Migration Letters

Volume: 20, No: 8, pp. 830-839

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

Socio-Cultural Studies of Communities in Fishermen's Settlements on the North Coast, Lamongan

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Abstract

It is an irony for a maritime country like Indonesia that in the midst of such a large sea wealth, fishing communities are the poorest group of people, especially in the new normal era of the Covid-19 pandemic. With the specific social and cultural character of fishermen, the economic conditions of the community are low income, the environmental conditions of fishermen's settlements with poor quality, efforts are needed in the arrangement of the neighborhood of its settlements, especially its open spaces, to support the activities of fishermen in meeting the economic needs of their families. Its purpose is to identify, analyze the social and cultural character of its people; identifying and analyzing the socio-culture of coastal against open spaces in the environment of fishermen's homes and analyzing the influencing elements. With the arrangement of these settlements, it can improve environmental conditions and improve the economy of coastal fishing families in the new normal era of the Covid-19 pandemic in Brondong Lamongan. The observation method uses qualitative and quantitative data, phenomenological approaches. Observation area on the North Coast of East Java, sampling, namely fishermen's settlements, Brondong beach in Lamongan. Target, identify and comprehensive study of the socio-cultural aspects of fishing communities in coastal areas. As well as the correlation of socio-cultural aspects to the existence of open space in fishing villages. It is hoped that interdisciplinary studies of environmental science and its sustainability, especially through a sociocultural approach to open up settlement spaces to coastal communities, can develop their relationship with architectural science in fishing settlements.

Keywords: Social; Culture; Fishermen; Fishermen's Settlements; Lamongan.

1. INTRODUCTION

As an archipelagic country, Indonesia has a very large coastal area, coastal areas according to Dahuri et al. (2001) are a transitional area between land and ocean, part of

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the coastal settlements are fishermen. Fishermen's culture is a system of ideas of fishing communities that are used as a reference for socio-cultural behavior by individuals in community interactions, through a long socio-historical process (Kusnadi, 2009). Fishing communities are mostly low income, income affects their ability to manage their residential environment and their lives. environment that contributes significantly to improving living standards and well-being. The hope is that it can provide an open space model that is in accordance with the social and cultural aspects of fishermen, so that the life of fishing communities is more comfortable in the activities, especially fishermen in their work cycles, so as to improve the community's economy in the new normal era of Covid-19. The fisherman settlement observed, is Brondong Lamongan on the North coast of East Java.

The research question is: What is the socio-cultural condition of the community in fishermen's settlements in the new normal era of the Covid-19 pandemic, and its correlation to open space settlements? While the goal is based on the level of problems and the point of view of the review, the research is focused on: Observing and analyzing its socio-cultural characteristics; Identifying and analyzing the social and cultural coastal residents on the open space needs of fishing settlements and analyzing the factors that influence them.

2. THEORY AND METHODOLOGY

Sustainable Coastal Area Development, regional development is land use planning and activities in the space of the region. According to Tarigan (2006), regional planning is to analyze current conditions, foresee various developments of relevant noncontrollable factors, estimate limiting factors, set achievable goals and objectives, establish measures to achieve such goals, as well as establish the location of various activities to be carried out.

There are several characteristics as a reference in preparing a coastal area management program (Sari & Soemarno, 2011) :

- 1. The management of coastal areas should have clear physical (geographical) boundaries of the area to be managed, both perpendicular boundaries of the coastline (towards sea and land) and those parallel to the coastline. Boundaries of coastal areas can be determined according to planning interests and for the benefit of day-to-day management.;
- 2. Coastal area management aims to minimize conflicts of interest and conflicts in the use of resources, so that benefits are obtained in a sustainable and optimal manner, for the greatest prosperity of the people;
- 3. The management of coastal area development is planned based on specifications and dynamics including ecological factors of coastal areas, both chemical biogeophysical and socio-economic-cultural and political;
- 4. Coastal management cannot be with a monodisciplinary approach but must be with an interdisciplinary approach; economics, sociology, engineering, ecology, and others; and
- 5. There must be an institutional order that specifically deals with the management of coastal areas, at the stages of planning, monitoring, and evaluation.

Based on the Law of the Republic of Indonesia, Number 26 of 2007, concerning Spatial Planning that the territorial space of the State of Indonesia which is an archipelago, needs to be improved efforts to manage it wisely, efficiently, and successfully guided by spatial planning regulations so that the quality of regional space can continue in order to realize general welfare, social justice in accordance with the constitutional basis Constitution of

the Republic of Indonesia of 1945 (Penataan Ruang. Ruang Terbuka Hijau (RTH), 2007). Improving environmental quality with the principle of sustainable environmentally sound development, by making designs that are integrated with nature, with the minimum possible damage to the existing environmental order and the design follows the landform (Randy Pratama & Widjajanti, 2016).

Fishermen's Settlements, having specific characteristics, adjustment to the environment is a strategic action aimed at maximizing life chances, as a community that has an orientation to the sea. Such adaptive behavior over a long period of time is symptomatic, at the next stage it is directed in the socioeconomic life of fishing communities. Thus, the specific environment is the same as the marine environment for the fishing communities. In Ratna's research, kinship relationships also influenced the spread of house locations in fishing settlements (Santoso & Idawarni, 2014). The fishing village is a specific, dynamic, unique area and very rich in habitats both marine and land. The environmental conditions of fishing villages have a certain pattern with the main elements in the form of: Place of drying of caught fish; Boat mooring place; Fish sales or fish auctions; Settlements of fishing communities (Sulistyo & Widjajanti, 2018). This area has many benefits for both the community, private sector and government and more and more people need it even though the area is very limited, so in this area there are often conflicts of interest between parties who need it. This is supported by the results of previous studies which stated that re-settlement by the government actually made a decrease in the development stage of a fishing village (Ahmad et al., 2010). The theory of regional structuring and development must be based on two-way interactions (man-environment studies). Man-environment studies, which is a study of mutual interaction between humans and the surrounding environment (related to three variables):

- 1. Human characteristics as shapers of the character of the environment;
- 2. The physical and human environment; and
- 3. Mechanisms that connect between humans and the environment in a two-way interaction.

The research location, conducted by purposive sampling, was carried out in the north coastal area, namely fishermen's settlements in Brondong, Lamongan Regency. The population in this study is the residents of fishing villages.

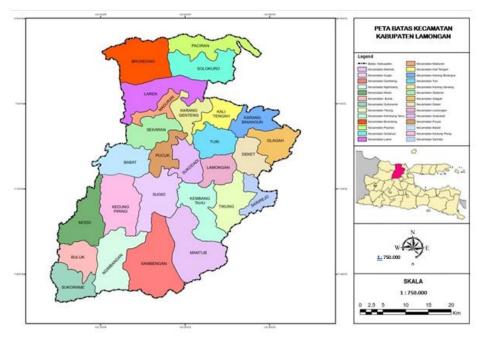


Fig 1. Map of Subdistricts in Lamongan Regency

Source: Satellite map, 2020

Research Design, with a phenomenological approach, with combination research methods (Mixed Methods), Concurrent Embedded (unbalanced mixture), rationalistic models that combine qualitative and quantitative research. Through case studies, seeking to examine the social and cultural conditions of fishing communities related to their open spaces, with instrumental type, treating the case of fishermen's households as an instrument for understanding living conditions in fishing communities.

3. RESULTS AND DISCUSSION

3.1 Existing Conditions

Socio-cultural, the socio-cultural conditions of the fishermen go to sea, with irregular sailing hours, depending on the tides of the sea. Fishermen's daily activities, leaving for sea at 22.00-03.00, coming at 06.00-12.00, the cargo is immediately unloaded and sold at the TPI, so that the fish are fresher. The buyer is a tourist and/or agent (distribution). The result of daily seafaring is approximately 1 quintal. Weekly activities, can produce 7ton-8tons. Fishermen sail far to Kalimantan, Sumatra, Sulawesi, approximately up to 10-20 days. At least 12 fishermen take part in weekly sailing. The ship and the average owner of the natives. As for the monthly activities, if the fisherman comes at 03.00, the fish are immediately unloaded. Disassembly avoids the sun, the fish are afraid of rot or damage. In addition to catching fish, the fisherman also processes, and further sells the caught fish. Fish products commonly obtained in this area include: snapper, cob, brass, bukur, shrimp, squid, and crab. In addition to being sold, seafood is also processed traditionally, namely by harvesting, drying, making shrimp paste, and making condiment of the fermented fish or shrimp. For modern processing, namely by processing it into flour, nuggets, and cold storage. When the fisherman does not go to sea, his life is only repairing the ship ("Baratan" time). In 1 month, fishermen go to sea at least 1 time. For 10-20 days at sea, 5 days on land (rest), and 5 days unloading seafood. Fishermen can also repair nets when not going to sea, parking small boats in their respective villages by the sea.







Figure 2 Results of Going to Sea and Sorting Out the Results of Going to Sea by Fishermen

Traditional institutions, the annual culture of fishermen in Brondong Lamongan when there are westerly winds or strong winds and big waves. Fishermen's cultural activities include: closing the kite and picking the sea (going to sea), sea ritual events do not exist, but only in the form of dances, orchestras and recitations. The activity is held during the westerly winds and big waves, in December-February. This cultural activity is known as "tutup layang", which is when the weather is bad, the fishermen stop going to sea, hold dances, and Qur'anic recitations. While the "petik laut" event is carried out before going to sea when the weather is good, the activities carried out are recitation and tayuban. Ritual events: 5 days – 7 days, orchestra, tayuban, recitation, which is held in January-February. Previous fishermen's ritual events such as the sailing of small boats and float of buffalo heads are no longer carried out now. This is because the north coastal communities are now more religious.

TPI activities, fish sales at 06.00 to 12.00, activities at TPI are buying and selling fish, processing brass fish and bukur fish with skin separation for chicken feed processed at the QL factory, Sedayu Lawas Village. Fish meat and fish heads are processed in fish processing factories into nuggets in Kandang Village & Brondong Village, KUD, East Java and Jakarta. At the TPI location, there are retails rented out to residents for a temporary processing process, renting one retail 80 million / year. The types of fish caught that dominate in TPI Brondong, namely squid, snapper, brass, cob, bloated, anchovies, crabs, layur, mackerel, stingrays, and others.





Figure 3 Fish From Going to Sea

3.2 Socio-Cultural of Fishermen's Settlement Communities

The socio-cultural conditions (eco spatial behavior) of fishing communities have their own specifications, showing a characteristic of rural communities, which is shown by the presence of familiarity, friendship, togetherness between neighbors, even though the environment is already urban. This condition is not wrong, because some of the residents are immigrants. Thus the character of rural life still dominates their socio-cultural system of behavior.

The fishing community of Brondong Lamongan, that the majority of the last education from the fishermen is 50% junior high school (SMP) graduates. Meanwhile, the fishermen's wives graduated from high school by 44%. This condition affects the lives of fishing communities, with a low educational background making it limited in innovating in increasing productivity, which has an impact on the level of welfare of coastal communities. Based on the results of the questionnaire, the system of division of labor of fishing communities based on gender, fishing activities are carried out by husbands while the wives of fishermen's activities are waiting on land. In previous studies that fishing communities have a sex-based division of labor system (Kusnadi, 2009). For the livelihood of the heads of fishermen's households are as fishermen, the wives of fishermen to help the survival have other sources of income, apart from being housewives by 70%, and the remaining 30% work to help husbands related to marine products, work in factories as laborers and cake making businesses and shop businesses.

The activities of fishermen's wives who help make a living for family needs related to the results of their husband's seafaring, carry out activities to sort fish from going to sea based on the size of the fish and the type of fish. Then for fish whose large size is weighed in VAT and sold to middlemen or traders with large capital, while fish that are small in size are cleaned to be processed into salted fish. This activity is carried out in the open space around the pier, because there is indeed no special place for these activities in the neighborhood where they lives.





Figure 4 Fisherman's Wife Works sorting and Cleaning Seafood at the Pier

The activities of the fishermen's wives, some of whom work in fish processing factories as laborers, by carrying out activities to clean up marine products that will be processed into sardines or fish nuggets.



Figure 5 Fisherman's Wife As A Factory Worker Cleaning Seafood

Based on the results of the questionnaire, it is known that the residents of the Lamongan fishermen's settlement are dominated by the indigenous Lamongan people who certainly have a Javanese cultural background and settle in the fishing village. Based on the length of stay, 70% of fishermen live in the Brondong Lamongan fishing settlement for >20 years, so most of the people live in the area for a very long time. This shows that they are already integrated with coastal nature and that survival depends on the suitability of the place of residence.

A survey of residents of fishing village communities was conducted to find out how to picture the environmental behavior response (eco-spatial behavior) based on visible behavior or attitudes and behaviors that are not visible. From the total sample, an eco-spatial picture of community behavior was obtained based on their total answer score. The total score that can be obtained is 80-382, if the score results are between 80-179, then it gives an idea that the ecological spatial behavior owned by the community is low, if the total score obtained is 180-281, then the ecological spatial behavior owned by the community is medium or ordinary and if the total score obtained is 282-382, then the ecological spatial behavior owned by the community is high. In the Brondong Lamongan fishermen's settlement, the majority of residents showed a fairly high total score, which was 330 with an average total overall score obtained was 321.5 which gave an idea that the ecological spatial behavior of the Brondong Lamongan fishing village community was high.

3.3 Effectiveness of Open Space Utilization in Fishermen's Settlements A place of socialization between citizens

In each settlement, especially fishing villages, they have their own characteristics in choosing a place to socialize with other residents. This shows that the spatial hue of fishing settlements has an influence on the way a person chooses a place to socialize. open space has benefits for social activities, namely for communicating and socializing, a

place to play and exercise; and as an ecological benefit, namely to add to the aesthetics of the building, overcome rainwater, the air becomes fresh, maintain and maintain the balance of the ecosystem.

For places to socialize fishing communities, use community institutions in each Brondong Lamongan settlement, including the PKK, youth organization, fishermen's groups, religious organizations, and so on. The community in carrying out these activities can be in buildings or in open spaces.

Open space for socialization activities between residents of the fishing community in Brondong Lamongan, can be seen as follows:





Figure 6 Fisherman's association and Fishermen's Youth Association in Brondong Lamongan





Figure 7 Coastal Settlement Neighborhood Road in Brondong Lamongan

A place of gathering and cultural expression

Fishing communities, as a collective social unit of communities living in coastal areas with their livelihoods fishing in the sea, whose patterns of behavior are bound by the prevailing cultural value system, have a common identity and boundaries of social unity, a steady social structure, and a society is formed due to the same social history (Kusnadi, 2009). In the Brondong Lamongan fishing settlement, each has a different community culture in response to coastal ecology. According to Koentjaraningrat (2005), fishing communities interact with the coastal living environment, coastal nature becomes an important binding element, and they are subject to nature, maintaining a harmonious relationship with coastal nature.

For a place of gathering and cultural expression, in the fishermen's settlement of Brondong Lamongan is held in an open space that is in the Lamongan VAT. Cultural activities of fishermen include: "tutup layang" and "petik laut" (set out to sea). Cultural activities called tutup layang, namely during bad weather, fishermen stop going to sea, hold dances, and recitations. The activity was held during the westerly winds and big waves, in December- February. Petik laut event is held before going to sea when the weather is good, the activities are recitation and tayuban. Ritual events: 5 days-7 days, Orchestra, tayuban, recitation is held in January-February.

3.4 Public Perception of the Function of Open Space

The perception of community members towards the function of open space in the fishermen's settlements they inhabit includes: social functions, economic functions, and cultural functions. The majority of the Brondong Lamongan fishing community stated that the social function of the open space in which they live is categorized as good 62.5%, while 31.25.% and 6.25% are bad; for economic functions categorized as good 37.5%, medium 56.25% and 6.25% bad; while for cultural functions categorized as good 12.5%, medium 37.5% and 50% bad. The three components of public perception of the function of open space when accumulated reached the good category of 37.5%, which is categorized as moderate 41.67%, and 20.83% in the bad category.

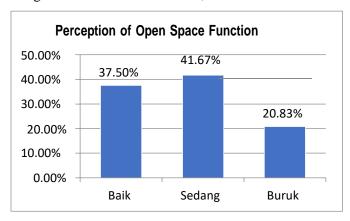


Figure 8 Public perception of the function of open space in Brondong Lamongan

Based on the description above, it turns out that the fishing village of Brondong Lamongan can fulfill the function of open space needed except for the function of open space for economic and cultural activities. The majority of the residents in the fishing village have lived in the fishing village for more than 20 years, so they have considered the settlements they inhabit to be 'hometowns'. Meanwhile, the public perception that fishermen's camps as settlements without open space, slums, and cannot reflect self-actualization, did not fully occur in the fishermen's settlement of Brondong Lamongan. This is due to the visible behavior of the fishing community in the preservation of environmental functions, so that the environmental conditions are quite good. From the 3 components of the perception of residents of fishing settlements towards their open space in their place of residence, in the fishing village of Brondong Lamongan, an overview of the perception of community residents towards the function of open space, moderately perceived at 41.67%.

3.5 Social behavior of community members towards the use of open space in fishing settlements

The perception of the social of the community that is observed to determine social behavior is the perception of the community towards the realness, community participation and tolerance between residents in the use of open space. The results of the observations showed that the majority of residents of the Brondong Lamongan fishing village community based on the difficulty, stated that they were at home 87.5%, were 6.25% and were not at home 6.25%; while community participation is good 75%, medium 21%, not good 4%; and good social tolerance 84%, medium 13.2%, and bad 2.8%. The average value of the 3 components of perception related to social behavior towards the use of open space in fishing villages is good 82.17%, medium 13.48% and not good 4.35%. This can be understood because most of the residents have lived >20 years, so the residents of these communities have succeeded in adapting to their environment.

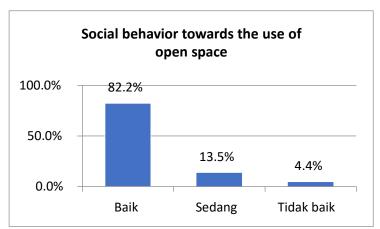


Figure 9 Social behavior of the community towards the use of open space in Brondong Lamongan

3.6 Analysis of Socio-Cultural Relations to environmental conditions

After it was known from the results of the correlation test that the variability of behavior appeared in the preservation of environmental functions related to environmental conditions, then a regression analysis will be carried out to find out how much behavioral culture appears on the preservation of environmental functions to have an influence on environmental conditions.

Based on the results of the anova test on regression analysis, the results were obtained that the regression model formed as a whole was significant, which means that there is at least 1 parameter or significant regression coefficient in the formed model.

Based on the results of regression analysis, the following model was obtained: Environmental conditions = -0.125; 1.128 Behavior appears to be in the preservation of environmental functions. Both coefficients on the model are individually significant.

The R-Square of the regression model formed was 32.8%, meaning that environmental conditions influenced by behavioral variables appeared in the preservation of environmental functions by 32.8%.

3.7 Analysis of Socio-Cultural Relations to the Availability of Open Space

After it is known from the results of the correlation test that the variability of invisible behavior is related to the availability of its open space, then a regression analysis will be carried out to find out how much the culture of invisible behavior is in environmental care attitudes, attitudes of mental adaptation and environmental coping, motivation to improve welfare, organizational awareness, have an influence on the existence of open spaces.

Based on the results of the anova test on regression analysis, the results were obtained that the regression model formed as a whole was significant, which means that there is at least 1 parameter or significant regression coefficient in the formed model.

Based on the results of regression analysis, the following model was obtained: The existence of open space = 0.372; 0.487 Organizational awareness. Both coefficients on the model are individually significant.

The R-Square of the regression model formed was 14.9%, meaning that environmental conditions were influenced by the organizational Awareness variable by 14.9%.

4. CONCLUSIONS

Fishermen's settlements need regulations to maintain harmony and integration, the availability of limited space, and the understanding of citizens about the importance of spatial planning, to create sustainable settlements. Socio-cultural considerations of coastal communities in the development of coastal areas accommodate the involvement of local resources, both natural resources and human resources in the planning of development and development of coastal areas. Thus, the foundation of local knowledge becomes one of the potentials for local communities and all related parties in facing problems and developing their territories in achieving welfare and sustainability. In environmental protection and management, they must pay attention to the socio-cultural values that apply in the living system of the community.

References

- Ahmad, Y., Ismail, M. A., & Ng, W. (2010). The Impact Of Re-Settlement Program On Social And Built Form Of Existing Fishermen Village In Kuala Kedah Malaysia. Journal Of Architeture, Planning& Construction Management, 2(2). https://journals.iium.edu.my/kaed/index.php/japcm/article/view/503/387
- Dahuri, R., Rais, J., Ginting, S. P., & Sitepu, M. J. (2001). Pengelolaan sumber daya wilayah pesisir dan lautan secara terpadu. PT. Pradnya Paramita.
- Koentjaraningrat, R. M. (2005). Pengantar Antropologi II: Pokok-pokok Etnografi. Rineka Cipta.
- Kusnadi. (2009). Keberdayaan Nelayan dan Dinamika Ekonomi Pesisir. Ar-ruzz Media.
- Randy Pratama, S., & Widjajanti, W. W. (2016). Pattern design tourism village in Borneo border area. International Journal of Applied Engineering Research, 11(16).
- Santoso, H. R., & Idawarni. (2014). Family Structure And Its Influence On Settlement Design For Fishermen, Aengbatu Indonesia. International Journal of Education and Research, 2.
- Sari, A. N., & Soemarno. (2011). Ekosistem Pesisir: Analisis dan Valuasinya. PPSUB.
- Sulistyo, B. W., & Widjajanti, W. W. (2018). Assessment of the existence of green open space in fishermen village, Surabaya. AIP Conference Proceedings, 1977. https://doi.org/10.1063/1.5042973
- Tarigan, R. (2006). Perencanaan Pembangunan Wilayah (2nd ed.). PT Bumi Aksara. Penataan Ruang. Ruang Terbuka Hijau (RTH), Pub. L. No. 27 (2007).