Polarization of Coastal Community from ‘Rob’ (Tidal Inundation) Influence: Study of Social Change in Bedono - Sayung

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Abstract. Coastal communities are the most dynamic society towards socio-cultural change compared to deepening communities. Changes in anthropos in human life, especially coastal/fishermen through six levels, starting from food, hunting and fishing, pastoral nomad, agricultural, industry and urban. The Bedono-Sayung, Demak community was originally a community that had a unity as a fishing and farming community, but after the social structure the community changed and experienced polarization. This study uses a qualitative approach by taking the theory of social structures in units or groups that have social relations with each other in coastal communities to shape patterns of behavior and social relations in a social system. The first finding is that the social structure of the Bedono community is dynamic in accordance with the social history of Bedono village. Second, the space capacity of social structures experiences critical points marked by economic institutions not functioning effectively. Third, the value of togetherness begins to fade due to patron-client patterns due to relocation. Fourth, the change in the fish trading system as a local economic system, leads to conflict even on a small scale.

1. Introduction
This research is to look back at the relationship of economic polarization with social polarization on the coast of Java. If economic polarization on the coast is aligned with social polarization, coastal communities will be structured according to class lines. Therefore this study is to explore the impact of ‘rob’ (tidal inundation) which causes economic polarization on the formation of the social structure of the community of Bendono-Sayung Demak. As explained by Albrecht and Albrecht that in general the economic distance between groups is proportional to the social distance between them. This means that if there is an economic polarization in a society, there is a high probability of social structure polarization [1].

In the context of coastal communities polarization of social structures can be interpreted as changes in social institutions in a society. Changes to social institutions then have an effect on their social systems, including values, behavioral patterns or attitudes in that society which consist of social groups [2,3]. The factors causing the first social structure polarization are contact with other cultures which then give effect, changes in education, dissatisfaction with society towards certain areas of life,
heterogeneous populations, tolerance of actions which were originally deviated and violated but which gradually became norms, even formal regulations or laws. Second, environmental change in a broader sense, regarding social values, social norms, behavioral patterns, organizational structures, institutions, layers of society, social relations, communication systems itself.

Bedono village, Sayung Subdistrict, Demak Regency is one of the villages that still survives with the effects of ‘rob’, which causes it; (1) many lands were damaged, (2) the number of community-owned ponds that had become the sea so that the farmers lost their livelihoods, (3) the transportation facilities were upheld so that the activities of the community were hampered, (4) ineffective public services which resulted in social disharmony. Sukadana [4] states that anthroposre changes in human life, especially coastal/fishermen experience six levels, starting from food gatherer, hunting and fishing, pastoral nomad, agricultural, industry and urban. The study conducted by Saleha [5] regarding the adaptation of fishermen to ecological changes shows that ecological changes in the coastal area of Balikpapan city affect the life patterns of fishermen in their socio-economic life. Because the socio-economic life of coastal people is strongly supported by existing climatic conditions, so climate change can provide a decrease in economic income, which results in changes in the social system of coastal communities.

John Levi Martin [6] states that units or groups that have a social relationship with each other, which is relatively eternal form patterns of behavior and social relations in a social system. In the study of coastal community institutional systems are accommodative to build a "progressive - integrative" social structure. According to Fletcher & Smith's view [7] in the perspective of socio-economic stratification, coastal communities are not homogeneous societies. Coastal communities are formed by various social groups when viewed from the aspect of community interaction with the economic resources available in the coastal area. Therefore coastal communities are classified as; (1) Direct users of environmental resources, such as fishermen, fish farmers in coastal waters; (2) Processors of fish or other marine products, such as scavengers, fish dryers, smokers, shrimp paste/fish meal/fish meal entrepreneurs, etc.; (3) Supporting fisheries economic activities, such as shop owners or stalls, workshop owners (mechanics and welders), transport entrepreneurs, boatmen and unskilled laborers (manol). From the above segmentation gave birth to the level of diversity (heterogeneity) of existing social groups influenced by the level of development of coastal villages. Coastal villages allow for diversification of economic activities [8]. The level of diversity of social groups is more complex than economic and cultural issues. Coastal villages usually have more progressive and intensive social dynamics than economic, cultural dynamics. This phenomenon is in accordance with Johnson's opinion [9] which explains that in human relations there is a tendency for stratification systems to make group division based on ownership of working capital and income. This opinion explains that a person with high status will provide more rare items in relation to demand. When exchanging such scarce resources the giver is deemed to obtain a higher status by the other group members. While Spencerian, states that society evolved through structural and functional differentiation: (1) from simple to complex, (2) from formless to interconnectedness between parts, (3) from uniformity (homogeneity) to specialization (heterogeneity), and (4) from instability to be stable, there are even symptoms going back to biological evolutionism.

Coastal communities as an open society, are always dynamic in the face of change, including coastal communities in Demak. Various socio-cultural activities and education also become an integral part in the development of progress in Indonesia. The level of awareness in sharing sustenance to the needy community has become a philanthropy culture and the success of the national literacy movement [10,11], and the involvement of corporate awareness programs through CSR (corporate social responsibility) in building libraries [12]. In the history of the Demak people, it was originally a community that had a unity as a fishing and farming community, but after the social structure of society there was a change and experience of polarization. In fact ‘rob’ caused a lot of damage to village infrastructure. Various kinds of damage such as roads, settlements, economic facilities, religious facilities, school buildings and government buildings led to the decline of social functions and religious functions in Bedono village. The maximum effort is carried out by residents to anticipate
damage, which was caused by ‘rob’, including hundreds of hectares of milkfish and shrimp ponds disappearing in the ocean.

Currently the number of coastal villages in Demak Regency which are affected by the tidal flood are 10 villages that are scattered namely Sriwulan, Bedono, Purwosari, Sidogemah, Gemulak, Tugu, Timbulslolo, Suroadi, Sidorejo, and Banjarsari. ‘rob’ not only accommodates residents' ponds but also public facilities such as village offices and schools. Settlement changes in Sayung Subdistrict in 2003-2013 showed that within 10 years there had been a change in the number of settlements [13]. The highest settlement change occurred in Bedono village due to abrasion and inundation [14]. With the relocation of several hamlets in Bendono village, the research question posed is how is the social structure of the Bedono community due to ‘rob’ and sea abrasion?

2. Research Methods

This study uses a qualitative approach [15,16], taking place in Bedono village, Sayung District, Demak Regency. The main data sources used in this study are; (1) the results of observations of ‘rob’ fluctuations namely, time, height, and area of ‘rob’ in the location and activities of the community include; livelihoods, income, farmer activities, student learning activities and others; (2) In-depth interviews with community leaders, religious leaders and village government officials regarding social change in the community include: (a) adaptation, (b) objectives, (c) behavior of people who still live in the ‘rob’ area and communities that have been relocated, and (d) community efforts to maintain and maintain the behavior and harmonization of the community.

Informants in this study were obtained using purposive sampling technique [17]. The source of supporting data that will be used in this study is data in the form of documents. To guarantee the validity of the data that has been obtained, source triangulation and triangulation methods will be used. This study uses the steps of interactive analysis model of data reduction, data presentation, and conclusion drawing or verification [18]. The results of the study so that more detailed analysis uses interpretive descriptive analysis. This analysis develops categories relevant to the research objectives. While interpretative tries to interpret and describe by referring to theories that are in accordance with the points discussed.

3. Result and Discussion

3.1. The state of Bedono village

Bedono village, Sayung Subdistrict, Demak Regency is one of the worst affected villages compared to villages in Karang Tengah, Bonang, and Wedung subdistricts. The condition of the ‘rob’ (tidal inundation) is exacerbated by the decrease in the land surface. Soil subsidence is a natural phenomenon because of the compressed soil that is still soft, causing changes in land use. This is not independent of the physical burden of buildings in the city of Semarang, which is followed by taking groundwater causing land conditions to decline. If this continues, the inundation of the river will expand every year the height of the water increases.

Bedono villagers have 7 settlements namely Bedono, Mondoliko, Rejosari, Senik, Pandansari, Tonosari, Tambaksari and Morosari. Tambaksari Hamlet is a hamlet that was first relocated due to abrasion and then followed by Senik Hamlet and permanently submerged in sea water. Relocation of Tambaksari Hamlet to Purwosari and Sidogemah villages (Tambaksari Baru). Then in 2004 there was another relocation, Rejosari Senik Hamlet in 2004. Rejosari Hamlet was relocated to Daleman village and Sidogemah village. Now there are still 5 hamlets in the village of Bedono that still survive.

Damaywanti said that due to ‘rob’ in Bedono it had an impact on the loss of some of the activities of the eyes of the pond farmers, disruption of access to transportation when the road was flooded due to ‘rob’ [8]. Likewise, pond farmers, are currently experiencing a shift in the area of pond activities which causes a shift in social problems. In addition learning activities are interrupted at SD Bedono 3 because access roads that are damaged and submerged in water during a ‘rob’ and when ‘rob’ is high will be difficult to pass so students are forced to be closed which results in reduced student learning hours. various new jobs in Bedono village.
3.2. The social structure of the Bedono village community

The social structure intended in this study is a structure that has dynamic capacity, in accordance with the social history of the Bedono community. The interaction between the Bedono community and outside will be responded according to the capacity or capacity of the social structure space. If new elements that enter the life of society can be integrated with the structure, or the structure is in a loose capacity to receive new elements, then new elements can be accepted and become part of the structure. Conversely, new elements that are not able to integrate with the structure will drain the capacity of the structure space, which will cause the capacity of the social structure to become narrower. To see the social structure can be distinguished in several phases including.

3.2.1. Before ‘rob’ happened

The Bedono community was originally a small community, as is usually the case with coastal communities who have the habit of hunting and fishing with simple technology. Along with the development of time, fishermen and fishers communities in the Demak coast experienced the development of social structures with the arrival of technology used with the increasing complexity of work relations. Despite experiencing structural changes as a result of the influence of these external factors, in general it can be said that the structure of the Bedono community remains in a simple hunting and fishing phase.

The Bedono community forms a coating structure and a pattern of relations between people who are bound in a social system that is limited or controlled by norms or patterns of behavior that are mutually agreed upon. The social structure of Bedono society has the concept of stratification (coating), differentiation of status and role, work relations and mobility (movement) between layers. In accordance with the character of the environment and its resources, people's lives are reflected in mutual cooperation, not individual, but in groups of communal ties. The main basis of communal ties is the pattern of work and religious relations as an effort to fulfill life's needs. The basis of the pattern of religious relations places the main factors forming social layers. Naturally, this social coating process is then followed by a differentiation of status and social roles and a set of typical work rules.

According to Susilo, Sukesi, & Hidayat [19] the condition of the Bedono community which has a tradition of mutual cooperation based on religious relations and work relations in the social coating process as an isolated or closed phase social structure which is marked by the space capacity of social structures objectively depends on key person who gave birth to religious leaders and community leaders. Outside intervention will be filtered by religious leaders and community leaders, so that the social structure is controlled by the figure, then the conduciveness and harmony of the community is maintained. In general, the Bedono community social relations are based on patron-client relations because community leaders, religious leaders (kyai langgar, ustadz) are still placed as role models, or sources of reference for the community in dealing with various life problems as coastal communities including facing complex natural resources and economic resources. Patron-clients (vertical) in social relations (horizontal) in the social structure of society give birth to a social layer. The closeness of the patron-client relationship is the commitment and loyalty of the community to religious leaders and community leaders as a form of scientific appreciation in the field of religion or appreciation as the owner of economic power which ultimately forms social norms. Social resources exchanged in patron-client relations in the community reflect the mutual needs of each party, so that despite having a hierarchy in the coating system, this social relationship is strongly influenced by religious understanding namely the teachings of Islam, because initially there were several pesantren and madrasas diniyah.

3.2.2. After ‘rob’ happened

Rob's community happened in Bedono village almost every two days with a small scale and experienced a peak in April to June with a height of about 70 -110cm with a duration of 4-5 hours with a ‘rob’ peak of 2 hours, then slowly receding. This natural phenomenon has an impact on people's
lives, especially on livelihoods. The loss of all ponds outside the embankment, the death of shells, the distribution process disrupted, damage to road infrastructure and educational facilities so that students' learning activities are often disrupted.

With the destruction of the economic environment, social environment and infrastructure, the Bedono people, both those who are still surviving and those who have been relocated, have experienced a shift or change in social, economic, and cultural terms, compared to before they were affected by ‘rob’. Since 2002 until now, the survey with the Bedono community has done; (1) adaptation, including place of residence, livelihoods, fulfillment of water needs, farming systems and social systems; (2) integration through elevation of residence, changing aquaculture with a net system, making embankments to contain robs, building refugee houses, and building social systems; (3) Latency through learning about ‘rob’ and ‘rob’ behavior patterns, so that at times ‘rob’ can anticipate.

From the above explanation theoretically the Bedono community is currently experiencing a change in social structure in the open phase. In this phase, increasingly complex structural changes, which are influenced by changes in economic resources of people who no longer rely on the results of fish farms or fishermen, even for the relocation community of Senik Hamlet, the majority of them turn into laborers in the city of Semarang, although a small portion remain fishermen and ponds. In this phase various statuses that entered the social structure in Bedono also became increasingly complex. In the open phase changes with the inclusion of new elements in the structure. Changes in social structure are not only characterized by the entry of the structure-forming status, but also by changes in the system of resource use, or by the economic system of the community. The behavior of fishermen and farmers who changed the marketing system of fishpond products not through swords by selling consumers directly, encouraged an increase in human resources among farmers.

The main factor that distinguishes between patterns of patron-client work and business relations is the tight nature or loosening of the work agreement, especially in the sales commitment captured by investors and the mechanism for determining the level of selling prices and "social obligations" in providing the social needs of fishermen who work for them. Business work relations are usually more open, based on business agreements with a clear interest rate and usually do not include the obligation to fulfill social needs outside the production relationship. While the pattern of patron-client work relations shows socio-cultural factors mixed with economic factors as the binding value. Brings to life where social structure is approaching at its critical point. The emergence of the new order government, on the one hand has given broadness to the space capacity of social structures, because it has freed them from life that is approaching a critical point. On the other hand, it was recognized that at that time the level of community compliance with the government was quite high. The opening of road access in the western region of the Karang-gongso region has provided additional capacity for the social structure space. The life of the Karanggongso community moves away from its critical point.

3.3. Social structure polarization
The social structure that is intended in research is the preparation of people in a sustainable manner on status and role in social groups, social stratification where a person's behavior can be controlled by values and norms in interactions that are influenced by power dimensions. Since it hit Bedono in 2004, relocation was carried out so that polarization occurred in the social structure of the community including:

a. Social polarization. Since relocating Bedono people have undergone fundamental social changes, because not all residents are accommodated in the place of relocation and scattering. These changes include social relations and social stratification. Social relations experience a shift between patron and client, while social stratification returns to the basic point. This means that the group of rich people and groups of poor people began to fade, this is because the land provided by the government is the same extent, and most of their property is submerged in ‘rob’.

b. Economic polarization. Initially the majority of Bedono people were farmers and fishermen, but their ponds now turned into the sea, so many lost their jobs as farmers. The beaches around Bedono become shallow beaches so fishermen have difficulty placing their ships. Farmers and
fishermen have partially turned into factory employees and construction workers in the city of Semarang.

c. Space polarization. With the relocation in several hamlets such as Senik and Mondoliko, the Bedono community does not all occupy the administrative area of Bedono village, but occupies a neighboring village, although it is still within the Sayung Demak sub-district. Although administratively different people feel they are residents of Bedono village

Of the three polarization above, theoretically the capacity of social structures experiences scaling up, including the life system of society. In accordance with Talcott Parson's functional structural theory [20] social systems experience a shift through the stages of adaptation, latency and integration. The linkage between AGIL (Adaptation, Goal, Integration, and Latency) Talcott Parsons's theory of social change in society can be seen in the form of adaptation made by the Bedono Village community to the impact of ‘rob’ they experience. The adaptation they do will be accompanied by goals where the community must survive. Integration related to the existence of structures that occur in Bedono village will shape a society's behavior in overcoming the ‘rob’. latency in this case is how the Bedono village community maintains and maintains the behavioral patterns they do in adapting so that their activities can always achieve the desired goals. Changes experienced by the Bedono village community can be seen briefly in table 1.

**Tabel 1. Polarization of community social structures**

| CHANGE                      | INFORMATION                                      |
|-----------------------------|--------------------------------------------------|
| **ADAPTATION**              |                                                  |
| Residence                   | Space polarization                               |
| Livelihood                  | Missing or no longer effective livelihoods       |
| Clean water supply          | Immersion of clean water channels                |
| Farming system              | Loss or destruction of the pond due to ‘rob’     |
| Community social system     | The fading sense of mutual cooperation in the community |
| **GOAL**                    |                                                  |
| To be able to handle the effects of ‘rob’ | New social structure |
| **INTEGRATION**             |                                                  |
| Residence elevation system  | Space polarization                               |
| Build cooperation by utilizing or avoiding the effects of ‘rob’ so that it is not disturbed | Utilizing the potential due to ‘rob’, such as: water tourism and mangrove forests |
| The existence of a pond system in the embankment to avoid rob | Shifting livelihoods to ‘rob’-free locations |
| The occurrence of individualism in the Bedono village community | So that the pond is free from high waves when ‘rob’ occurs which can cause the pond to be destroyed |
| Expenditures in adapting    | People prefer to be busy looking for money rather than having to interact |
| **LATENCY**                 |                                                  |
| The community observed and studied the behavior of ‘rob’ that occurred in Bedono village | In order to find out the cycle of the occurrence of ‘rob’ |

Based on table 1, the polarization of the Bedono village social structure is basically for Adaptation, Integration and Latency in maintaining the sustainability of the social structure. First Adaptation is
adjusting to the circumstances around them. Adaptation is carried out, starting from the place of residence, livelihood, clean water, aquaculture system, to the social system of the community in Bedono village and the purpose of the adaptation to survive due to the impact of ‘rob’ experienced. The two Goals are related to changes in society in dealing with the effects of ‘rob’, which aim to create a new social structure. The three integration is a relationship of human behavior to the structures that are around. Integration can be observed with the behavior of the community in building cooperation in this case, avoiding and utilizing the ‘rob’ that occurs, then adjusting the community. Fourth Latency was observed through how the Bedono village community maintained the relationship between people's behavior and the ‘rob’ structure by learning years of experience and being a science that greatly helped the community to anticipate the effects of ‘rob’ in the Bedono village area.

From the knowledge about ‘rob’, the community needs to behave to anticipate the impact of the ‘rob’. This behavior formed a habit of the community in Bedono village in establishing a relationship of community adaptation to the ‘rob’ that occurred in their area. Such behavior can be seen from how the house elevation system, how the village community Bedono ‘rob’ avoid or exploit for the purposes of making a living, the adjustment costs of adaptation depending on location of residence, until the occurrence of individualism due to the insistence of necessity of life.

4. Conclusion
The discussion of social structures always goes hand in hand with social organizations and social systems. In coastal communities the community has two dimensions, namely culture and social organization. The structure as defined as a network organization, distribution, grammar and the game is very determined by status and social role in the control group by the norms and values in the process of interaction. Structure building always changes, increases and decreases the forming elements so that the polarization of the social structure occurs.

The area of Bedono village as a region affected by ‘rob’ (tidal inundation) experienced changes in the elements forming social structures. Changes in social organization occurs when the majority society should be relocated from the hamlet who have for years occupied with meninggalka village and forced to build a new social organization in the region of relocation, including some of those still persist region which occurs at any time ‘rob’. The social system of the Bedono community has also changed because of changes in the livelihoods of fishermen and farmers into factory and building workers, (economic polarization), changes in the people who are role models, or who are made leaders in religious leadership such as Imam mosque, people who lead tahlil on Friday night ‘at, teacher of the Al Qur'an, including changes in values and norms in a patron-client relationship (social polarization), changes in residential areas due to forced relocation and those who survive must change the rented place of residence by increasing their residence (space polarization).

To reduce the polarization of the social structure due to the ‘rob’ Bedono village community as Parson's theory that every human being in order to sustain life must do adaptation, integration and latency. This is done because the survival of human beings is very dependent on the role, function, power and prestige. So that the stronger the polarization of the social structure needs adaptation, integration and latency that occur in the surrounding environment.

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