

## COMMUNITY ADAPTATION FACTORS IN TANJUNGUBAN-TELAGA PUNGGUR CROSSINGTHE NORTH WIND SEASON IN RIAU ISLAND

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#### ABSTRACT

This research is motivated to find out the community adaptation in Tanjunguban-Telaga Punggur Crossing During the North Wind Season in Riau Island. Research location at Tanjunguban-Telaga Punggur Crossing. This study uses a qualitative approach with the type of descriptive research. Primary data collection in this study uses interviews, observation, and documentation techniques, while secondary data is collected by searching literature books and searching internet media. The selection of informants is done by purposive sampling. The results of the study carried out that 1) Community factor continue to cross the north wind namely; a\_the north wind season coincides with school holidays, b\_the north wind season coincides with Christmas and New Year, and c\_the north monsoon coincides with Chinese New Year; and 2) The strategies adopted include: a\_crossing before 10:00 WIB, b\_changing lanes or access roads, and c\_choosing to use transportation that is considered safer.

Keywords: Adaptation, North Season Wind, Cross Crossing



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### INTRODUCTION

Geographically, Indonesia is the most archipelago country in the world. One of the islands scattered in Indonesia is the Riau Island Province. The Riau Island Province has a composition of 4% land area and 96% sea area, with an area of 241,215 km<sup>2</sup> with a topography consisting of a group of the island separated by the ocean and has various geographical uniqueness characteristics (Ginting, 2013).

One of the unique geographical features of Riau Island Province is climate change. Climate change can be interpreted that the ongoing changes to climate parameters over time, without distinguishing whether the change is caused as a natural factor or a result of human actions, the concept of climate change is still not widely known (Sudiyono, 2016).

Various impacts that are influenced by climate change that occurs in Riau Island Province are the dynamics of the coast. Daily sea wave height formed in the east coast water of Bintan Island caused by wind during 2005-2014 ranged from 0.10-4.55 m with dominant sea wave height ranging from 0.10-0.50 m, while the period of sea waves ranged from 1.10-11.23 s. The maximum sea wave height that forms in the water of the east coast of Bintan Island generally occurs at the peak of the north season (December-February) and the south season (June-August) this is caused by the speed of the wind blowing in the water of the east coast of Bintan Island during the west season and season east is higher compared to other seasons (Suhana et al, 2018).

Bintan Island has several ports connecting access to the island. The ports include, among others, the Port of Bulang Linggi Tanjunguban, the Port of Roro ASDP

Tanjunguban, and the Ferry Port of the BBT Terminal in the Lagoi Tourism Area. According to the Ministry of Transportation (KEMENHUB) the three seaports which are under the auspices of the Tanjunguban Port Service Unit (UPP) have the fourth most populous passenger out of 52 UPP in Indonesia.

Based on data obtained by syahbandar, the highest number of passengers crossing the Tanjunguban-Telaga Punggur crossing is during the north wind season. The north monsoon peak occurs in December-February. According to the results of studies by Laksmi Rachmawati and Sri Sunarti Purwaningsih, government officials who have the authority to formulate policies related to climate change mitigation and adaptation effort are still not well known. So far their understanding is still limited to discourse so that they still have difficulty in formulating policies (Sudiyono, 2016).

The occurrence of environmental changes that are theoretically caused by rising sea levels, will have a major influence on the community, especially those who live around the coast and people who will cross, whereas the level of community crossing the Tanjunguban-Telaga Punggur crossing is the most in the season north wind. In this condition, what will/can be done by the community (especially those living in coastal areas and crossing communities) will adjust/adapt themselves to changes and new environmental conditions, will be another important issue that must be examined carefully. None of the previous studies have examined the community adaptation in the Tanjunguban-Telaga Punggur Crossing During the North Wind Season in the Riau Island. For this reason, this article endeavors to see how the community adaptation in Tanjunguban-Telaga Punggur Crossing During the North Wind Season in the Riau Island.

### **METHODS**

The focus of this study is the community adaptation factor in the Tanjunguban-Telaga Punggur crossing during the northern wind season in Riau Island. The study was conducted at Tanjunguban-Telaga Punggur crossing in the Riau Island. This study uses a qualitative approach with descriptive research type (Moleong, 2000). The selection of informants using the Purposive Sampling technique (Bagong, 1995). Primary data collection in this study used interview, observation, and documentation techniques, while secondary data was collected by searching literature books and searching internet media. Data validity techniques using source triangulation, triangulation of data collection techniques, and time triangulation (Basrowi & Kelvin. 2009). Data analysis techniques using qualitative data analysis developed by (Miles & Huberman, 1992), consisting of three components, namely: 1) Data reduction; 2) Presentation of data; and 3) Conclusion drawer.

### **RESULTS AND DISCUSSION**

The results of several research finding, based on data through observation and direct interviews in the field with informants. In crossing Tanjunguban-Telaga Punggur crossing, there are two modes of transportation used by the community, namely the Speed Boat and RoRo ship. Speed boat is a category or type of fast boat that is designed with certain needs for sea transportation that can move more swiftly and freely. With Speed Boat, the journey can reach the destination faster than having to take a Ferry which takes longer. While the Ro-Ro ship is a ship that can load vehicles coming in and out with their movers. In crossing the Tanjunguban-Telaga Punggur port, the dominant community uses another Speed Boat, as when carrying a car or motorbike, the community will use a Ro-Ro ship in crossing. There are several adaptation made by the community in crossing of Tanjunguban-Telaga Punggur in North Wind Season in the Riau Island, as follows:

# **3.1** Factors that cause people to continue crossing the Tanjunguban-Telaga Punggur crossing in the north wind season.

The north wind season coincides with school holidays: The peak north wind season occurs in the month of December-February, which coincides with the odd semester school holidays. Many tourists use school vacation time to visit bintan island, where the island has tourist attractions that have natural, historical and religious nuances that are not inferior to other cities. Based on the results of an interview with one of the many captain who uses speed boat/RoRo transportation, tourists who aim to travel to several places on the island of Bintan must cross the Tanjunguban-Telaga Punggur crossing.

The north wind season coincides with Christmas and the New Year: Christmas and New Year celebrations coincide with the peak of the northern wind season, which is in December (February-February) On Christmas and New Year, the people in Bintan Island chose to take a vacation by visiting relatives to celebrate the Christmas and New Year holidays. From some data the number of people who use speed boat / RoRo transportation in crossings at the Tanjunguban-Telaga Punggur crossing increases on Christmas and New Year holidays, in contrast to ordinary days.

The north wind season coincides with the Chinese New Year: In addition to some of the factor above, Chinese New Year is also a factor for people to cross the Tanjungubanpunggur crossing, namely in January to coincide with the peak of the northern wind season, which is in the month (December-February). From some interview data with informant, the community chose to conduct crossing to celebrate the Chinese New Year with their families.

# 3.2 The community's strategy in crossing the Tanjunguban-Telaga crossing in the north wind season

**Make a crossing before 10:00 WIB:** According to one of the speedboat skippers, the north monsoon was felt to be moving more strongly around 10:00 WIB upwards. That's why people will choose the crossing before that hour. Predicting the direction and speed of wind The Syahbandar Service Post at the port will predict the direction and speed of the wind before allowing speed boats or other modes of transportation to cross. According to the syahbandar officers, permission to cross the waters will not be granted if the direction and speed of the speed of the wind threatens the safety of passengers.

**Change the lane or access road:** Crossing using a speed boat will still be possible even though it has passed from 10:00 WIB, by changing lanes or access road. To cross by crossing the so-called "through the outside" when the north wind season will cause an impact on the safety of passengers, to reduce the impact by making changes to crossing access crossing through the crossing called "passing through". The crossing using this access point is done by crossing this crossing will take longer takes 30-35 minutes. The speed of the speed boat will be reduced for fear of disturbing or damaging the fishing houses that are above the waters due to the crashing waves from the Speed Boat.

**Use transportation that is considered safer:** People who cross the Tanjunguban-Telaga Punggur crossing will look for other transportation that is considered safer. In addition to

using a speed boat the community also uses a Ro-Ro boat (Roll on-Roll off). RoRo ships are also an option in carrying out Tanjunguban-Telaga Punggur crossings because of their large size and large loads and can carry other land transportation such as motorcycles, cars, trucks and other heavy equipment. But using this RoRo ship will take even longer, which is around 60 minutes and around 80 minutes during the north wind season.

#### **3.3 Discussion**

Climate change events that appear in the form of a terrible natural phenomenon that is high waves of sea water accompanied by the thunderous sound of the waves, heavy rain accompanied by strong wind, dark cloudy weather, and turbulent sea level clad in white foam and fog darkness that occurred on the afternoon of September 21, 2016 took place around 15:00 to 17:00 WIB. This situation makes all activities carried out at sea stopped, let alone go out to sea to catch fish, large ships were docked to a headland to avoid the waves hit (Sudiyono, 2016). Need intensive and periodic ship inspection and maintenance, which is 12 months to 4 years, so there is an increase in the safety of crossing the Palembang-Muntok crossing. Related to the SWOT analysis, especially to overcome the weaknesses and challenges, it is necessary to rejuvenate the crossing vessels to create excellent service to support the realization of improved safety of crossing the Palembang Muntok crossing transportation (Mudana, 2014).

Nationally, Indonesia had a gastric regulation that arose in 1966, and the Schepen Verordening regulation 1935 (SV 1935) and its implementing regulations derived from these legal products. At present, the elaboration of SV is regulated in Law Number 17 of 2008 concerning Shipping, in his explanation mandating that the safety and security regulations contain provisions that anticipate technological progress by referring to international conventions that tend to use the latest equipment in shipping safety facilities and infrastructure, in addition to accommodating provisions regarding the shipping security system contained in the International Ship and Port Facility Security Code (ISPS Code) (Mudana, 2014).

Some of the studies above Parsons's statement in AGIL Theory revealed in parts of the system are interrelated, related to people who continue to cross Tanjunguban-Telaga Punggur crossing in the north wind season, as for the factors that cause people to continue crossing, namely: (a) The north monsoon season coincides with school holidays, (b) the north monsoon season coincides with Christmas and the New Year, (c) the north monsoon season coincides with Chinese New Year. This is seen because some of the factors above that perception is also related to the system is still being carried out, so all causes of people still crossing will affect the order, equilibirium and change and neglect of impact as an emphasis of Talcott Parson's theory of Functional Structures that exist in society this (Poloma, 1998). In this study there are several strategies that the community must comply with the rules made by the government for crossing, this is a strategy of adaptation when crossing the goal for the safety of the community. The strategies undertaken include: crossing before 10:00 WIB, changing lanes or access roads, using transportation that is considered safer. The existence of this perception amid society causes the community to continue to cross with their circumstances and environment (Paloma, 1998).

### CONCLUSION

Based on the results of the author's research on community adaptation in Tanjunguban-Telaga Punggur Crossing during the North wind season in Riau Island. It can be concluded that it is related to the people who continue to cross the Tanjunguban-Telaga Punggur crossing in north wind season, as for the factors that cause the community to continue crossing, namely: 1) The north wind season coincides with school holidays; 2) north monsoon occurs coinciding with Natalan andNew Year; and 3). the north monsoon coincides with Chinese New Year. As for the strategies implemented include: crossing before 10:00 WIB, changing lanes or access, using transportation that is considered safer.

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