledge regarding public information disclosure through innovation so that the community can participate in development according to their respective fields.

By seeing that the information obtained by people in border areas is still far behind, whether from telecommunications or television broadcasting, the solution that can be developed is to build information security. The government of Bengkalis has carried out socialization to the public, installation of billboards, distribution of books on community rights and obligations as well as banners that the public can see for information. In addition, we also conduct surveys for future policies. In disseminating information at the regional level, the activities

carried out are: 1). Dissemination of public information disclosure to the public; this is done to know the place of the complaint, the complaint process, and how to obtain information. This socialization was carried out in 12 sub-districts in Bengkalis, meaning no regional distinction, and the socialization has been carried out in border areas. Socialization was also carried out through radio and; 2. The distribution of books is a deduction of the rights and obligations of the community; 3. Install banners or billboards containing the complaint website and applications for complaints.

Sophisticated Technology

Distributing excellent service is the main goal for the government, in this case, the local government. Currently, local governments are competing in the use of technological developments. Utilization of technology in public services, including public literacy, to the community. The growth of data technology and the implementation of internet connectivity into government governance is expected to answer technological challenges and overcome cases through innovation and productivity, expansion of reach, and cost savings.

In disseminating information to border communities, the Bengkalis Regency has conducted socialization to all sub-districts. It can be concluded that the quality of the information and website interface of the Bengkalis Regency government, which in general is a border area, is considered quite good (Damanik & Purwaningsih, 2017).

Human Resources

Human resources consist of all the efforts, skills, and abilities of all people who work in an organization. As an improvement effort, hiring and developing talented and synergized staff can lay the foundation for a sustainable competitive advantage (Tampubolon, 2016). For human resources, namely, staff who support local government policies related to technology development in border areas. If the human resources are qualified, the sub-district operators are already qualified. Bengkalis government have provided technical guidance to competent people in this field because of the main BPID and the auxiliary BPID. It explains that the local government has prepared human resources, the foundation for implementing government policies.

CONCLUSION

Information Security is necessary for developing information technology for the future, especially in border areas that are still far behind compared to other regions. Implementing information security in border areas is carried out by creating the resilience of telecommunications infrastructure, digital broadcasting, and resilience of mind through digital literacy from the central government and local governments. It is hoped that the people of the border areas will unite by creating information awareness to face threats from any sector. Another concern for information security in border areas is the penetration of mass media through television and radio, which will still be a shared task. Mass media penetration will diminish Indonesian socio-cultural values in border areas.

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