

Settlement pattern and occupation shift among salt farmers

Pola pemukiman dan pergeseran pekerjaan di kalangan petani garam

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Abstract

Madura can be seen as a microcosm of Indonesia as a whole through the various livelihoods of the Madurese people. Madura consists of people living along coastlines and this can be considered as representative of most Indonesian people. The primary occupations of the Madurese people are that of salt farmers and fishermen. Salt as a commercial business is cultivated by the community, is mostly located along the eastern and southern coastlines of Madura, and is adjusted to various circumstances, including lower rainfall in the area. During the rainy season, salt ponds are turned into shrimp ponds and farmers' occupations change accordingly. The job of a salt farmer is not trouble-free. Problems arise from the erratic and uncertain climate and there are also threats of price instability and imported salt. Farmers are forced to accept such circumstances. This study contributes to the literature by exploring how the livelihood of salt farmers is representative of Indonesian's maritime characteristics. Ironically, this sector has been increasingly abandoned and has become less desirable, though it plays a strategic industrial role in Indonesia. This study employed a qualitative method and determined its sample using the purposive sample technique. The informants were permanent salt farmers, salt farmers who also worked as shrimp farmers, and salt farmers who completely shifted to shrimp farming. This research was conducted in Lapak Daya, Dungkek, Sumenep. The findings showed that most salt farmers shifted their occupations to shrimp farmers because they considered it to be more profitable. However, some salt farmers who continued to survive in salt farming worked both as salt farmers and shrimp farmers. It was also found that salt farmers generally came from outside Madura, while those from Madura preferred changing their livelihood to farming shrimp due to the higher yields and the fact that the farming does not depend on seasonal changes. Although the number of salt farmers continues to decrease, there are some salt farmers who keep their occupation permanently.

Keywords: settlement pattern; farmer; salt; transition; livelihood

Abstrak

Berbicara tentang Madura, tak ubahnya kita melihat miniatur Indonesia yang tercermin dalam ragam mata pencaharian masyarakat Madura. Madura dengan mayoritas masyarakat pesisirnya merupakan representasi Indonesia. Mata pencaharian bagi masyarakat Madura daerah pesisir, yaitu sebagai nelayan dan petani garam. Usaha penggarapan yang diusahakan masyarakat, berada pada kawasan Madura timur dan bagian selatan hal ini disesuaikan dengan berbagai kondisi yang menyertai, seperti curah hujan yang lebih rendah di kawasan tersebut. Selama musim hujan, di lahan-lahan kering yang menjadi tambak garam tersebut berubah menjadi tambak-tambak udang, sehingga usaha yang dijalankan bergantian menurut musim yang sedang berlangsung. Menjadi petani garam bukanlah hal yang mudah, selain harus bertarung dengan kejamnya iklim yang kerap kali tidak menentu, ancaman ketidakstabilan harga, ancaman dominasi produk luar membuat petani garam hanya bisa pasrah dan menerima keadaan yang dialaminya. Studi ini penting, mengingat bahwa hanya segelintir penelitian yang mengupas tentang petani garam yang menjadi ciri khas masyarakat Indonesia dengan corak maritim, sektor garam yang mulai ditinggalkan oleh sebagian besar masyarakat menjadi hal yang kurang diminati, padahal garam menjadi peranan penting dalam industry di Indonesia. Metode yang digunakan dalam penelitian ini adalah penelitian kualitatif. Informan yang diwawancarai adalah: petani garam yang tidak melakukan peralihan pekerjaan, petani garam yang merangkap sebagai petani tambak udang, dan petani garam yang berpindah menjadi petani tambak udang. Hasil penelitian yang dilakukan di Lapak Daya, Dungkek, Sumenep. Ini menunjukkan sebagian besar petani garam beralih menjadi petani tambak udang yang dirasa lebih menguntungkan, meskipun demikian masih ada petani garam yang tetap bertahan dalam bertani garam, dan sebagian lagi mempunyai pekerjaan merangkap, yaitu petani garam dan petani tambak udang. Petani garam umumnya berasal dari luar Madura, sedangkan yang berasal dari Madura lebih memilih untuk

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berubah mata pencaharian menjadi petani tambak udang karena lebih menguntungkan secara ekonomi, dan tidak bergantung pada musim. Meskipun petani garam semakin langka, namun masih ada petani garam yang tetap bertahan dalam mata pencaharian tersebut.

Kata kunci: pola pemukiman; petani; garam; peralihan; mata pencaharian

Introduction

According to Bartels and Sungkar (2005), salt intrusion during a prolonged dry season can be considered as natural disaster which disrupts farming in many areas all over the world. Even though dry season is considered a blessing by some farmers, a prolonged one is disastrous for salt farming.

Ca Mau Peninsula is a sub-region along Mekong’s Delta in Vietnam which covers 1.6 million (43%) hectares of the total delta area of 3.6 million hectares (Thang 2013). River system along the peninsula facilitates various farming activities and aquaculture. According to Mike (2003), approximately 380 hectares or one-third of farming activities are influenced by salt intrusion. Salt farming is an important source of income for Madurese government and residents. Several thousand people depend their livelihood solely on salt, while more than 200,000 people earn seasonal income from it. In 1918, it was known as the golden year for salt farming when approximately 3,000 hectares of salt ponds were cultivated by locals and produced nearly 216,000 tons of salt and sold for more than 1.2 million guilders. Likewise, in the early decades of 1930s, the stock of salt was extremely abundant, so that the government was forced to limit its production (De Jonge 2011:35).

In order to meet an increasing demand for salt for both household consumption and industrial needs, as well as to improve salt quality and prevent imports in 1970, the government carried out massive modernization of state-owned salt companies. In 1975, a multimillion-dollar plan was formulated to improve salt production in Kalianget. The area had encompassed around 3,250 hectares and planned to be expanded to over 1,000 hectares. It indicated that private salt companies should be purchased by the government. Several thousand salt-producing villages were affected by land acquisition for at least 2 years. Most lands were successfully purchased, though the owners of salt farms refused to cooperate and in turn, stalled the project’s progress at its infancy stage (De Jonge 2011:38).

There is a need to develop stress-tolerant varieties adapted into local adaptation and meet the preferences of local agricultural community to ensure adoption (Witcombe et al. 1996). According Saulah (2016), salt business is highly sensitive to price and output changes, less sensitive to changes in production cost, and insensitive to changes in government aids (Direct Community Assistance or *Bantuan Langsung Masyarakat-BLM*), though *BLM* has a large impact on several Community Salt Business Empowerment Program or *Program Pemberdayaan Usaha Garam Masyarakat-PUGAR* group. For some farmers, planting rice becomes an alternative for rainy season. Rice encompassed approximately 90% of farming area as rain fed crops during rainy season. Planting other kinds of crops during rainy season is challenging due to excessive wetting and inundation in the lowlands (Sarangi et al. 2016).

During the colonial era, salt farm owners did not always produce salt. In such cases, during salt farming season, the owners handed over their ponds which were used for fish ponds during the rainy season. The owners received some amount of money. Some licensed holders could also rent the ponds to other cultivators. This “double rights” ownership has continued to be maintained in several areas and can be inherited (Kuntowijoyo 1980:392-399). Salt issue has been an interesting national issue among general public in the last few years. As we may know, the import rate of salt for household consumption in 2009 was recorded at 99,754, 597,583 in 2010, and reached 923,756 in 2011. While for industrial needs, in 2009, the import rate reached 1,636,699, 1,590,049 in 2010, and reached 1,691,440 in 2011 (Kementerian Perindustrian RI 2011:14).

Salt production in Madura mostly takes place in southern coast lines. Along the coastline, monsoon winds combined with dry southeast winds usually result in less rain or no rain at all. Salt-related issues are gaining more interest as more and more conflict occurred involving salt farmers and there was also an issue of salt scarcity. These issues attract the authors’ interest to investigate deeper

about settlement pattern of salt farmers and their occupation shifts in the region of salt production in Dungkek, Sumenep.

If we talk about settlement pattern, it is tightly related to physical condition of the Earth. Residents generally choose their settlement based on the availability of natural resources and other reasons. For instance, residents prefer a house near main street to ease their mobility, or near a river that is often used for irrigation. Such preferences aim to ease all activities which are carried out to fulfill their primary, secondary, and tertiary needs. Choosing a settlement near the main street and the river has been done by the society members for a long time. If the dwelling locations are farther away from the main streets or rivers, the number of residents becomes fewer and their settlement patterns are more scattered or widespread. Remote settlement refers to the difficulties in reaching the area, so that other society members barely interact with the area. That is why residents living in areas which are difficult to be reached by land, river, or sea, are classified as remote areas.

Meanwhile, settlement pattern along coastlines share some similarities with the settlement along river banks, namely longitudinal settlement pattern or following the coastline. However, settlement pattern by the sea is built so that the society members have no difficulties and take too much time in accessing the sea as their main occupations, not to interact with other regions.

For lowland areas, establishing a settlement is relatively easier and generally the settlement pattern is centered or grouped around certain natural resources. Conversely, for those residing in a mountain, they live surrounding the slope, as if trying to avoid adverse effects of the mountain, particularly if the mountain is an active volcano. Population settlement pattern can basically be classified into 3 categories. First, settlement patterns which are centered or clustered into groups. We can find settlement patterns like this in cities, crossroads, lowlands, large plantation areas, industrial areas, etc. Second, longitudinal or linear settlement patterns along the coastline and transportation. This pattern follows along roads, railroads, rivers, and coastal settlements. Third, widespread settlement patterns. This pattern of settlement is generally located around mountains, remote areas, dry areas, and so on. In dry areas, population is spread due to limited water sources. Where there are water sources, there are small numbers of settlements. This kind of pattern also intends to reduce the adverse effects of eruptions and disasters in the mountains, so that people choose safer areas.

According to Sujarto (1977), in term of selecting their residents within their area, coastal communities are not different from people living in other environments. They also demand three basic needs. First, a place to live which is safely protected from natural disturbances. Second, a place to carry out their occupation and make a living. Third, a place to fulfill their daily needs. The relationship between kinship systems in residential settlement and socio-cultural aspects as their physical embodiment can be described as follows: kinship groups can influence the settlement location and land/house arrangement using some principles adopted by society and social roles among kin. Both society and kinship influence the formation of spaces which become means of interaction between relatives.

Research Method

This study employed a concept which was proposed by Koentjaraningrat regarding informants. For Koentjaraningrat (1990), informants were individuals who were interviewed to obtain information and data. Koentjaraningrat's opinion had some similarities with Lewis's (1986), which explained that informants refer to those who provide information about their culture or information outside themselves; while Crapo (2002) argued that an informant was a person speaking his own dialect, or a native speaker.

This study employed qualitative method to see the diversity of data and in-depth investigation. It used purposive technique to choose informants using the following criteria: 1) salt farmers who continued to run salt farming businesses without moving/having side jobs; 2) salt farmers who were also shrimp farmers; and 3) salt farmers who changed their livelihoods to become shrimp farmers. This study was conducted in Lapak Daya Village, Dungkek Sub-District, Sumenep District. This location was selected as it used to be the location of salt farming, yet it has now gradually left behind by the farmers, because the income from salt farming was inadequate for their daily needs.

Result and Discussion

Several results were obtained in this study. We classified farmers according to changes in their livelihoods. Group A included salt farmers who did not change jobs, even though every year his workload and life are getting heavier. Group B encompassed salt and shrimp farmers who worked together depending on seasons. Group C consisted of salt farmers who left their main jobs and turned into fully-fledged shrimp farmers.

Based on the field data, it was found that in general, Group A farmers who remained loyal to their professions had low level of education, some of them did not even finish primary school. For them, education is not a benchmark for success. Even without high level of education, they think that as long as one has an ambitious dream, she/he will survive and succeed in life. One of them has been a salt farmer for approximately 20 years. Income instability does not hinder him to be a salt farmer which has taught them many things. Being a salt farmer, she/he has faced many obstacles, but as a true salt farmer, he/she remains faithful to this occupation, because it is also a hereditary profession. Besides, changing job requires extraordinary efforts, while his ability as a salt farmer is naturally taught by his/her parents

Conversely, salt farmers, who have multiple jobs as salt and shrimp farmers in Group B, turned out to have higher level of welfare compared to other salt farmers. It is because they have side business besides working as salt farmers so that they can support their families. Although with a decent income in sectors other than shrimp farming, one of the informants was still reluctant to completely move jobs which have raised him/her since he/she was a kid. Being a salt farmer is a reputable profession for Madurese, because it signifies characters of Madurese. Moreover, being a salt farmer has existed in coastal areas like Madura since the Dutch era.

For Group C, most salt farmers who had left work as salt farmers were new farmers. One of them learned to be a salt farmer when he was in junior and high school. With patience and shrewdness, some salt farmers are able to make Madurese salt a promising source of income. Nevertheless, most salt farmers changed professions to shrimp farmers. The farmers in this group often complained about government's policy on salt, though they acknowledged that such policies signal a step toward improvement. When there were some conflicts between salt farmers and the government, in order to gain income two-times higher than being a mere salt farmer, this group of farmers do not hesitate to leave their initial occupation to make a living. With an income averagely IDR 2.5 million per month (calculation of the difference between shrimp sales and shrimp farm operational cost), they are more concerned with their own economic well-being, because their economic needs keep increasing year by year. This group also has the largest number of farmers. It does not only include salt farmers who change occupation after suffering losses, there are new shrimp farmers who do not want to cultivate salt fields, because they consider it difficult and earn too little. Some members of Group C are native Madurese.

The settlement lands began to be abandoned, so there was a lot of a vacant land around salt farms. Most of them move to areas closer to shrimp farms to facilitate their mobility to reach the place of their livelihood. Residential areas around agricultural areas began to be deserted and they moved to the land of shrimp farming. The salt fields are sold by the owners who change jobs. Only a small percentage of salt farmers who still survive despite the difficulties.

Settlement patterns of salt farmers

According to Sangalang & Adji (2014), a settlement refers to a group of dwellings in which its residents agree with each other both formally and informally to form a community. The socio-cultural relations, adaptability, and building relationships and physical environment conditions within the settlements (such as housing and supporting facilities) greatly influence the controlled development of settlements and provide welfare for the community members based on local wisdom. Settlement patterns of Madurese outside their native region are generally clustered. However, it cannot necessarily be interpreted that Madurese migrants are an exclusive group who are reluctant to mingle and establish social relations with other people. Madurese migrants in various regions in Indonesia have known to live in harmonious and peaceful environments with local residents for

several generations. This proves that the process of adaptation and social integration of Madurese outside their native region are quite successful (Wiyata 2013:41).

According to one of the informants we interviewed, community settlements have always gathered at one point. With the same style of livelihood and a profound kinship system. The community members always display incredibly strong relationship, which is enhanced by kinship culture adopted by Madurese communities. There are three layers of kinships, namely *taretan dalem* (core family member), *taretan semma* (close relatives), and *taretan jhau* (distant relatives). Apart from Madurese migrants, we need to look at the pattern of community settlements whose residents mostly earn a living as salt farmers in Madura island itself, particularly in Dungkek, Sumenep. They adopted an extended settlement pattern along the coastline, because most of them think it is easier to live closer to their livelihood. In addition, such settlement pattern makes it easier for salt farmers to monitor their salt farming progress and avoid some possible threats from others which may cause losses. During the daytime they work on a seasonal basis and at night they maintain their salt levels. Moreover, living far from their livelihoods causes farmers to experience difficulties when their salt is stolen by irresponsible people.

According to the informant, in the past, the settlement pattern of salt farmers followed the spread of salt fields to facilitate their works and daily lives; however, it did not last long. As farmers' sale prices fell further, many farmers switched jobs as shrimp farmers to yield annual results. As a result, they transferred their house elsewhere. Their houses are no longer located around the salt fields, but around their shrimp ponds. As stated earlier, the settlement pattern of salt farmers has now changed. Many have moved to the areas around shrimp farming which is located further away from the coastline. Many salt farmers are losing money, so most of them switch professions. Only a small percentage still becomes salt farmers, though they have double occupation as shrimp farmers, as well.

A strong bond among farmers has made salt farmers who switch professions to move their houses together and inhabit new areas around shrimp farms. Consequently, we barely see any dwellings around salt ponds. This is very reasonable considering that the kinship among Madurese community is exceptionally close, so that a migration of people due to changes in livelihood will be followed by other family members. Currently, there are only 1-2 houses around salt ponds which are still inhabited by salt farmers as a temporary place to stay. Usually farmers who have homes in the area of salt ponds are farmers who have multiple livelihoods as a salt farmer and a shrimp farmer.

Tanean lanjang and kinship

According to Citrayati et al. (2008), Madurese agrarian community form a community settlement known as *taneyan lanjang* settlement pattern as a form of maintaining kinship between community members. The pattern of *taneyan lanjang* is scattered in small groups, following the location of the lands they have. The way they build the buildings was also adjusted to the needs of its inhabitants, such as a prayer room (*langgar*) as the center/main axis of the cluster, main house (*roma tongghu*), kitchen (*dapor*), animal cage, bathroom (*pakeban*), and barn (*lambung*).

This *tanean lanjang* pattern is also found in the settlement pattern of salt farmers. Most of the salt farmers living nearby each other are relatives or extended family members. Interaction between the family members is incredibly close; hence, interactions with outsiders are almost uncommon, including moving out of salt farms to shrimp farms in one group. *Tanean lanjang* pattern is also common in most residential areas in Madura, for both native Madurese and non-native Madurese. It is because Madurese communities influence each other greatly. Fellow residents will feel the benefit of comfort of being in one 'extended family.' Such positive value can be undeniably credited to *tanean lanjang*. Geertz (1981:10) explained that primordial elements include "social elements which are born from those considered existing" in social life. Mostly, it encompasses direct relationships and family relations, but it also includes membership in certain religious environments, certain languages or dialects, and certain social habits. Prevalence of the relationship born from blood, speech/language, and habits is convincing.

The important element of primordial values which always appears (and deliberately so) in social interaction is kinship bond. Among Madurese society, kinship ties are formed based on paternal and maternal line. In general, kinships between family members are closer among paternal lineage, so they tend to dominate. Madurese kinship encompasses 4 generations, ascending and descending from ego (Wiyata 2011:104).

Within Madurese kinship system, there are 3 cores of kinship, namely *taretan dalem* (nuclear family members), *taretan semma* (close relatives from marriage), and *taretan jhau* (distant relatives from generations of marriage ties or several-degrees-cousins). People outside this system are considered as outsiders, not 'kin.' Even so, in Madura, even though they are considered outsiders, the closeness of community members sometimes resembles those of family as a result of intense social relations. Madurese marriages generally aim to marry among distant a relative, which is referred as *mapolang tolang*. It literally means collecting bones of families whose relationships have begun to drift further away, so that they can regroup and establish closer relationships, particularly in terms of family business' management. Marriages between distant relatives also keep family properties to be inherited by outsiders.

According to Haryanto (2012:198), problems faced by salt farmers include erratic weather changes, constantly changing mud conditions, and salt water characteristics. To solve those problems, salt farmers have done some cultural adaptations. They do not only face the dangers occurring in the environment, but also the use of technology. In Kuwu Village, farming is still largely conducted using traditional methods, namely *klakah*, *blonjong*, *siwur*, *kepyur*, *payon*, buckets, and *kerik*. The research conducted by Rochwulaningsih (2007) was a historical and empirical study describing the lives of salt farmers, especially in the Rembang area, Central Java, who in fact was decreasing in numbers. The practice of salt commodities ensnared and did not benefit the farmers themselves, because it has been influenced by capitalism, which basically had emerged since the VOC era. As a result, the communities of salt farmers (including those in Rembang) are in a marginalized position.

Rochwulaningsih (2013) argued that within community's salt trade system, salt farmers are placed in a weak and vulnerable position, because they do not have direct access to markets. Market structure at various levels of the community and supra-community depict the existence of hegemony of capital owners with a monopolistic market mechanism.

Conclusion

There are several things to conclude based on the research findings. First, most salt farmers come from outside Madura, while those from Madura prefer to change their occupation to shrimp farmers, because it is more profitable and does not heavily depend on seasonal changes. Hence, residential pattern which follows along the coastline for salt farmers has moved into the areas near shrimp farming, following their new occupation.

Second, interaction between communities' members is tightly-knitted. Madurese culture is not only for indigenous Madurese, but also for non-Madurese salt famers who share the same culture by building their houses with the typical *tanean*-shaped housing. Kinship system influences the formation of residential patterns. The kinship system which is based on paternal and maternal lineages provides a space of interaction among people living along the coastline and working as salt farmers. In Madurese society, kinship ties are formed through familial lineages, both paternal and maternal lines. Third, there is a need for a serious dialogue to discuss the problem of irregular salt yields, which cause many salt farmers are out of business and change their occupation to the more prospective ones. This is a scarcity threat of salt production; hence, a mechanism for determining the selling and purchase price needs to be formulated so that it does not harm the farmers.

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