ASSESSING THE LOCAL COMMUNITY READINESS TO SUNDA STRAIT BRIDGE DEVELOPMENT PLAN
(Case Study: Cilegon City)

Cucu Hayati
STIE Mahardhika Surabaya

ABSTRACT

The objective of this study is to identify how Sunda Strait Bridge will affect local community readiness. It also investigated the adaptive capacity of stakeholders related to Sunda Strait Bridge Development Plan.

This research was began by collecting quantitative preliminary data as a basis for collecting and interpreting the primary qualitative data. In order to obtain representative responses, this research used purposive sampling technique. The number of respondents of this research were 100 people from different interests who live in Pulomerak Districts, Ciwandan Districts, Grogol Districts and Citangkil Districts. This research’s process divided into three stages, stages of preparation/pre-field (description about the research and make analogy with related researches), stages of field work (classifying responses and adaptive capacity), and stage of post field work (connecting between theory and finding).

It can be concluded that Sunda Strait Bridge is not relevant to be built today because the community is not ready yet. In the other hand, the objective of Sunda Strait Bridge Development Plan would be supported by community readiness and community-personal adaptation, even it could not address the issues of negative impacts. This research gives three kind recommendations to intervention for policy and planning to minimize the residue and local community adaptation strategy.

Keyword: Sunda Strait Bridge, community readiness, response and adaptation

INTRODUCTION

Indonesian Development have entertained the new stage after President Regulation Number 86 Year 2011 officially announced. This regulation has become interesting because it will connect Sumatera Island and Java Island, which known as the highest density areas in Indonesia by planning the development of Sunda Strait Bridge (Bathoro, 2011).

Sunda Strait Bridge will also become the first step to realize the Sunda Strait National Strategic Areas (KSN) which is one of 22 major economic activities Acceleration and Expansion of Indonesia's Economic Development Master Plan (MP3EI). The benefits of Sunda Strait Bridge Development is to develop a new economic region, accelerating the development of Sumatra Island, reducing economic centralization in Java, and create employment opportunities. This is the strategy of KSN Sunda Strait, which is known that Sumatra Island as region with industry based on energy and natural resources, while the Banten Province is known as a light and friendly environment industrial area.

Cilegon City is one of alternative rute of Sunda Strait Bridge. It the macro level, the Alternative Route 2 (Cilegon-Ketapang) were considered to have a higher level of readiness than Alternative Route 1 (Anyer-Ketapang). The level of public acceptance to the bridge is high because people in Cilegon City are able to see the positive impact that could be generated from the construction of the bridge.

Until today, the Sunda Strait Bridge project is still under review and in the feasibility study phase. It is therefore necessary to identify the risks
at each stage of project. Identification is required for the implementation by stakeholders who will manage the risks in order to minimize the negative impacts by preparing mitigation plan. (Karim, 2017).

From those researches, it is indicated that this project is going to be built soon. So, it is assumed that people need preparation to be adaptable to the impact might be occurred. It is also indicated that people in study area already have adaptation strategy, but it have not investigated yet in the previous researches. By preparing adaptive capacity, communities are enabled to see what skills they have and kind of problems identification they know to solve through common action, supported by other persons, which may have the capacity to bring these skills together and enable them further.

The objective of this research is identification the response and adaptation of Cilegon’s community to the social and economic changes perspective. In order to achieve the objective, two sub-research objectives need to be formulated, namely:

a. Identifying Cilegon’s community response to Sunda Strait Bridge utilization
b. Identifying Cilegon’s community adaptation to Sunda Strait Bridge utilization

LITERATURE REVIEW
Impact Assessment of Infrastructure Development

Basically, the development has a target to raise the level of social welfare. Development activities that lead unplanned effects outside the target is called impact (Soemarwoto, 1992).

Expected changes is how the infrastructure could create better access and an increase in livelihoods assets. Emery and Flora suggests consideration of an asset portfolio of seven different types of assets. Those indicators are called Community Capitals Framework (CCF) and used to analyze a comprehensive community development effort (Emery & Flora, 2006).

This research will collected data to analyze community capitals based on five of them, such as:

1. Natural capital: land, water, forests, marine resources, air quality, erosion protection, and biodiversity.
2. Physical capital: transportation, roads, buildings, shelter, water supply and sanitation, energy, technology, communications, or other household assets.
3. Financial capital: savings (cash as well as liquid assets), credit (formal and informal), as well as inflows (state transfers and remittances).
4. Human capital: education, skills, knowledge, health, nutrition, and labor power.
5. Social capital: networks that increase trust, ability to work together, access to opportunities, reciprocity; informal safety nets; and membership in organizations

Community Readiness and Adaptive Capacity

Brooks (2003;8) within Maguire and Cartwright (2008) defined adaptive capacity as the ability or capability of a system to modify or change its characteristics or behavior to cope better with actual or anticipated stresses. Adaptation includes actions taken to reduce vulnerabilities and to increase resilience and adaptive capacity is the ability to take those actions.

Mary Ann Pentz, who headed the Midwest Prevention Project, deserves the credit for presenting the original concept of Community Readiness. In a paper presented at the Kentucky Conference for Prevention Research in 1991, she made it clear that, unless a community was ready, initiation of a prevention program was unlikely, and if a program was started despite the fact that the community was not ready, initiation was likely to lead
Edwards et al (2000) also explained the stage of community readiness based on Tri-ethnic Center’s community readiness theory. Following are the stages of community readiness and the definitions of those stages developed at the Tri-Ethnic Center for Prevention Research.

1. No Knowledge Stage - suggests that the community or the leaders do not generally recognize the issue as a problem.
2. Denial Stage - involves the belief that there is little or no recognition that this might be a local problem but there is usually some recognition by at least some members of the community that the behavior itself is or can be a problem.
3. Vague Awareness Stage - involves recognition of the problem, but no motivation for action.
4. Preplanning Stage - indicates recognition of a problem and agreement that something needs to be done.
5. Preparation Stage - involves active planning.
6. Initiation Stage - involves implementation of a program.
7. Stabilization Stage - indicates that one or two programs are operating and are stable.
8. Confirmation/expansion Stage - involves recognition of limitations and attempts to improve existing programs.
9. Professionalization Stage - is marked by sophistication, training, and effective evaluation.

Furthermore, it explained that although the response of the community or group of communities to changing social, economic, and environmental is very diverse, both in the form of support or resistance, but actually the adaptive capacity of society is strongly influenced by how large infrastructure provides benefits to them.

Mitigation

In addition to build planned adaptive capacity of society, it needs to prepare some prevention and control efforts. Fandeli (2011) stated that in order to prevent and mitigate the impact caused by the utilization of natural resources or the environment called mitigation of impact. Mitigation is an action taken by humans to prevent and mitigate the impact of the environment.

Learned from the study of environmental impact mitigation patterns of port development presented by Fandeli (2011), then some mitigation patterns that could be applied to the development of Sunda Strait Bridge is derived from the public response and mitigation patterns adopted from Fandeli’s research.

1. Technology applied should be simple, effective and efficient
2. Parts of the equipment used can be obtained easily in project site.
3. Costs of mitigate should be affordable by the project’s budget.
4. For bioengineering, using local resources that grown in the area.
5. For socio-engineering, social engineering should be in accordance with social norms and local community’s knowledge.

CONCEPTUAL FRAMEWORK
In this study, Sunda Strait Bridge is positioned as the input. The analysis has been started by identifying impact due to bridge provision, respond and adaptation by the community. In this context, the response and adaptation is not done suddenly, but it is based on the historical background. Then, also analyzed the opportunities and constraints into consideration in setting policy and advocacy for the community. With this, the community readiness hopefully could be assessed and adaptive capacity could be achieved.

RESEARCH METHOD
Study Area
Area in Cilegon which indicated will receive direct impact of Sunda Strait Bridge development, included Ciwandan District, Grogol District, Pulomerak District and Citangkil District. Total population in those study area are 184498 people.

Data and Indicator
This research will analyze this indicator which will be obtained from various sources.

Table 1. Data Requirement

<table>
<thead>
<tr>
<th>No.</th>
<th>Objective</th>
<th>Indicators</th>
<th>Measurement</th>
<th>Analysis Tool/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development Impact</td>
<td>Main issue and potential impacts that might be occurred after development</td>
<td>Pra-construction Issue</td>
<td>Analogy Analysis from relevant research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction Issue</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Operational Issue</td>
<td></td>
</tr>
</tbody>
</table>
| 2   | Stakeholders Response and Community Adaptation | 1) Response and adaptive capacity of the government (local and central government).  
2) Response and adaptive capacity of business people, (entrepreneurs and business investors).  
3) Response and adaptive capacity of indigenous people.  
4) Response and adaptive capacity of social organizations. | 1) The government’s policy response.  
2) The business opportunities are planned by private parties  
3) The form of assistance from the social organizations (NGOs, research institutes) to the community  
4) The planned adaptation efforts by the community in addressing the impact and the business opportunities that will occur. | Structured Interview to stakeholders. |

Data Collection
The data required in this study were categorized into 2 types, namely primary data and secondary data. The collection of secondary data is obtained from various sources, including documents related research, statistical data from Statistics Research Agency (BPS) Cilegon City, and Village Potential Data (Data Potensi Desa).
Primary data was obtained from field observations and interviews to respondents supported by a closed questioner, considering the respondents had some knowledge and capacity to measure the problem.

**Respondent**

In this research, the important point is not the number of respondents, but the potential for each respondent cases to give a better theoretical understanding of the aspects studied (Agusta, 2003). Respondents were purposively selected, having previously made a typology (micro, meso and macro level) within the community.

Determination of the number of samples done in two stages, the first stage determines the sample area Cluster Sampling (Sampling Area), and the next phase to determine those that exist in the sampling area. In order to obtain representative samples of population, it can be determined that the sample is calculated using the formula of Slovin, as follows:

\[
n = \frac{N}{1 + Ne^2}
\]

Note:
- \( n \) = number of sample
- \( N \) = number of population (184498 people)
- \( e \) = maximum acceptable error, assumption: 10%

### Table 2. List of Respondent

<table>
<thead>
<tr>
<th>No.</th>
<th>Level Of Analysis</th>
<th>Characteristic</th>
<th>District/ Area</th>
<th>Number of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Micro</td>
<td>Community/ Beneficiary</td>
<td>Ciwandan</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Citangkil</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pulomerak</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grogol</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Meso</td>
<td>Public Figure</td>
<td>Ciwandan</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Citangkil</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pulomerak</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grogol</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Macro</td>
<td>Government</td>
<td>Statistic of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Housing, Planning, and Urban Development of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Regional Development of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of High way construction and road maintenance of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Agriculture of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of In and Trade of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Land Plantation of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Marine of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agency of Environment of Cilegon City</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Business Actor</td>
<td></td>
<td>Cilegon City</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>NGO</td>
<td></td>
<td>Cilegon City</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL** 100

Source: pre-field work observation
RESULT
Impact Assessment of Sunda Strait Bridge Development Plan

Based on the impact study of a port that has been developed by Fandeli (2011), then the following is a summary of the main issues, key issues and potential environmental impacts at all stages of development activity in the fishing harbor in the village of Karangwuni, Glagah, Kulon Progo which could be an analogy for this study.

Table 3. Main issues, key issues and potential environmental impacts of fishing harbor in the village of Karangwuni, Glagah, Kulon Progo as an analogy for this study

<table>
<thead>
<tr>
<th>No.</th>
<th>Stages Of Development Activity</th>
<th>Main Issues</th>
<th>Potential Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pra-Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>land acquisition</td>
<td>- land compensation and growing crops</td>
<td>cash compensation, land use changing, land investment, cost impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- cash compensation should become replace profit</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>land clearing</td>
<td>Dirty air environment due to the use of heavy equipment / air quality decreases</td>
<td>Pollution: increased dust concentration</td>
</tr>
<tr>
<td>2.</td>
<td>Construction</td>
<td>change in environmental quality and land along the access road entrance.</td>
<td>Pollution: dust, gas, noise, congestion, disease</td>
</tr>
<tr>
<td>3.</td>
<td>Operational</td>
<td>Transportation activities</td>
<td>competition, air quality (dust, gas, noise), congestion issue, demography, safety of users, business opportunities, employment opportunities, security, Accessibility to public facilities, Public unrest in cost</td>
</tr>
</tbody>
</table>

Source: Fandeli, 2011

Hidayat (2012) conducted a research about impact of Suramadu Bridge to Social-Economy. This research used theory of public policy for concept formulation and project implementation. This research also used policy analysis to analyze development policy of Suramadu Bridge. This research gave emphasize to government intervention to adjust with the impact.

Table 4. Impact Assessment of Suramadu Bridge to Social-Economy

<table>
<thead>
<tr>
<th>No.</th>
<th>Impacts</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Social Impacts</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Increase Land Price</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Profit due to land price changing (63.3% in Surabaya and 97.9% in Madura)</td>
<td>Socialization about compensation base on regulation</td>
</tr>
<tr>
<td></td>
<td>- Suffer a financial loss due to land loss (36% in Surabaya and 100% in Madura).</td>
<td>Socialization about impact</td>
</tr>
<tr>
<td></td>
<td>- The development of Bangkalan</td>
<td>The development of Bangkalan</td>
</tr>
</tbody>
</table>

59 Media Mahardhika Vol. 17 No. 1 September 2018
<table>
<thead>
<tr>
<th>No.</th>
<th>Impacts</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| b   | Land Use Changing  
   − Road development would cause land use changing  
   − It would be significantly changing into industry, trade, service and warehouse areas. | based on RTRW of East Java Province explained that the agriculture and fishery area will become a part of Metropolitan area. |
| c   | Lose of Cultivation Area  
   − It would not be significantly occur in Surabaya.  
   − It would be significantly occur in Madura. | |
| d   | Social Envious  
   − Labor force competition during development process | − Increase coordination and partnership, community engagement, and also create social trust |
| e   | Fisherman unrest  
   − Biodiversity | − Government together with community should develop the productivity by creating economy activities based on local commodities and local labor. |
| f   | Security  
   − Robbery  
   − Other criminality | − Use CCTV |
| g   | Modernity  
   − Consumptive  
   − Individualistic  
   − Competitive | − Defend social dependency and shared interest  
   − Tradition and education strengthen  
   − Increase human capital (create ready for use human resources) by labor empowering in skill. |

2 Economy Impact

| a   | Productivity  
   − Easy to access job in Surabaya  
   − Increase income  
   − Loss of profit to transportation business actor  
   − Decrease number of water transportation user  
   − Decrease of number transportation mode  
   − Decrease the fisherman income  
   − Decrease fish fishing | Increase community assets (human capital, financial capital, social capital, physical capital, environment capital) |
| b   | Job Opportunity :  
   − Labor mobilization during development process  
   − Labor Demobilization | − Open access for local labor  
   − Open new job opportunity  
   − Human capital strengthen |

3 Impact to Infrastructure Provision

| a   | Public Service Infrastructure  
   − Increase accessibility to school, market and government facilities,  
   − Low road quality  
   − Illegal street vendor (PKL) | Built good toilet, permanent shops and road improvement in villages around project site |

Source: Hidayat, 2012
From several related research, it predicted that the impacts that would arise due to the development of the Sunda Strait Bridge utilization, among others:

1. land use changing
2. bio degradation issue (pollution)
3. demography
4. economy issues (business opportunities, employment opportunities, cost impact)
5. transportation issues (congestion issue)
6. accessibility to public facilities

Socialization of Sunda Strait Bridge Development Plan

Socialization of the Sunda Strait Bridge Development Plan is only famous to the level of the government district, but there are a lot of discussions and information received by the public in this study area.

There are 80% people got the information about the location of Sunda Strait Bridge Development Plan. According to the deep interview, Sunda Strait Bridge might be located in the District Pulomerak or District Anyer. They found the technology will be applied is the technology of infrastructure are adopted from other country, such as China, Japan and Germany. Employment that would happen is the local workforce as workers/labor and people from outside Banten as the technical expert in the level of managerial and supervision. Beside Government, the public believes that development of Sunda Strait Bridge would be financed by the National Budget Plan. The development is expected by the public would attract investors to put their money on this project.

Based on resources / informant, it can be found that if socialization of Sunda Strait Bridge Development Plan has not been touching people at the micro level. Governments tend to have discussions among the Government and with NGOs as well. Business Actors tend to do business discussion with fellow actors and with friends outside them group. Mass media such as newspapers/ magazines, internet and other media can be interpreted as the primary communication in the study area.

This research asked about stakeholders’s response to the project. People have been able to assess how they feel about this project. Most people agree to Sunda Strait Bridge Development Plan, even NGO fully agree with this plan. However, there were also a small number of Community groups that the government does not agree and doubtfully.

Community Adaptation

Sunda Strait Bridge Development is expected would cause some effects, such as changes in social, economic and environmental. Some of the issues that have been circulating in the public discussion are land ownership, demographics (urbanization), economic activity, environmental degradation and pollution, congestion, and unemployment. In this research, it was found that the forms of adaptation which are well known and began to be prepared by the resident. The adaptation consists of attitudes and actions that would be taken, forms and sources of capital that will be prepared and the actor chosen to be a discussion partner.
Local Governments have not set up funds from the local budget to anticipate these changes may occur along with the Sunda Strait Bridge development plan yet. However, the partnership plan will be initiated between the government and others, is expected to accumulate funds intended. The Government chose to discuss with fellow governments, NGOs and some Public Figure. It is normal that local communities have not received complete information other.

More than 50% of respondent have already prepare for land changing due to Sunda Strait Bridge Development Plan (Figure 3). Most of them will prepare for land investment. Another adaptation preparation they might take are rent their land to private sector, land selling, stay in their origin village, or move out from origin village if the condition are going worst.

To deal with the issue of demographic change affecting employment in the study area, the Business Actors will do better absorption of local and immigrant population. In the event of changes in economic activity, steps will they take is still working in the current job and or open new job opportunity (Figure 4). Public Figures assess that local Communities have the ability to survive in the post-construction of bridge in their origin village.
In case of bio-degradation changes (pollution and air temperature changes) in post-development, Business Actors and Local Community have already ability to prepare for it (Figure 5). Most of them will stay to and continue their activities in the origin village. But, Public Figure gave recommendation for moving, because they predicted that the condition is going worst.

When congestion impacts occurs in post-construction, then 80% of them have ability to prepare from congestion issue. Most of Indigenous People are going to prepare to do transitional modes of transportation or find other location within origin village. In the other hand, Local Business Actors have not preparation to deal this issue. They choose to find other better location to run their business.

In case of unemployment impacts post-construction, there are 50-50 option suggested by Public Figure. They assess that people have tendency to find new job opportunity within origin village or outside. It means that they have ability to prepare from unemployment issue. Different with Public Figure, more than 30% Local Business Actors and Local People have no preparation to deal this issue. But, they might take opportunity to find new job opportunity still in their origin village.

Public Figures considered that the post-impact-cost should be prepared by the government, because the development is initiated by the government as part of responsibility. While, business actors and local people asses that they should prepare some capital in order to deal with this issue, which sourced thorough personal capital, loans, CSR programs and also government programs. However, they some people still have no idea to obtain it.

Village Government declared that there are some of annual government program considered for rural development program. The procedure to pursue it is easy. Local people only need to prepare a proposal than follow the several procedures. The program’s fund will be distributed by village government and have been conducted well so far.

Krakatau Steel provides assurance to students who are members of the worker’s family of PT. Krakatau Steel. Collateral in the form of collateral-free school in the public schools and health in several medical center. It is a source of capital that is expected by the government to support people along with the development that will occur. Terms submission guarantee facility is a resident must have an ID card as citizen in Cilegon City and show family identity who works in PT. Krakatau Steel.

It can be assessed that the local community is a social group that has a high curiosity. It is seen from the high number of discussions they have done with all the social groups existing society, including government, businesses and NGOs. This happens because the local people are aware that they are the first who will receive the direct impact of Sunda Strait Bridge Development Plan.

Local NGOs were found in the study area has a slightly closed stance. They are willing to give its assessment of economic and social change.
prediction only. They have no willingness to share information on other forms of NGO monitoring the development in the study area.

This research found that there are some important indicators to measure community adaptation depend on public awareness, partner to discuss, access to opportunity and financial capital. Different level of interest may arise different responses. The main issues may arise based on community assets are Land Changing, Demography Changing, Economy Activities Changing, Bio Degradation, Congestion, Unemployment and Impact-Cost Preparation.

The Community Readiness in Cilegon City are in Stage 4, that is Preplanning Stage. It indicates recognition of a problem and agreement that something needs to be done. In this condition, people in study area are starting to realize the role of collectivity, leadership, community forums, as well as local knowledge, but the channels of communication and the network is still not optimized to support the development. It’s because the construction stage of Sunda Strait Bridge is not ready yet to begin. So, the community cannot join or participate into the process yet.

Table 5. Assessing The Community Adaptation Strategies in Cilegon Cityto Sunda Strait Bridge Development Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Issues</th>
<th>Strategies</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1   | Land Changing Issue             | Adaptation by adjustment    | - Stay
- Land rent
- Land investment
- Land sale
- Government should facilitate this problem together with Contractors, local people, land owner

Adaptation by reaction -

Adaptation to the left - Leave

| 2   | Demography Changing Issue       | Adaptation by adjustment    | - Stay
- Hire local and immigrant employment
- Government and Business actors should focus in local employment

Adaptation by reaction -

Adaptation to the left - Leave

| 3   | Economy Activities Changing Issue | Adaptation by adjustment    | - Still work in current job
- Open new job opportunity

Adaptation by reaction -

Adaptation to the left - Leave the current job

| 4   | Bio Degradation Issue           | Adaptation by adjustment    | - Stay
- Government should facilitate this problem together with Consultant, local people, and Department of Environment

Adaptation by reaction -
<table>
<thead>
<tr>
<th>No.</th>
<th>Issues</th>
<th>Strategies</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Adaptation to the left</td>
<td>- Leave</td>
</tr>
<tr>
<td>5</td>
<td>Congestion Issue</td>
<td>Adaptation by adjustment</td>
<td>- Transitional modes of transportation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation by reaction</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation to the left</td>
<td>- Move out from origin village</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Find other location within origin village</td>
</tr>
<tr>
<td>6</td>
<td>Unemployment Issue</td>
<td>Adaptation by adjustment</td>
<td>- Find new job opportunity inside the origin village</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation by reaction</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation to the left</td>
<td>- Find new job opportunity outside the origin village</td>
</tr>
<tr>
<td>7</td>
<td>Impact-Cost Preparation Issues</td>
<td>Adaptation by adjustment</td>
<td>The variety of Source of Impact Cost Preparation:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation by reaction</td>
<td>- Money</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptation to the left</td>
<td>- Land</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Skill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Health insurance</td>
</tr>
</tbody>
</table>

Source: Analysis

From Table 5, it can be seen that the adaptation strategies that would be taken by the people in Cilegon City are Adaptation by Adjustment and Adaptation to the left. It means that people try to adjust their skills and knowledge by themself in order to achieve the development’s goals. People in Cilegon did not prepare strategy of Adaptation by Reaction because they cannot adjust their environment to do so. It doesn’t show the positive or negative response of people, but it indicates the low community influence to infrastructure development in Cilegon City.

**CONCLUSION**

Based on the result and finding, it can be concluded that Sunda Strait Bridge is not relevant to be built today. The local community already has ability to analyze the development impact would be occurred, but there was low communication between regulator in macro level and indigenous people in micro level. The objective of Sunda Strait Bridge Development is supported with community readiness and community-personal adaptation, even it could not address the issues of negative impacts. Today, people in study area are in Preplanning Stage which are starting to realize the role of collectivity, leadership, community forums, as well as local knowledge, but the channels of communication and the network is still not optimized to support the development. They indicate recognition of a problem and agreement that something needs to be done.

**RECOMMENDATION**

Intervention/action for policy and planning to minimize residue:

a. To increase the Community Readiness Level into the next stage, local community should be joined into participatory planning. Government should socialize and inform the information about location, technology, budget, labor and any other information through any discussion in village level. Public figure, Government, Business
Actor and Community should develop community capacity to face the Sunda Strait Bridge Development.

b. The government should arrange regulations related to the issues of negative impacts, such as changing demographics due to the presence of immigrants, congestion and transport, and also unemployment-related sea transport services to achieve good planning, organizing, actuating and controlling the Sunda Strait Bridge Development.

c. People in Cilegon City have to develop Local Community Adaptive Strategy by powering the strategy of Adaptation by adjustment, which acts on the environment by reducing conflict adjusting or changing behaviors so that harmony with the environment.

REFERENCES

Book

Essay, Thesis and Dissertation

Internet