

Self-Actualization of Contemporary Era Coastal Muslim Communities (Study on the Survival Strategy of Coastal Communities in Sayung District, Demak Regency)

Ririh Megah Safitri Universitas Islam Negeri Walisongo Semarang, Indonesia ririh.megah.safitri@walisongo.ac.id Naili Ni'matul Illiyyun Universitas Islam Negeri Walisongo Semarang, Indonesia Masrohatun Masrohatun Universitas Islam Negeri Walisongo Semarang, Indonesia

Abstract — The complexity of the contemporary era requires society to adapt to various changes and demands of the times, including coastal Muslim communities. The development of technological devices and the massive flow of information have also placed coastal Muslim communities as part of global society. This has a practical impact on the identity construction process and various community activities. This study focuses on the forms of adaptation and negotiation of coastal Muslim communities in Sayung District, Demak Regency in responding to changes in the contemporary era. The geographical and topographical location of the Savung coastal area has left a latent problem for the community, namely prolonged tidal flooding. This is a special condition that must be addressed by coastal Muslim communities to survive, bearing in mind that prolonged tidal floods often have the potential to marginalize coastal Muslim communities. Qualitative research methods with a descriptive narrative approach are used to examine the experiences and meanings of society. In this context, the theory of social capital is used to portray the self-actualization of coastal Muslim communities through the trust that is built between individuals, the construction of social norms and efforts to build networks with other stakeholders. There are three main findings in this study, the first is the socio-cultural-religious historical value which becomes the philosophy of life and binds the social relations of coastal Muslim communities. The second relates to the process of constructing social norms which represent the process of adaptation of coastal Muslim communities in responding to various social changes. The third refers to various community efforts in building relationships with elements of government and religious leaders, especially in formulating policy formulations as an effort to find problem solving for problems that arise in people's daily lives.

Keyword — self actualization, survival strategi, coastal muslim communities

I. INTRODUCTION

A comfortable and safe environment is becoming one of the most important things in everyday life. But unexpectedly, the inhabited environment continues to change, reducing the comfort of living. This environmental change has hit the world the impact of global warming, including in Indonesia precisely in the village of Surodadi, Sayung district, Demak. Every day the community is active surrounded by a flood of robs. Every day they struggle with water spills because the land of the Demak coastal area is declining, the sea level is rising, and the coastline is changing. The abrasion rate in Sayung reached an average speed of 13,08 meters/year in the period 2013-2020 and a rate of accretion of 8,22 metres/year [4].

Tidal flood (rob) in Demak is the impact of climate change caused by natural conditions and human activity. Specifically, this is due to the reclamation of the Marina Beach and the development of the industry area of the city of Semarang that borders directly with Sayung Demak [1]. This flood also has an impact on various aspects, including in terms of economics. The economy of the people of the village of Surodadi has undergone many changes after the flood began to enter the settlements and destroy the farmland of the villagers and the fields belonging to the residents. The destruction of the cave and the residents' debris has changed their income significantly. A similar fate is experienced by fishermen. The capture is not as good as before. The income now is not enough to buy solar and meet basic needs. Some people switched their professions from grain farmers and chose to work outside the village such as laborers, factory workers, traders and other jobs. Environmental change has really transformed the existing economic sustainability.

To deal with such circumstances, people need a strategy of resilience and good adaptability. Some choose to survive in that village, some choose to migrate to a safer place. It is influenced by the economic conditions, opportunities, and also by the historical experience of a person with his place of residence [5][6][7][8]. According to an informant's statement, the majority of the people of the village of Surodadi Sayung Demak chose to survive in their village because the kinship system is close that it is difficult to leave the village. In anticipation of the flood robbery, residents raise their houses on a regular basis and they work together on a variety of things including asking for donations to raise roads and cope with the floods because the government's road construction assistance is insufficient.

Several research have been conducted related to survival strategy and adaptability. Cahaya (2015) [9] found that social capital such as cooperation, mutual trust, mutual help, and kinship used to survive among poor families of fishermen. Another thing is that local institution successfully helped them to survive. Harini et al. (2017) [10] focused on survival strategy in facing the impact of tidal floods in communities of

© The Author(s) 2023

two villages. It showed that this flood damage to environment, sociocultural life, physic, economy, health, and education in both villages. Awumbila and Yaro (2016) [11] argued that the effects and role of social capital's networks on livelihood strategies and migration processes in Accra Ghana is based on specific context. Buchori et al. (2018) [12] claimed that most of people in coastal areas prefer to stay rather than move since they have close relationship and being comfortable with their community. Mashi et al. (2020) [13] focused on community perception about flood in Africa. Socio-cultural and income become dominant factors affecting flood adaptation, meanwhile they only have traditional action to reduce flood impacts and have no flood warning system. Imperiale and Vanclay (2016) [14]; Kim and Marcouiller (2016) [16]; Filho et al. (2017) [15] claimed that resilience of local community in facing disaster with great awareness and strong support in order to deal with social and economic impacts during their difficult time. Moreover, Lloret et al. (2016) [17] added biological perspective in managing coastal fisheries through cooperation among governments, stakeholders, and research institutions. Islam and Hasan (2015) [18] focused on how natural disaster affects people migration because of insecurity, health problem, lack of housing and public services. Different from that research, Malak et al. (2020) [19] found the elderly have high vulnerability during cyclones in coastal Bangladesh. To increase their adaptability, the government, NGO, and stakeholder need to pay attention. Neise and Diez (2019) [20] analyzed on flood survival strategies among firms in Jakarta and Semarang Indonesia. Medium and large size firms have better and more effective adaptation to flood.

Based on that background, this paper aims to identify the values that characterize the social relations of coastal Muslim communities, the experiences and adaptation processes of the coastal Muslim community in responding to various social changes, as well as various efforts of the community in building relations with stakeholders in finding problem solving in every life.

II. RESEARCH METHOD

This research is a field research using qualitative research methods with a descriptive narrative approach. Qualitative research [21] here covers the interpretation and natural approach to a subject of study by revealing phenomena or events and presenting a picture of what actually happens. The data excavation included empirical data from field records, interviews, conversations, photographs, and recordings. Data depth and quality are heavily emphasized in qualitative research.

Data collection in this study will be carried out in several ways including live observation, in-depth interviews, and document study. First, direct observation. The researchers will look at and observe the activities initiated by the Society in the village of Surodadi Sayung Demak in the context of the survival strategy and the process of adaptation to the flood. In this observation, the researchers recorded the activity in the field note [22].

Second, an in-depth interview. The interview will be conducted in greater depth relating to data needs and questions which are not mentioned yet in the interview guidelines. The interview technique to use is a semistructured interview, which is to write a list of questions to help the researchers conduct the interview. This makes it easier for informants to freely express their opinions and follow the course of the conversation. As for the informant selection technique used, the snowball or chain sampling method is to select the informer recommended by the previous informer according to the defined criteria [23] which starts from the village device as the key informer so as to obtain several subsequent informants who are able to give a valid and comprehensive picture. The village device provides an overview of the profile of the village and the general activities of the community. Then the recommended informants provided information related to the adaptation process and the survival strategy in the village in both economic, social, and religious aspects.

Third, documentary/literary studies are secondary data that will provide information related to the subject of research. This last step helps researchers to re-verify information derived from observations and interviews so that valid data can be obtained.

In the process of data analysis, researchers perform in several stages namely data reduction, data presentation, and conclusion drawing [21][24]. The first phase is data reduction in which researchers will identify data obtained in the field, perform data coding, then data relevant to the topic will be selected while data less relevant will be reduced. The second stage is the presentation of data by performing the classification of data based on the coding of data that has been obtained. The results of the classification of such data are then elaborated with inductive analysis techniques in which researchers will look from things of a special nature to the general. Using a proper analytical theory and previous studies, the researchers then interpreted the data so that they obtained a systematic result. The last step is to draw conclusions by verifying the data that has been studied based on the formula of the problem.

Adaptation and Negotiation of Coastal Muslim Communities

Along with the dynamics of technological developments in the contemporary era, changes in the geographic and demographic landscape have also become vital elements that determine people's lifestyles. In this context, the geographical and demographic landscape requires people to make adaptation efforts in order to survive. Like the coastal Muslim community in Surodadi Village, Sayung District, which continues to strive to maintain the quality of life in the midst of the process of adapting to environmental changes and changing times. The main problem that surrounds the daily life of the people of Surodadi Village, Sayung District is the prolonged tidal floods. Floods caused by rising sea levels are increasingly unpredictable due to weather anomalies caused by global warming. Practically, tidal floods inundated almost the entire area of Suradadi Village, Sayung District. In this context, society is required to be able to adapt to various derivative problems caused by tidal floods, both in the context of environmental planning, economic activities, social religious activities, and efforts to maintain cleanliness and health.

Geographical details of Surodadi Village, Sayung District, stretches on the edge of the Java Sea with an area of 510 Ha, where 83% (425.5%) of the land is used by the community as fish ponds (Demak, 2021). This is in line with

the livelihood background of the majority of people as fishermen and pond farmers. The geographical location close to the sea is a stimulant for people to use their land as ponds for tiger prawns and milkfish. If we refer to the results of the 2020 population census, the population of Surodadi Village, Sayung District is 2,955 people with a population density of 579/km². Administratively, Surodadi Village is divided into 4 hamlets, namely Deling Hamlet, Surodadi Hamlet, Gandong Hamlet and Baru Hamlet. The Surodadi Village community is classified as a homogeneous society when viewed from a socio-religious perspective, this refers to the Islamic religious practices inherent in the community's daily activities. Apart from that, the people of Surodadi Village also have the same ethnic background, namely Javanese ethnicity. This homogeneity then gives rise to solidarity and good social ties between communities, especially in responding to various actual problems caused by changes in environmental conditions.

Changes in the geographical landscape of Surodadi Village, Sayung District, have been recorded since 2000. Referring to the 2000 demographic data for Sayung District, there has been a significant change in land use from rice fields or moors to fish ponds. This is the community's economic strategy in responding to rising sea levels as a result of tidal floods. The prolonged intensity of tidal floods causes residents' rice fields and dry fields to be submerged and cannot be optimized for farming. Therefore, the community made a livelihood transition to becoming pond farmers with the commodities of milkfish and tiger shrimp. Recently, mussels have become a new commodity along with the massive tidal floods that have occurred in residential areas and pond areas. Tidal floods that inundate pond areas also bring milkfish and shrimp, so they can harm the community both materially and non-materially (energy and time during the breeding process). Therefore, shellfish have become an alternative commodity, even though the harvest value is not always high, shellfish do not require extra care like milkfish or shrimp. Thus, when tidal floods occur in the ponds, the farmers do not suffer too much. This refers to exposure:

"Previously, before the tidal floods were this high, ponds could still be planted with milkfish, even though they were filled with a small amount compared to before, which used to be tens of thousands of milkfish seeds. But after the high tidal floods we didn't plant milkfish because they often ran away. We change the shells or we leave them alone but sometimes they are netted every few months. And we chose to work as freelancers" (Informan 2, the people of Surodadi Village, Sayung District).

The livelihood transition becomes a complex dynamic in the daily life of the people of Surodadi Village. In this context, society is not only required to adapt to changes in natural conditions but also must develop strategies to maintain the family's economic welfare. The livelihood transition process is a difficult process considering that not all people have the skills to farm milkfish, tiger prawns and shellfish beforehand. In other words, all the skills in managing ponds are obtained by self-taught. Until now, the community continues to make adjustments to their livelihoods due to the large impact of tidal floods which can no longer be predicted regarding the time and extent of submergence in the area. So many people are starting to look for alternative jobs as industrial workers, construction workers and traders as alternative livelihoods. The trend of shifting jobs to the industrial and building sectors is a new phenomenon for most young people of productive age.

In the midst of the era of globalization and the mainstreaming of digital technology as a support for people's lives in the era of society 4.0, the people of Surodadi Village, Sayung District, continue to strive to actualize themselves and maintain their existence both in an economic, social and religious context. Various adaptations and negotiations are represented in people's daily lifestyles. In this context, the Surodadi Village community optimizes social capital as a vital element in formulating social relations and actions that refer to solving actual problems, particularly those related to environmental degradation. Referring to Coleman (1988) [2] social capital includes a number of aspects of social structure and makes it easy for people to do things within the framework of that social structure. The aspect of social structure creates a social network that keeps everyone connected to each other in such a way that obligations and sanctions can be imposed on everyone who is a member of the network. In addition, the existence of social organizations can be used to achieve common goals which in this context refer to self-actualization and self-existence of coastal Muslim communities in the digital era. In this regard, Coleman underlined the operationalization of aspects of intercommunity trust in social structures, norms that apply as a binder of social structures and networks between individuals as the main elements in the operationalization of social capital [2].

The people of Surodadi Village, Sayung District have high social ties, considering that one of the backgrounds in choosing a place to live in the Surodadi Village area is based on kinship ties. In fact, many of the people of Surodadi Village have kinship relations with one another. This then gives rise to strong social bonds including a sense of trust that is built in social relations in society. The fact is that kinship relations between communities also underlie the decision to remain in the Surodadi Village area, Sayung District, even though it is covered with thorny problems related to environmental degradation, especially tidal floods. In this context, the people of Surodadi Village have to raise the house area regularly to anticipate tidal flood water entering the house. Usually the house elevation cycle occurs once every five years with a 1 meter elevation capacity. Another thing to do to minimize the impact of tidal flooding is by raising roads, especially roads in residential areas. Road elevation is usually carried out with assistance schemes from the village government and cross-subsidies between communities. Road elevation must be carried out to facilitate community mobility during tidal floods. So, community activities can still be carried out even though tidal floods are still submerging settlements. Raising houses and roads is a routine program that must be carried out by the community at a significant construction cost. In the midst of the complicated impact of the rob, the people of Surodadi Village, Sayung District, are still trying to maintain their hometown as a place to live because of several things, including kinship ties, social experiences that cannot be found anywhere else, to land assets that cannot be abandoned. This is in line with the statement:

"The tidal floods have been going on every day, but the height and low of the submergence cannot be determined. if you happen to be tall, you can enter the house, especially if the house is short. Tidal floods also cannot be predicted, sometimes in the morning, afternoon, evening or early morning. not sure either because it can no longer be predicted with months and seasons. In fact, now we often see information from cellphones. The house continues to rise and many families live here. from parents, grandparents and other relatives... so it's comfortable living here, for example, if there is a tidal flood problem, it can be solved together, because everyone here is also affected by tidal floods.." (Informan 3, the people of Surodadi Village, Sayung District).

The excerpt from the interview above confirms the decision of the people who want to remain in the area of Surodadi Village, Sayung District, which incidentally is prone to tidal floods. This relates to social bonds that have been formed from aspects of kinship and shared experiences that are built from every community's daily activities. On the other hand, the community's efforts to anticipate the impact of tidal floods also build a sense of shared destiny. So it actually strengthens the sense of solidarity between communities. Referring to Coleman (1988) [2], hope arises from a sense of trust in a social environment. In line with the context of the people of Surodadi Village, Sayung District, the tidal flood disaster actually formed a shared experience that strengthened social bonds and trust between communities. In this context, social bonds and trust between communities also bring hope to continue to live in Surodadi Village, Sayung District.

The risk of tidal floods which have the potential to submerge coastal areas, including Surodadi Village, Sayung District, has been heard by some people. Recently, issues related to the potential for coastal areas to be submerged have received public attention, especially on social media. Despite this, the people of Surodadi Village are still trying to carry out their daily activities. Various forms of community adaptation and negotiation are also represented through socio-religious activities. Most of the people in Surodadi Village, Sayung District, are Muslim with religious practices that refer to Nahdhatul Ulama (NU). Thus, many religious practices are carried out collectively, such as routine recitations, yasin, tahlil, mauludan, pidak kubro, death recitations, suran porridge, manakiban, dibaan, barianien and various pregnancy commemoration rites. These religious practices are carried out collectively and periodically by residents, both adults, teenagers and children. Apart from being a religious ritual carried out by followers of the Islamic religion-NU, these various religious activities also form social bonds between communities. In this context, religious leaders have a central role in efforts to self-actualize coastal Muslim communities. Not only coordinating religious activities, in this context charismatic religious figures also play an important role in formulating social norms that become agreements between communities, including anticipating dangers that arise due to tidal floods.

The process of community adaptation and negotiation is manifested in the construction of social norms and agreements, especially in terms of religious practices. In this context, religious leaders play a central role in norm construction efforts, such as adjusting routine agendas to suit the economic conditions of society. Tidal floods which often inundate village areas practically cause people's income to decrease because pond commodities are flooded or economic activities are disrupted because road access is submerged in tidal floods for several days. More than that, another impact of prolonged tidal floods is damage to the structure of houses due to seawater inundation. In addition to submerged houses. sea water also weathered the foundations of residents' houses. Thus, the community has to pay for the repair and elevation of the house every four or five years. The dynamics of the family economy as a derivative impact of tidal floods is one of the considerations in the construction of social norms and agreements in the context of religious practice. Several socioreligious norms and agreements that were formulated as a form of negotiation when tidal floods were occurring included changes to the location of routine studies, changes to implementation times and adjustments to food and drink offerings to study participants (adjusting the economic capabilities of the study organizers). Coleman (1990) [3] emphasized that social norms and agreements are oriented towards creating harmonious social conditions as a form of community commitment in implementing these norms or agreements. This is in line with the situation and social conditions of Surodadi Village, where religious practice is one of the elements that actually strengthens social ties between communities. Commitment and implementation of social norms and agreements in the context of religious practice actually strengthens the existence and selfactualization of the people of Surodadi Village, Sayung District.

The potential for natural disasters that accompany the daily lives of the people of Surodadi Village, Sayung District, practically stimulates various stakeholders to formulate forms of anticipation and solutions. In this context, the community coordinates and builds relationships with relevant stakeholders in order to optimize the tidal flood anticipation program, both formal and informal programs (program initiatives from the internal community). In the formal context, the people of Surodadi Village through the village government and youth organizations optimize good relations with the sub-district and district level governments to obtain allocations for natural disaster management assistance. In this case, assistance from the central government will be used for the construction of a sea wall and the elevation of the village's main road. This is oriented to minimize the impact of robberies on mobility and community activities. Bearing in mind that standing tidal water can hamper community activities both in the context of economics, education, health and religious practices. Apart from being in the form of materials, central government assistance has also taken the form of programs to build public facilities such as the construction of village offices and mosques or prayer rooms in the Surodadi Village area.

In the informal context, the community optimizes personal relationships and potential, especially in the framework of social assistance fundraising. Usually the community will manage the social assistance fundraising schedule in each RT (Rukun Tetangga) area. Fundraising for social assistance can be concentrated on the main road or the Demak-Semarang arterial road. The choice of location for raising social assistance funds in the main road area was motivated by the location of Surodadi Village, which is right on the edge of the Java North Coast route (Pantura), so that many large vehicles pass it. It is hoped that road users who also pass through the Pantura route can donate funds for road elevation or the construction of a sea wall. On another occasion, the community also took advantage of social relations with industrial companies domiciled in Sayung District and its surroundings. This is an added point for the community because there are industrial areas in the Sayung District, such as the Jatengland Industrial Park Sayung Area. In this context, the community takes advantage of the management of CSR funds from every company operating in the Jatengland Industrial Park Sayung area. This refers to residents' exposure:

"Official assistance from the village government will usually be used to raise the road, but not all of it because the large area of land is not enough. but mostly it is for physical development. This road, which has been raised with village funds, also only lasts a short time because tidal floods are getting higher every year. so usually aid funds are used to elevate the road. when there is no assistance from the village and district governments, residents usually seek funds by raising social assistance funds on the streets. because it's a pity that the people have to elevate their houses and roads every five years at least 50 cm. usually residents even elevate their house 1 meter. residents and youth organizations usually also distribute proposals for assistance to industrial companies to seek financial assistance from companies around here". (Informan 3, the people of Surodadi Village, Sayung District).

Based on the explanation above, it can be seen that the community is optimizing their relationships and self-potential in efforts to overcome the impact of tidal floods. In this context, the community formulates strategies based on the potential of each group, such as youth groups, RT associations, and PKK groups. Referring to Coleman (1988) [2], the importance of social relations and the smooth flow of information within the social structure to encourage the development of activities in society. This is an important point in efforts to overcome tidal floods and minimize the impact of tidal floods for the survival of the people of Surodadi Village, Sayung District. Especially in responding to weather anomalies which have a significant impact on the massive intensity and extent of tidal flooding.

III. CONCLUSION

In the midst of the dynamics of global development, the fact is that the people of Surodadi Village, Sayung District, still have to adapt to the issue of environmental degradation, especially tidal floods. In fact, tidal floods have become routine for the people of Sayung Village, Demak District. In this context, the community has found various anticipatory strategies in order to minimize the impact of tidal floods so that they do not hinder people's daily mobility. There are three main findings in this study, the first is the socio-culturalreligious historical value which becomes the philosophy of life and binds the social relations of coastal Muslim communities. The second relates to the process of constructing social norms which represent the process of adaptation of coastal Muslim communities in responding to various social changes. The third refers to various community efforts in building relationships with elements of government and religious leaders, especially in formulating policy

formulations as an effort to find problem solving for problems that arise in people's daily lives.

REFERENCES

- Asiyah, S., Rindarjono, M.G., & Muryani C., 2015. Analisis Perubahan Permukiman dan Karakteristik Permukiman Kumuh Akibat Abrasi dan Inundasi di Pesisir Kecamatan Sayung Kabupaten Demak Tahun 2003-2013. Jurnal GeoEco, 1(1):83-100.
- [2] Coleman, James S. (1988) 'Social capital in the Creation of Human Capital' American Journal of Sociology 94: S95-S120.
- [3] Coleman, James S. (1990) Foundations of Social Theory. Cambridge, Mass: Harvard University Press.
- [4] Y. P. Ramadhani, I. Praktikto, and C. A. Suryono, "Perubahan Garis Pantai Menggunakan Citra Satelit Landsat di Pesisir Kecamatan Sayung, Kabupaten Demak," Journal of Marine Research, vol. 10, no. 2, pp. 299-305, May. 2021. https://doi.org/10.14710/jmr.v10i2.30468
- [5] Klaiber, H. Allen, 2014. Migration and household adaptation to climate: a review of empirical research. Energy Econ. 46 (November), 539–547. https://doi.org/10.1016/j.eneco.2014.04.001. Elsevier B.V.
- Koerth, Jana, Jones, Nikoleta, Vafeidis, Athanasios T., [6] G., Dimitrakopoulos, Panayiotis Melliou, Androniki, Chatzidimitriou. Evaggelia, Koukoulas, Sotirios, 2013a. "Household adaptation and intention to adapt to coastal flooding in the axios-loudias-aliakmonas national park, Greece. Ocean Coast Manag. (September), 43-50. https://doi.org/10.1016/j.ocecoaman.2013.05.008. Elsevier Ltd.
- [7] Koerth, Jana, Vafeidis, Athanasios T., Hinkel, Jochen, Sterr, Horst, 2013b. What Motivates Coastal Households to Adapt pro-Actively to Sea-Level Rise and Increasing Flood Risk? Reg. Environ. Change 13 (4), 897–909. https://doi.org/10.1007/s10113012-0399-x.
- [8] Penning-Rowsell, Edmund C., Sultana, Parvin, Thompson, Paul M., 2013. The 'last Resort'? Population movement in response to climate-related hazards in Bangladesh. Environ. Sci. Pol. 27 (March), S44–S59. https://doi.org/10.1016/j.envsci.2012.03.009. Elsevier Ltd
- [9] Cahaya, Andi. Fishermen Community in the Coastal Area: A Note from Indonesian Poor Family, Procedia Economics and Finance, Volume 26, 2015, Pages 29-33, ISSN 2212-5671, https://doi.org/10.1016/S2212-5671(15)00801-1.
- [10] Harini, Rika et al. The Survival Strategy of Households Affected by Tidal Floods: The Cases of Two Villages in the Pekalongan Coastal Area. Vol 31, No 1 (2017)
- [11] Awumbila, Mariama., Teye, Joseph Kofi., Yaro, Joseph Awetori. 2016. Social Networks, Migration Trajectories and Livelihood Strategies of Migrant Domestic and Construction Workers in Accra, Ghana. Journal of Asian and African Studies 1–15
- [12] Buchori, Imam et al. Adaptation to coastal flooding and inundation: Mitigations and migration pattern in Semarang City, Indonesia. Ocean and Coastal Management 163 (2018) 445–455.
- [13] S. A. Mashi, A. I. Inkani, Oghenejeabor Obaro, A. S. Asanarimam. 2020. Community perception, response andladaptation strategies towards liood risk inlaltraditiona African city. Natural Hazards https://doi.org/10.1007/s11069-020-04052-2
- [14] Imperiale, Angelo Jonas & Vanclay, Frank. Experiencing local community resilience in action: Learning from post-disaster communities. Journal of Rural Studies 47 (2016) 204 – 219.
- [15] Filho, Walter Leal et al. Fostering coastal resilience to climate change vulnerability in Bangladesh, Brazil, Cameroon and Uruguay: a cross-country comparison. Springer Science+Business Media B.V. 2017
- [16] Kim, Hyun & Marcouiller, David W. Natural Disaster Response, Community Resilience, and Economic Capacity: A Case Study of Coastal Florida. SOCIETY AND NATURAL RESOURCES. 2016, VOL. 00, NO. 00, 1–17. http://dx.doi.org/10.1080/08941920.2015.1080336

- [17] Lloret, Josep et al. Small-scale coastal fisheries in European Seas are not what they were: Ecological, social and economic changes. http://dx.doi.org/10.1016/j.marpol.2016.11.007
- [18] Islam, M. Rezaul & Hasan, Mehedi. Climate-induced human displacement: a case study of Cyclone Aila in the south-west coastal region of Bangladesh. Nat Hazards DOI 10.1007/s11069-015-2119-
- [19] Malak, Md. Abdul et al. We are feeling older than our age": Vulnerability and adaptive strategies of aging people to cyclones in coastal Bangladesh. International Journal of Disaster Risk Reduction 48 (2020) 101595
- [20] Neise, Thomas and Diez, Javier Revilla. Adapt, move or surrender? Manufacturing firms' routines and dynamic capabilities on flood risk reduction in coastal cities of Indonesia. International Journal of Disaster Risk Reduction 33 (2019) 332–342

- [21] Denzin N. & Yvonna S Lincoln. The SAGE Handbook of Qualitative Research. Thousand Oaks, Sage Publications, (2009), 2
- [22] Creswell J. Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed. Yogyakarta, Pustaka Pelajar, (2010)
- [23] Ritchie J, Jane L. Qualitative Research Practice: A Guide for Social Science Students and Researchers. London, California, Thousand Oaks, Sage Publications, (2003), 93
- [24] Miles M, Huberman A, Saldaña J. Qualitative data analysis : a methods Sourcebook. California, Sage Publications, (2014), 380

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

