

Social Changes in Coastal Community Affected by the Conversion of Environmental Resources

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Abstract

The study examined about the social changes in coastal community due to the conversion of environmental resources. It aimed to reveal how the process and the consequences of these changes. The research type was qualitative-descriptive-analytic. The research findings indicated that development as a result of modernization was addressed by various community groups in the coastal areas, and the visible change was the changing pattern of work. The sharpening of social differentiation and commercialization of economy that created the vertical relationships were led to the weakening ties between them. Then, the consequences arising were that the relationship with the local community had been loosened, so that social relationships was on the basis of personal interest; the occasion of the production of widely open market can make differentiation in the community structure; belief in the supernatural aspects began to decline, so that rationality appeared in the way of thinking; and mutual aid only occurred for particular purposes among neighbors and relatives, while the economic activity was carried out on the basis of money and other payment instruments. It was concluded that the relationships among communities were not so strongly that the consequences on the aspects of social structure and culture occurred. It was expected that the social problems that experienced over the functions of resources in the coastal community can be clearly revealed.

Keywords: social changes, function conversion, environmental resources

1. Introduction

This research is motivated by the existence of phenomena that occur in coastal areas of Pallameang Pinrang, South Sulawesi, Indonesia, especially those living in the communities around the mangrove forests that have been degraded due to development, such as environmental resource conversion into aquaculture and other uses. The function transfer of environmental resources is due to the inclusion of outside investors, the inclusion of technology in the form of the use of modern tools, and the rationality of the society to change.

The question then, is when environmental resources in this mangrove forest has been converted, then the impact on the lives of the surrounding community. People lose job-related field in mangrove forest. Based on the field observation, they live around the mangrove forests in coastal areas, before experiencing degradation, their livelihoods are as fishermen, woodcutters; and they also take shellfish, fry and milkfish. But now, these are rarely found, even they can be said to be almost extinct.

2. Literature Review

2.1 Conversion of Environmental Resource and Condition of Coastal Community

Environmental resources that have been experienced over the land in the coastal areas are mangrove forest. Commonly, a mangrove forest an attractive phenomenon studied in many views, because the areas of mangrove forest along the coast of Indonesia are quite large. Mangrove forest is not only as a timber stand and fauna habitat, but it is also a socio-economic ecosystem, that is the importance of the various battlefields.

2.1.1 Mangrove forest and its management

Boonruang (1984) suggests that mangrove forest is a forest that occupies intertidal zone of tropical and sub-tropical swamp or wet mudflats or tidal. Meanwhile, according to Anwar (2005), mangrove is a general term to describe a variety of tropical coastal plant communities dominated by a few species of typical trees or shrubs that have the ability to live in foreign waters. On the other hand, Poedjirahajoe (2000) sees mangrove as a forest vegetation that grows in the tidal line, but it also grows on the coral coast (dead coral mainland), being covered with a thin layer on top of it or mud or muddy beaches with traits: (1) not influenced by climate, (2) tidally influenced, (3) trees reaching a height of 40 cm, (4) tree species ranging from sea to land or *Rhizophora*,

Avicenia, *Sonneratia*, *Xylocarpus*, *Bruguiera*, and *Nypa*, (5) plants under *Acrosticum aureum*, *Acanthus illicifolius*, *A. Arbrateatus*, (6) growing on the coast that forms lines, and (7) the trees forming a typical root.

Mangrove forest is a unique ecosystem and as one of the many natural resources that contributes to human life because it has several functions: first, maintaining physical function shoreline to remain stable, protecting the beaches and river banks, protecting coastal and marine erosion (abrasion), a buffer zone against the seepage of sea water (intrusion), process waste; second, biological function, namely as a spawning and foraging for shrimp, fish, scallops, and other fish species, nesting birds, a natural habitat for various types of biota; and third, the economy functions as a source of fuel (charcoal, firewood), building materials (beams, roofs and mats), fisheries, agriculture, textile (synthetic fibers), drugs, drink (alcohol), raw materials, paper, export materials, trade and other economic products (Salim, 2002).

In this context, it is interesting to study the concept of dominance and hegemony in order to understand the state of power relations in community. According to Harper (2004), there are three concepts to explain the relationship. First, surplus power, that is the dominance and monopoly over state power through excessive bureaucracy and military and police agencies, so that state power has forced physically and administratively. Second, surplus value, that is the domination and control of the state directly through etatisme-value economy, this control occurs through the acquisition and construction of capital projects through the regulatory and licensing bureaucracy, although the surplus-value that does not by itself make countries richer because it is suctioned back through corrupt practices. Third, surplus meaning, that is the state hegemony toward more meaning about important issues in the interpretation of the level of public and against the country, where understanding and interpretation of the interpretation should not conflict with the government. Harper (2004) concludes that the dominance (surplus power and surplus value) is a coercive control, both physically and administratively; while hegemony (surplus meaning) is a liberal coercion because just as if the minds are made to be directed, so as to follow a particular view or knowledge production though people sometimes do not realize it.

Implementation of this theory in the management of environmental resources is the predominance of government power and hegemony of knowledge in environmental resource management. Domination of state power is manifested in rights of state over environmental resources, by not considering the rights of local communities, while the hegemony of knowledge is manifested by conservation knowledge of environmental resources constructed by state, with no regard to local knowledge community.

2.1.2 Socio-Economic Condition of Coastal Communities

Sociological and economic approaches in understanding social reality of people's lives who live in mangrove forests in coastal areas are directed to analyze the social and economic realities that may indicate a form of social action patterns of relationships and the dominant influence in people's lives. These are related to their livelihood and living life obtained.

Problems of the people who live in mangrove forest areas or in coastal areas in general are very low levels of well-being compared with the villagers or the inhabitants in the town as well as the tendency to the levels of public education. Income levels are generally below the poverty line and less affordable by the development. Livelihood is fishing, with simple technology, the power of family to produce limited to subsistence and they have developed a system of exploitation of natural resources by way of farming as a form of adaptation to the environment.

According to Semedi (1998), the problem of low standard of living exacerbated by population growth in the surrounding areas of mangrove forests or coastal areas, either due to a number of natives from rural hinterland to the coastal areas. The increase of population causes a shift in the ecosystem and unfavorable changes of people's lives. As a result, it does not only lead to or cause disruption to the function of the forest, but the deterioration occurs in the people's lives with regard to socio-economic conditions of the community.

2.2 Perspective of Social Change

Cohen (1983) states that "Social change is any change in the structure of society or changes in the social organization of society. Every human society always has a change. Changes in people's lives are social phenomena which are reasonable, because every human being has infinite importance. In the positive side, at least changes can improve the quality of human beings, because human beings have a need, for examples, moral need, economy, achievement, recognition, and so on. All needs will only be achieved through better social environment. If social changes are happening so rapidly, the negative effects will also be very large. Negative effects of the changes are, among others, the individuals feel alienated, lonely and become desperate; if changes occur suddenly, they can disrupt and undermine individual feelings. If the effects cause the cultural gap, these are likely to occur in the general disorganization of society as a whole, because social changes are often accompanied by a variety of social problems.

Besides, Soemardjan (1981) argues that social changes are the changes in the institutions of society that affect social systems, including social values, attitudes, and patterns of behavior between groups in society. This

concept gives more emphasis to the institutional or organizational changes related to the values, attitudes and patterns of behavior applied and held by certain communities. This gives a hint that any changes always show up immediately values, new attitudes and behaviors.

Understanding the concepts of social and cultural changes above, the changes are said to be the socio-cultural changes that occur in a society if it has these characteristics: (1) there is no society whose development stops because every time it changes sooner or later, (2) changes in social institutions will be followed by a change in existing social institutions, (3) rapid changes will usually result in temporary chaos because people will try to adjust to the changes that occur, and (4) the change cannot be confined to material or spiritual field only because these two are related to each other.

According to Parsons (1977), there are four types of processes related to social changes, namely: (1) the balance, referring to the process that helps to maintain the boundaries of the system. The process may be static or dynamic. In the second type of equilibrium, the process goes on, there is just a dynamic equilibrium in the process of change that has been patterned; (2) structural changes, namely changes in the socio-cultural normative system concerned. This means that changes in the system of the most important values in the highest levels of the social system, there is also a change in the existing subsystems and in social roles. Interdependence of the units in the system means that a fundamental change in a particular unit may cause other types of changes in the unit, and a certain degree of change in the system that may affect the kind of change at other levels; (3) structural differentiation, that these processes lead to changes in the subsystem, but these do not change the structure of the social system as a whole. Values that have been established are considered not to change, they only change the content of values but the patterns do not change; and (4) the evolution of society, that this process leads to increased adaptability. In this case the differentiation that raises new units are different, both its structure and its functional significance for the wider system.

2.3 Development and Social Changes

According to Usman (2010), economic development is not only economic development but a manifestation of social and cultural changes. The development is a change in perception and attitude towards human life as a whole, not in parts. The understanding of most people in the development is concerned with the material aspects, such as the use of quality seeds, pesticides, tractors, agricultural processing machines, generators, vehicles, communication equipment, home appliances and the use of other technologies. The new technology will be sustainable if it is accompanied by an understanding of the organization of work, working mechanism, discipline, working hours, job skills and other social changes. Therefore, any development is concerning all aspects of life. The use of technology is a means to gain an easy life and it is only the beginning of social change.

Development cannot succeed without changes to the value system that supports the construction of which is then followed by a social transformation in preparation for the foundation of acceptance of new technology. According to Soedjatmoko (2000), there are three basic minds to change society in preparing development. First, the process of development of a society requires a social transformation in preparation for acceptance of new technology and a new value system. This phase is the starting point in achieving acceptance of new technologies. Second, social transformation is a continuous process that builds a power base that supports the development process. Third, technology is a tool to facilitate human work and therefore, it should not manipulate people. Transformation will run and well-received if it meets the three aspects of community participation, social justice, and friendly to the environment.

Failure of socio-economic changes is caused by changes in the old values that are too slow and old values into the new organization. Economic organization is based on rationalization in accordance with economic principles that require high efficiency. The inclusion of the old value causes the economic organization to become too fat in which it is similar to social organization. Failure of modern organizations in the fields of politics appears in the structures and systems that bring values to the organization indicated by the patrimonial system of nepotism. Such organizations are less concerned with changes in supporting development (Taneko, 1984). Social change is not possible in parts but integrated with systematic and the clear order.

3. Research Methods

This type of research was a qualitative one. To describe this in more natural, meaningful, and deep, a descriptive-qualitative-analytic approach was used. For subjective interpretation of the meaning of the mind, speech, behavior, and actions of people being studied, and as well as its relation to the situation and field context, the researcher used a *verstehen* method. This method is in line with the emic perspective, and the researcher himself was the main instrument (human instrument), and stayed on the field within a certain time. In terms of the approach used, the research created a study of the interpretive sociology paradigm. The research subjects (informants) were people who lived on the coast who had experienced the social changes due to the conversion of environmental resources. Based on the given consideration, the researcher determined the location of the coastal areas at Pallameang village because administratively the location was one of the coastal villages in

Mattiro Sompe district, Pinrang regency, South Sulawesi Province. The research location had much direct contact with mangrove forests degraded due to the conversion of a farm environment, resulting in social changes in their communities. Other informants were the elements associated with community activities, such as community leaders, village officials, activists of Community Social Institutions, and coastal communities (the fishermen, merchants, carpenters, bricklayers, and fish farmers). The way to choose and determine the informants was purposive by using these criteria: (1) a group of key informants, that many people who have extensive knowledge about various things or various problems that exist in the coastal communities, (2) the expert informant group, that the community leaders understand the issues and have extensive knowledge of the information required to be given out further research to solve problems in this study, and (3) groups of regular informants, that the informants were able to provide a variety of information needs according to their ability standard, but they were not experts in the problems being studied.

The focus of this study was to describe the process of social changes and consequences arising from the conversion of environmental resources for social changes in the coastal areas of Pallameang, Pinrang. Data collection techniques used in this study were observation, interviews, documentation, and all three combined (triangulation). Primary data were collected through observation and interview techniques, or a combination of both, while secondary data were collected through documentation. The technique of data analysis was completely qualitative. The qualitative data were analyzed through a descriptive-interpretative approach, which was constantly interpreting data and information obtained through a connection between the phenomena based on a conceptual framework that has been determined. The data validation techniques recommended were the extension of participation, persistence observation, triangulation, peer checking, negative case analysis, resource adequacy, member checking, detailed descriptions, and audit trail.

4.Results

The results of the research consisted of process of social changes and consequences of conversion of environmental resources.

4.1 Process of Social Changes

In the coastal areas, it was found that development was a result of modernization addressed by various community groups, especially fishermen, visible change is the changing pattern of work, either because the stratification system of basic mastery of the means of production and the way to embrace the power. Stratification changes also occur in the organization of catching fish as the implications of technology transfer, so that institutional fishermen who has been awakened earlier will usually change as well.

Fisheries modernization is impacting on the social life of fishermen and the fishing community. The impact is a change in work patterns of use of old technology that is still simple rowboat into new technologies, such as more modern outboard which is effective and efficient. Effectiveness and efficiency of the modernization of differentiation raises the emergence of new social units that have an impact on changes in the social structure of fishing communities. These changes occur at the level of fishermen and other communities.

Considering from the pattern of the work based on the dimension of time used, the change is very significant. The use of old technology provides with work patterns with a cruising closer, shorter time at sea, fewer number of workers and division of tasks does not exist or exists but it is not clear. While the use of new technologies (modernization) provides with work pattern with a cruising further work, longer time at sea, more labors and more clear divisions of tasks. In addition, the distribution of results is also more organized, so the better the fishing technology used, the more the results obtained and it has an impact on the increasing levels of income of fishermen.

In addition to fishing activities, activities that become the focus of attention now is seaweed farming. Seaweed prices are relatively high in the market, making it the main commodities in fishing communities. This activity is dominantly carried out by the women of Pallameang society. Mentoring local government periodically is very useful, such as in the form of increased knowledge and skills of coastal communities. In addition to providing training seaweed farming, local government officials also utilize the skills taught in the form of shells of marine products that can be of valuable goods if it is in the form of accessories, and so on. Evidently, this time is a group of female fishers to exploit the natural resources and these have been marketed.

Subsequent changes experienced by the Pallameang communities start growing level of awareness of the natural environment with voluntary movement replant mangroves, with a prohibition of fishing using bomb or poison which is very dangerous to the sustainability of natural ecosystems. This is done because the coastal areas in Mattitosompe district is an area between the mouth of the river meeting the high seas led to brackish water, making it the area of fish habitat and other marine creatures.

Moreover, the constraints faced by fishermen and workers in the maritime sector are profit margins which are very small. Most of the advantages are enjoyed by middlemen and taken out of the area. There are difficulties to

carry out the development; it is difficult to create economic growth for communities in the region. Fishing communities do not enjoy a multiplier effect on the utilization of fishery production in the region.

Fisheries and marine resource potential has been less attention from the government and the business world because it is necessary to develop the system utilization and management of fisheries and marine resources production whose orientation is business success and environmental sustainability. Here we need the concept of regional development on the basis of fisheries and marine sectors. Prosperity of the region in addition to the amount is determined by the additional values created in the region as well as by how much a payment transfer about the share of income flowing out of the region or getting a flow of funds from outside the region. When talking about economic growth, it will directly involve the problem of improving outcomes (outputs) which are continuous in the long run. Increased outputs are dependent on the type and quantities of inputs or the factors of production used in the production process.

4.2 Consequences and Direction Change

Pallameang urban village has long been recognized as one of the producers of fish, rice and shrimp which is well-known in Pinrang and surrounding counties. According to various sources, this district is formerly one of the world's largest producer of fish in coastal areas which is characterized by the presence of Makassar village and Bone village whose main job was fishermen. Results of the fishermen are not only marketed and consumed by the local people, but they are also marketed to other regions, even to the outer islands, such as Java and Kalimantan islands.

Developments of fishermen Community in the coastal village gradually begin to diminish as the opening ponds extensively and cover almost the entire coastal region, being caused by the shrimps as export commodities. Pallameang is known by the nickname as local fish and shrimp. Now, a number of fishermen have been lacking, even the only surviving coastal fishermen. If you look at a growing view in the community, it is first of all connected as a major cause of forest destruction in the coastal mangrove in general in relation to local government policy through the provision of concessions and management of mangrove forest, which was originally only performed by local government through Regional Forestry Company, but in the late 1990s to the early 2000s emerging private companies there were private companies that opened ponds in coastal areas without taking into account of the preservation of forest resources. The damage is then further compounded by the euphoria of reform, which is one of the forms as the emergence of regional autonomy in excessive interpretation, such that it allows the local government to make issues for a number of policies mangrove forest resource exploitation in order to increase local revenue.

In addition to the policy of exploitation, destruction of mangrove forests is also exacerbated by the high tidal water which gives effect to the erosion of beaches due to high waves and result in coastal areas abraded. As explained in the previous chapter, that coastal areas experience changes and affect the livelihoods of the people, and carry big consequences for mangrove destruction of environmental resources, and even affect the fertility of the sea, the consequences are affecting structural change, patron-client relationships, weakening of social solidarity and even community minded for the sake of money and materials or rationalization actions occur.

Based on data and facts as it can be interpreted that the damage to beaches and coastal mangrove forests in Pinrang, especially in Pallameang mangrove forest area, was caused by the policy of exploitation of mangrove forests by residents of a farming land that is not coupled to the control and supervision by the government, causing maximum damage toward remarkable region and its impact also affects fertility of sea as the main source of income of the fishermen. Besides, farming land is also suffered damage from sea water seeped, so that productivity decreases and eventually it is converted into fishponds, so consequently all activities associated with it have experienced differentiation and it is one of the real consequences behind the function transfer of environmental resources.

Differentiation of structures referred to in this discussion is the change of the structure or the emergence of new functions in society as a consequence and the direction of change over the function of environmental resources occurs. Social structure of the community in question, when viewed from the side of social background has similarities with the structure of the general public in South Sulawesi. This means that social background largely determines the shape and color of the existing social structure. For village communities, Pallameang social structure that can be explained in accordance with the conditions of local communities with several approaches. These include descent and work approaches.

Such changes and shifts occur give effects to new consequences in the whole life of the community, like how they did redefinition, reorientation, and the renegotiation of the various actions and all the meaning that lies behind it, which is not only related to the aspects of production and consumption, but also moral and cultural values. Society is increasingly influenced by new trends which are nuanced with material, mechanical, and rational as part of efforts to become a modern society. Consequently, people begin to abandon the moral economy models, such as just getting fry for subsistence. Instead, they are more interested in the economic model and entrepreneur shrimp ponds, such as open ponds of mangrove areas, establish breeding, fry trade, and

other business; the reason is much more profitable. The opening of the dam embankment was originally just a trench to accommodate fish and shrimp during low tides, but shifted over time, involving not only local communities, but rather outsiders who master high capital opened a massive pond and exploit mangrove forests; but there is no account of the impact on the coastal environment.

In that context, it is reflected in the coastal communities that do not actually run into a situation when they have to face the confusion of dichotomies, such as moral and rational, subsistence and market, community and government. The change does not necessarily unilaterally imposed as a result of penetration from the outside. Instead, the change was the result of a creative community involvement, both in the context of negotiation and resistance, in social, economic, and political interactions. The community is creatively engaged in the face of differences and addresses the changes that appear successive. They seem to have accepted it as an inevitability of change, such that any rhetoric in the development, empowerment, well-being, participation, conservation, mangrove areas will always be undergoing a process of negotiation before it is adopted. The greater the benefits to be gained from a rhetoric, the sooner people adopt it. Conversely, the smaller the profit that can be learned, the less the chance of people accept it.

5. Conclusion

The process of social changes affected by the conversion of environmental resources is due to the sharpening of social differentiation and commercialization of economy (profit maximization) so as to create more vertical relationships that lead to weakened ties among them. A number of consequences arising from the transfer function environmental resources for social change can be seen from the structural aspects: (1) family ties are still strong, but the relationship with the local community has been loosened which can be predicted that social relationships with people on the basis of self-interest leads, and (2) the opportunity to market the production is widely open that can create differentiation in the structure of society. While the other aspects of culture are: (1) belief in the supernatural aspect begins to decline, so that rationality appears as the way of thinking, and (2) the purposes of mutual assistance are performed only for among neighbors and relatives, while the economic activity is carried out on the basis of money, so that the economy is almost entirely a market economy based on the use of money and other payment instruments.

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