

Coastal Reclamation in the Frame of Islamic Perspective of Maqāṣid Sharī'ah to Preserve Environmental Sustainability

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ABSTRACT

One way of procuring new land in Indonesia is through the reclamation of coastal areas in several regions in order to increase the benefits of land resources and to answer the needs for land due to the high population, especially in coastal areas, by landfilling and draining. This raises a number of crucial problems, including the biodiversity extinction of various mangrove species, seagrass beds, species of fish, shellfish, crabs, birds, and various other living things; the increased potential for flooding and rob coupled with rising sea levels due to global warming; the changes of the level of slope, the composition of river sediments, patterns of tidal and ocean currents along the coast; the damage of water management area; and the changes of landscape (geomorphology) and water flow (hydrology) in the reclamation area and its surroundings. Disruption of the ecosystem's balance on a large scale can ultimately lead to the total destruction of our planet. The reclamation that causes large scale damages to the planet does not only contradict to Islamic law's objective in taking care of the environment (*maqāṣid sharī'ah fi ri'āyah al-bī'ah*) but also contrary with Islamic law's objectives in preserving one's soul, lineage, intelligence, wealth, and honor (*maqāṣid sharī'ah fi hiḏ al-naḑs wa al-naḑl wa al-'aḑl wa al-māl wa al-'ird*).

Keywords: coastal reclamation; Jakarta; Islamic law, environmental degradation, *maqāṣid sharī'ah*

INTRODUCTION

Population growth with all its activities cannot be separated from the issue about their need for land. The development aimed at the people welfare who want to acquire land to settle, especially in urban areas, has led to the inevitable need for regional expansion (Rottler et al. 2018; Hasni, 2008). The needs for new land are mainly focused on strategic areas of heavy economic activity centers such as ports, airports or other commercial areas (Soehoed, 2004).

One way of procuring new land is through reclamation (Gan and Zeng, 2018; Suryadewi and Edward, 1998) done on several Indonesian territorial waters in order to increase the benefits of land resources and to answer the need for land due to the high population, especially in coastal areas. Reclamation is carried out by landfilling and draining, such activities always face various pros and cons (Wiltshire, 2018). Ineffective and bad planned drainage will bring negative impacts on the environment (Qadir and Gulshan, 2018), among others are reducing the quality of the environment and public health and disrupting transportation and economic activities (Tanudjaja, 2008). In addition, other coastal areas are prone to sinking, or at least salty sea water rises to the mainland so that many plants die, rice fields

cannot be used for farming, and living places for animals and coastal plants are destroyed (Chen et al., 2018; Zainuri et al., 2017), which, eventually, cause disturbance on the natural balance. If the disturbance continues to occur on a large scale, it can affect weather changes and leads to the total destruction of the planet (Sengupta et al., 2018).

The Jakarta Bay area includes the Jakarta coastal area and the Jakarta Bay waters and has Tanjung Pasir in the west (6° 00.96' S/106° 47.76' E) and the Muara Gembong peninsula in the east (5°56.48' S/107°01.93' E) as its borders. This region is a shallow bay with a depth profile of 5 meters apart at a distance of 1 km from the coast and a contour depth of 10 meters at a distance of 3 kms from the coast. The total area of Jakarta Bay waters is 514 km² with a coastline of about 72 kms. The Jakarta Bay has experienced changes due to very significant reclamation and coastal development in the past few decades and, sadly, there are many more proposed development projects and ongoing ones that will certainly give serious impacts.

A substantial question that then arises is whether the Jakarta coastal reclamation is a need or a desire, more useful or more harmful. Advances in science and technology should not be used to

exploit natural resources to the most. To the initiators of reclamation, the success of development means reducing poverty even though at the expense of the balance of coastal ecosystems that should otherwise be maintained. Neglecting the ethics to save the country's environment when coastal reclamation continues to take place will certainly destroy its ocean with its variety of marine biota that is not owned by other countries. In such a case, the pretext of alleviating poverty will only be utopian since the reclamation projects will only enrich large capital owners and actually worsen economic inequality. The biggest inequality for fishermen who are disadvantaged by the reclamation project is the loss of their livelihoods. The sea, which has been their source of livelihood, will be buried under luxury buildings. Beautiful scenery, blue water, and shady mangrove trees along the beach cannot be enjoyed anymore. The decreasing green open space and blue open space are the main factors behind the frequent disasters. It is time to end people's ambition and selfishness in exploiting natural resources without any limit. Indonesia still has many alternatives to carry out land expansion without changing the landscape. Some previous studies on coastal reclamation had been conducted by several researchers including Thobroni (2017a; 2017b) who studied the management of maritime potencies in the Qur'anic perspective, Mufid (2017) who reconstructed the jurisprudence on maritime based on anthropo-cosmic view with his study on Jakarta's coastal bay reclamation, and Maskur (2008) who tried to reconstruct the regulations on the Semarang city's coastal reclamation. In his paper, Maskur (2008) discussed the existing legal arrangements about coastal reclamation in the city of Semarang together with their legal arrangements related to the reclaimed coastal area which was reconstructed related to the Indonesian Acts No. 23 of 1997 concerning the Environment (Gol, 1997), No. 24 of 2007 concerning the Disaster Management (Gol, 2007a), No. 26 of 2007 concerning the Spatial Planning (Gol, 2007b), and No. 27 of 2007 concerning the Management of Coastal Areas and Small Islands (Gol, 2007c), so that they become references in implementing comprehensive reclamation with due regard to all stakeholders' interests. In carrying out the reclamation, the Semarang City government referred to the Article 18 of the Indonesian Act No. 32 of 2004 about Regional Government (Gol, 2004). In 31 August 2004, the Mayor of Semarang issued a decree No. 590/04310

concerning an approval for the use of aquatic land and the implementation of reclamation in the waters area (Semarang City, 2004). The reclamation required rules in the form of a regional regulation which, in its preparation, involved the Semarang City Government as the executive institution and the City's Parliament as the legislative one and people's representative so that it was expected to produce regional regulations that were aspirational, accountable, and met the expectations of the community (Maskur, 2008).

Meanwhile, Wagiu (2011) did his research about the impacts of reclamation programs to fishermen families' economy in Manado. In his research, he discussed the extent of the reclamation program in the city of Manado that had affected the economic lives of fishermen families living around the reclamation area. The results of his study showed that the reclamation of coastal areas in the said city had caused a decrease in the level of income which eventually gave a direct impact on the social economic life of the fishermen community (Wagiu, 2011).

Then, there was Rahmat (2014) with his research about the supervision of executing the license for conducting a coastal reclamation in Makassar. He discussed the implementation of coastal reclamation license and its supervision by the Makassar City Government. The Makassar City Government has not yet had any city or mayor regulation related to the implementation of coastal reclamation license in accordance with the Article 16 of the Indonesian Minister of Maritime and Fisheries (MMF) Regulation No. 17/Permen-KP/2013 concerning Reclamation Licensing in Coastal Areas and Small Islands (Gol-MMF, 2013). Regarding the supervision of coastal reclamation in Makassar City, it could not be done since there had not been any reclamation license issued due to the absence of the mayor's regulations regarding the implementation of coastal reclamation license that could be used as a legal basis for implementing the coastal reclamation licensing there. Therefore, all forms of marine hoarding activities in Makassar City are illegal since the legal basis governing the licensing mechanism is not yet present (Rahmat, 2014).

Differing to these previous studies, this research tries to explore and analyze coastal reclamation in the perspective of *maqāṣid sharī'ah fī ri'āyah al-bī'ah* with a hope that a perspective considering the environment in carrying out any program related to the interests and needs of many people will emerge.

LITERATURE REVIEW

Coastal reclamation in the Regulation of Indonesian Conventional Law

The Indonesian Act No. 27 of 2007 (Gol, 2007c) is one of regulations that can be used as a legal basis for coastal reclamation. Article 1 point 3 of the Act defines reclamation as an activity carried out by people in the context of increasing the benefits of land resources from an environmental and socio-economic perspective by means of backfilling, land draining or drainage (Azizah, 2017). The 34th dictum paragraph 1 says that "Reclamation of coastal areas and small islands are carried out in order to increase the benefits and/or added value of coastal areas and small islands in terms of technical, environmental, and socio-economic aspects. Paragraph 2 of Article 34 states that the implementation of reclamation as referred to in paragraph 1 must maintain and pay attention to: a) the sustainability of people's lives and livelihoods, b) a balance between the interests of utilization and that of preserving the functions of the coastal environment and small islands, c) technical requirements for the extraction, collection, and backfilling of materials. Paragraph 2 of this article is an explanation of the paragraph 1 that the three aspects - technical, environmental and socio-economic, - must be realized as stated in paragraph 2.

The Indonesian Act No. 32 of 2009 concerning environmental protection and management provides legal certainty and protection of everyone's right to obtain a good and healthy environment as part of the protection of the entire ecosystem (Gol, 2009). Coastal reclamation is faced with this law especially on the prerequisite that national economic development can only be carried out based on the principle of sustainable and environmentally sound development.

The regional regulations (Peraturan Daerah or Perda, Ind.) on zoning bases the granting of reclamation permits on articles 4, 11 and 17 of the Presidential Regulation No. 122 of 2012 concerning Reclamation of Coastal Areas and Small Islands (Gol, 2012) and the MMF's Regulation No. 17 of 2013 Article 8 number 3 letter (a) which reads "the license regarding reclamation location and the implementation of reclamation must be in accordance with the zoning of the area to be reclaimed" (Gol-MMF, 2013). Therefore, prior to granting a location permit, a regional regulation on the coastal area zoning must be issued (Gol-MMF, 2013). In the Jakarta Provincial Regulation No. 1 of 2012 concerning the Spatial Planning for the Jakarta Province in 2030, the Jakarta North Coast Region is designated as a strategic area for economic, environmental, and socio-cultural interests

(Government of Jakarta, 2012a). These two regulations then sparked public debate since they were considered to contain distortions and deviations from the philosophy of environmental law (Jaya, 2017).

The article 5 letter (a) states that the Minister has the authority to issue reclamation location permits and to conduct reclamation in certain national strategic areas (Gol-Ministry of Maritime and Fisheries, 2013). Additionally, the Article 8 paragraph (1) states that the license to carry out reclamation of area over 25 hectares must obtain a recommendation from the Minister. Based on these provisions, the licensing for the reclamation location and its implementation becomes an absolute authority of the MMF (Gol-MMF, 2013). The Minister's recommendation as referred to in article 8 paragraph (1) is issued taking into account the suitability of the location with the Zoning Plan of Coastal Area and Small Islands (Rencana Zonasi Wilayah Pesisir dan Pulau-pulau Kecil or RZWP-3K, Ind.) or provincial, regency's or city's spatial plan that has allocated space for reclamation, coastal ecosystem conditions, public access, and sustainability of life and people's livelihoods. Meanwhile, the Minister's recommendation as referred to in article 8 paragraph (2) for a permit to carry out reclamation with an area of more than 500 hectares can be issued taking into account environmental impact assessments in accordance with the Environmental Impact Analysis (EIA), the condition of coastal ecosystems, public access, spatial planning of reclamation areas, and the sustainability of people's lives and livelihoods (Gol-MMF, 2013).

Furthermore, the article 30 of the MMF's Regulation No.17/PERMEN-KP/2013 reads: "The implementation of reclamation is obliged to maintain and pay attention to the sustainability of life and livelihoods of the community which includes; Sustainability of life and livelihood of the community as referred to in paragraph (1) shall be carried out by: a) Providing access to the community to the beach; b) Maintaining the livelihoods of the population as fishermen, fish farmers, and other marine and fisheries businesses; c) Provide compensation / compensation to surrounding communities affected by reclamation; d) Relocating settlements for people who are in the reclamation location; and e) Empowering surrounding communities affected by reclamation" (Gol-MMF, 2013).

Anything related to the responsibility regarding the fishermen's fate directly affected by the reclamation project are done in accordance with the said regulation article 30 paragraphs 1 and 2. Based on these regulations, the government

actually had warned and ordered the parties involved in the reclamation projects to not forget their responsibility to the fishermen and other parties impacted by the projects (Gol-MMF, 2013).

According to some of these regulations, the developers of coastal reclamation projects must have instruments to prevent pollution and damages to the environment aimed for preventing pollution and environmental damages. These instruments are mentioned in article 14 of the Indonesian Act No. 32 of 2009 on the Protection and Management of Environment (Gol, 2009). One of the important instruments that must pass the test is the EIA which plays an important role in the implementation of coastal reclamation projects. All instruments required to obtain a coastal reclamation license must be ensured that the principle of sustainable development has become the basis and is integrated in the implementation of the project. Should any instrument declared less qualified and has the potential to damage the environment, then the government is obliged to reject the project. Unwise management of natural resources will have an impact on the environment and humans who hold the responsibility as its managers. The government is obliged to consider various environmental impacts and the needs of future generations since they have the right to enjoy a clean and healthy environment.

Maqāṣid Sharī'ah

Maqāṣid sharī'ah (purposefulness of Islamic law) is the mother of all *fiqh* (Islamic jurisprudence) since it includes the meaning, secrets, and wisdom contained within the legal texts. It is, therefore, not stagnant before the textual forms and pronunciations nor it neglects the intentions behind it (Al-Qaradawi, 2006). Sharī'ah is a law enacted by God about religious affairs or religious regulations determined and ordered in the form of *'ibādah* (worship) and *mu'āmalah* (worldly transactions) which regulate and drive human life. Allah says in the Holy Qur'an Surah (QS) *al-Jāthiyah* [45]: 18, "Then We put thee on the (right) way of religion; so follow thou that (way); and follow not the desires of those who know not." (Ali, 1992)

Based on this verse, al-Qaradawi explains that the word *sharī'ah* originates from the word *sharā'a al-shar'iy* which means explaining something or it is taken from the words *al-shir'ah* and *al-sharī'ah* which means a place where water sources are never interrupted and people who come there don't need any tool to collect it. In the Quranic vocabulary, *al-shar'u* is also interpreted as a clear path direction. In other words, linguistically,

sharī'ah means a path, while *maqāṣid sharī'ah* is the whole purpose of Islam (Al-Qaradawi, 2006; Harahap, 2014).

Al-Qaradawi (2006) argued that using other ways for attaining *sharī'ah* purposes which differ from al-Ghazali's (1937) opinion is something that possibly happens. This is so, bearing in mind that al-Ghazali through his work "*al-Mustashfā*" explains about *maṣlahāh* (benefit) as something with an unclear origin (*aṣl al-mauhum*) since *maṣlahāh* deviates from the original studies of *sharī'ah* purposes and then comes to the formation of the origin of *sharī'ah* purposes theory used by Moslem thinkers all the time with its division into three levels; *al-ḍarūriyyāt* (primary), *al-ḥājīyyāt* (secondary), *al-taḥsīniyyāt* (tertiary).

When discussing the purposes of al-Qur'an, Rashid Rida mentioned in his famous work "*al-Wahyu al-Muḥammad*" that *sharī'ah* purposes were in accordance with the themes taught by Islam and became the great purposes to be realized by the Qur'an in people's life. He also summarized *sharī'ah* purposes in his own version which did not follow the limitations used by al-Ghazali. Likewise, al-Qaradawi did not divide *maqāṣid sharī'ah* into preserving five basic things (*al-kullīyyāt al-khamsah*), but rather he described the objectives of *sharī'ah* in the following terms: 1) improving one's faith regarding the concept of God, religion, and rewards/punishments, 2) affirming the human dignity and rights, especially of the weak people, 3) inviting people to worshipping and devoting to Allah, 4) cleansing the human heart and straightening their morals, 5) building a pious family and providing justice to women, 6) building a Moslem society who will testify to humanity, and 7) inviting people to creating a universal humanity based on mutual cooperation (Al-Qaradawi, 2006; Sulong and Ismail, 2010).

Al-Qaradawi is of the opinion that *al-kullīyyāt al-khamsah* as previously mentioned should also be realized by Islam in human life so that the laws also depend on it. Based on this idea, he believes that emphasizing the human dignity and rights, especially of the weak people, and providing justice to women is part of *maqāṣid sharī'ah*. In other words, al-Qaradawi includes the human right values as one of the objectives of Islamic law which has not so far been fully accommodated (al-Qaradawi, 2006). Some of his thoughts related to human rights values include: 1) upholding human dignity, 2) emphasizing human rights, and 3) fighting for the rights of the weak people (Al-Qaradawi, 2006).

The emergence of al-Qaraḍawi's thought did not come from a vacuum without any dialect with social reality. Thus, it is very possible that there were some influences that had contributed to pushing him to include the human right values as one part of *maqāṣid sharī'ah*. They were inseparable from his slightly different perspective regarding *maqāṣid sharī'ah* in which he disagreed with al-Ghazali (1937) and al-Shaṭibi (1997) in understanding *maqāṣid sharī'ah*, but he rather inclined to following the footsteps of Rashid Rida (Al-Qaraḍawi, 2006). He believed that Islamic law has *maqāṣid sharī'ah* which also accommodates the human right values which he divided it into three things as previously mentioned. In other words, al-Qaraḍawi slightly revealed that the so far assessment of human rights groups related to Islamic law is not entirely correct (Al-Qaraḍawi, 2006).

Some terminological definitions of *maṣlaḥah* can refer to al-Buty's (1992) opinions. He explained that *maṣlaḥah* is a form of *maṣdar* (a noun) which means *al-ṣalah* (benefit), similar to the word *manfa'ah* which means *al-naf'u* (benefit), or it is a plural form of *al-maṣāliḥ*. Everything in which there are benefits, either by way of *al-jalb* (attracting something) or *al-taḥṣīl* (producing something) such as producing benefits or refusing and avoiding *muḍarāt* (harms), then all of them deserve to be called *maṣlaḥah* (al-Buty, 1992). Meanwhile, in al Ghazali's perception, *maṣlaḥah* is not merely attaining benefits and rejecting harms since such is obviously the human's objective and concern in obtaining their purpose. To him, *maṣlaḥah* is more interpreted regarding maintaining the objectives of *sharī'ah* which consist of five things namely: preserving one's religion, soul, intelligence, lineage, and wealth. Everything that guarantees the preservation of these five things is called *maṣlaḥah* while those that jeopardize them is called *mafsadah* (harms) (al-Ghazali, 1937).

More operationally, al-Salam outlines the understanding of *maṣlaḥah* with four kinds of enjoyment and their causes as well as happiness and their causes. Likewise, *mafsadah* is identified with four kinds of suffering and their causes and sorrow and their causes. *Maṣlaḥah* and *mafsadah* are worldly and heavenly matters. The worldly pleasure, happiness, suffering, and sorrow can be known by custom or tradition whereas the heavenly ones and their causes have been explained through threats and prohibitions contained in the Qur'an and Hadith (Ibnu Abdul Salam, 1999).

Meanwhile, al-Shaṭibi (1997) defines *maṣlaḥah* as something that has an impact on up-righting

and perfecting the human life as well as fulfilling the demands of the instincts of lust and mind absolutely so that mankind are able to feel pleasure optimally. In interpreting *fiqh* (Islamic jurisprudence) as a source of social ethics and benefit, he divides benefits into three levels namely *al-ḍarūriyyāt* (primary benefits), *al-ḥājjiyyāt* (secondary benefits), and *al-taḥṣiniyyāt* (tertiary benefits). The primary benefits must become the main reference for implementing Islamic law. The primary benefits include the necessity to protect one's soul, body, and honor which are in detail known as *hifẓ al-nafs* (protecting one's soul), *hifẓ al-'aql* (protecting one's intelligence), *hifẓ al-māl* (protecting one's wealth), *hifẓ al-nasl* (protecting one's lineage), and *hifẓ al-dīn* (protecting one's religion) (al-Shaṭibi, 1997).

MATERIALS AND METHODS

This library research is intended to solve and discover the legality of coastal reclamation regulations through a critical review of primary legal sources. Normative legal research approaches are used to find the truth of coherence whether the regulations are according to legal norms, whether there are norms, in the forms of both orders or prohibitions, which are in accordance with legal principles, and whether one's actions are in accordance with legal norms (not only in accordance with legal rules) or with legal principles. The statute approach is carried out by examining the laws and regulations which are relevant to the legal issues being studied. This analytical descriptive research aims to explain the reclamation of the coast in Jakarta in the perspective of *maqāṣid sharī'ah fī ri'āyah al-bī'ah*. The primary data source used al-Qaraḍawi's monumental work, *Risālah fī Ri'āyah al-Bī'ah* while secondary ones were obtained from the data and reports on the reclamation of the Jakarta coast. These data were then analyzed using content, comparative, and critical analysis.

RESULTS

Jakarta, the Indonesian capital city, with its high population density has a limited land area, therefore, to meet the need for land for its development and area expansion, reclaiming the Jakarta Bay becomes an inevitable choice. Apart from overcoming the limited land area, the reclamation is expected to contribute a significant role in the city's spatial rearrangement and to give a unique character to the Ancol Coastal Area in the context of developing the Jakarta Water Front City (Sampono et al., 2012).

In July 1997, the Government of Jakarta Province signed a cooperation agreement on the Development of Reclamation Execution on Block

Areas No. I and No. IV in the western sub-region of the city with the Kapuk Naga Indah Limited Company (Perseroan Terbatas Kapuk Naga Indah or PT-KNI). Based on the said agreement, PT-KNI conducted a variety of planning studies, both spatial plan and environmental facilities and infrastructure one in their general design studies. The economic crisis in the late 1990s that hit Indonesia and various countries resulted in the cessation of physical development activities, especially any development in the property sector, including coastal reclamations.

Within the said agreement, it was explained that the cooperation between the Jakarta's Government and PT-KNI is to develop a reclamation project on an area of ± 674 hectares (has). Referring to the addendum to the said agreement and the results of measurement and mapping by the Jakarta Provincial Land and Mapping Agency (up to - 8 (minus eight) meters depth from the normal sea level), the working area of PT-KNI is ± 870 has consisting of the Island 1 ± 275 has, the Island 2A ± 310 has, and the Island 2B ± 285 has. Such measurement and mapping of the working area was done as instructed by the Jakarta's Governor Instruction No. 32 of 2004 concerning The Usage of Basic Maps in the Province of Jakarta (the Mapping of TM30) covering an area of $\pm 1,131$ has. In order to carry out the said project agreement, since 2005 PT-KNI has been updating the concepts of preparing for the development reclamation project which once in 1997 had been principally approved by the then Governor of Jakarta Province ((Government of Jakarta, 2012b).

The Jakarta's coastal reclamation, in the context of developing urban areas, aims to meet the need for land for housing, offices, or business places (Widodo, 2005). The purposes and functions of developing the Kapuk Naga Indah area are basically identical to those of the North Java's Coastal Reclamation (or Pantura Reclamation), namely: 1) achieving a good quality of spatial usage in creating the City of Jakarta as a strategic service-city and a highly competitive city among other world major cities, 2) achieving a good quality of spatial usage in realizing the balance between people's welfare and security interests, 3) administering environmentally-friendly usages of space that pay attention to the use of protected and cultivated areas, and 4) reducing the pressure of the city's growth towards the southern part of the city.

In 2003, the Indonesian Ministry of Environment stated the ineligibility of the Pantura Reclamation and Revitalization Activity Plan and submitted an appeal to the Indonesian Supreme Court. On July 28, 2009, the Supreme Court granted the appeal

and stated that the said reclamation violated the environmental influences analysis (EIA). In 2011, the Supreme Court issued a new verdict No. 12/PK/TUN/2011 stating that the said reclamation was legal. In 2012, the then Indonesian President Yudhoyono issued a Presidential Regulation No. 122 of 2012 concerning the reclamation of coastal areas and small islands and approved the territorial acquisition of coastal area and small islands in the Jakarta Bay (Gol, 2012). In September 2012, the Jakarta's Governor Fauzi Bowo issued a decree No. 2238 which was extended in December 2014 and granted a reclamation permit of the Island G to the Muara Wisesa Samudra Limited Company (PT Muara Wisesa Samudra or PT-MWS) (Valentino, 2016).

The Jakarta Provincial Regulation No. 1 of 2012 concerning the Jakarta 2030's City Spatial Plan establishes the Jakarta's north coastal area as its strategic area. The water and coastal area along ± 32 kms of the Jakarta Bay is the city's gateway in the regional and international scopes (Government of Jakarta, 2012a). This establishment was in line with other broader scale policies including the Indonesian Government Regulation No. 26 of 2008 concerning the National Spatial Plan in which Jakarta together with the surrounding cities that characterize the metropolitan area were designated as the national strategic area. Further arrangements regarding their spatial plan were regulated through the Presidential Regulation No. 54 of 2008 concerning the Spatial Plan for the Areas of Jakarta, Bogor, Depok, Tangerang, Bekasi, Puncak, and Cianjur (Jabodetabekpunjur). As a national strategic area, the Jabodetabekpunjur Region requires integrated spatial planning, spatial use, and control of spatial use.

One of the impacts of the Jakarta Bay reclamation was on fisheries activities. Based on the 2009 Jakarta government's data, the population working in the field of fisheries in Jakarta comprised of 2,366 boat owners and 16,580 workers. From these numbers, regarding their address status, there were 10,268 permanent fishermen and 8,678 migrant ones. The high population of fishermen had resulted in inadequate facilities and infrastructure including housing for fishermen so that the canals for boat repair have also been used for settlements. Fishery activities are currently dominated by mini purse seines (*payang*), purse seines, ramp nets, gill nets, and fish traps. The fish they usually caught include *baronang*, grouper, mullet, spoilers, and so on. Other than fish species, green mussels are one of the commodities most

widely cultivated in the coastal waters of North Jakarta.

The coastal reclamation that had been carried out so far resulted in inevitable ecosystem damages. Such is marked by the loss of biodiversity, loss of various species of mangroves, seagrass beds, extinction of fish species, shellfish, crabs, birds, and various other living creatures as well as an increase of potential for flooding and changing landscapes (geomorphology) and water flow (hydrology) in the reclamation area and its surroundings. The changes in the landscape are in the form of slope level, river sediment composition, tidal patterns, patterns of ocean currents along the coast, and damages to the water system. The potential flooding due to reclamation projects will increase with rising sea levels caused by global warming. Relating to its social impacts, the coastal reclamation can certainly cause displacing the traditional fishermen from their sources of life. Furthermore, many evictions took place since the commercial area to be developed requires that the surrounding beach be clean from various fishing facilities owned by fishermen.

Every policy in the context of regional development and expansion will surely bring positive impacts (benefits) and negative ones (losses) on the socio-cultural, economic, and ecological aspects. The role of these three aspects in such a development, from the planning stage to the implementation and impact, will determine its success. Therefore, there is a need for a careful and integrated planning and a thorough implementation of management policy on reclaimed coastal area, so that the main objective of improving and raising the quality of the beach can be achieved as well as avoiding a decline in the aquatic environment the aquatic environment quality or, even worse, causing social conflicts and other spatial planning problems. Ineffective policies can impact on the deterioration of environmental quality and cause a decline in the socio-cultural sectors which will eventually result in the futility of the reclamation projects that had been done so far.

Borrowing the term of an ecologist, Soemarwoto (2016), we must be able to distinguish between the needs and desires in the relationship of human interaction with the environment. Need is interpreted as something that is limited and is necessitated to achieve health, safety, and aspects related to humanity whereas desire is interpreted as the opposite, it knows no limit, it always wants more, it rises with no limit (i.e., the rising demand). Thus, the coastal reclamation must be immediately reviewed as a necessity or just a desire (Sampono et al., 2012).

A coastal reclamation, on the one hand, can help a country or a city in the context of providing land for various purposes including urban expansion, restructuring of coastal areas, and developing a marine tourism (Hasyar, 2007). On the other hand, the negative impact of a reclamation is more read as a form of human intervention on the balance of the natural environment which should always be in a dynamic balanced state. The reclamation impacts can be distinguished into three stages: 1) the pre-construction stage which includes technical and environmental survey activities, mapping and pre-planning, licensing, and detailed or technical planning, 2) the construction phase which includes labor mobilization activities, collecting landfill materials, transportation of landfill materials, and landfilling processes, and 3) the post-construction stage which includes demobilization of equipment and labor, area maturation, and area maintenance.

Among the areas affected by the presence of a coastal reclamation is the coastal area which was originally a public space for the community, it will disappear or be reduced to be replaced by private activities utilization. From the environmental side, many marine biotas, both flora and fauna, died due to the accumulation of landfill which eventually affected the ecosystem. Additionally, the hydrological system of sea water waves that fall to the seashore will change from its natural state, and such will bring an effect of the area outside the reclamation in which they will receive an overflow of water which causes abrasion and tidal. From the social aspect, most of the community activities in the coastal area are pond farmers, fishermen or laborers. A coastal reclamation will significantly reduce the amount of fish in the sea so that it results in a decrease in the income of those who depend their livelihood on the sea. Then, addressing the ecological aspect, the condition of ecosystems in coastal areas that are rich in biodiversity strongly supports the function of the coast as a buffer for land. Coastal ecosystems are very sensitive to any change so that whenever a natural or engineered change takes place, such will lead to the change of ecosystem's balance. Imbalance of coastal waters ecosystem in a relatively long time will result in damages to the ecosystem of the coastal area, this condition can eventually cause total damage to the coastal and our planet.

Since they were not found in nearby areas around the reclamation site, the materials for landfilling must be brought in from other places. Transporting these materials also resulted in new impacts in the form of congested traffic, decreased air quality, dust, and noises which eventually disturb public health (Gol-Ministry of

Public Works, 2008). Thus, to reduce and minimize the impacts of such reclamation projects, an in-depth study involving many parties and interdisciplinary science and is supported by technological facilities is needed. A careful and comprehensive study is expected to create a reclamation area with the least impact on the surrounding environment. At the same time, since the reclamation takes place on coastal sites, the prediction and simulation of hydrodynamic changes during all the pre-project, the project implementation, and the post reclamation as well as its drainage systems must also be taken into account. This is so because changes in hydrodynamics and poor drainage systems usually bring about direct negative impacts on the environment.

DISCUSSIONS

Coastal Reclamation in the Perspective of Maqāṣid Sharī'ah fī Ri'āyah al-Bī'ah

Islam gives freedom to mankind to utilize natural resources with the principle of freedom to exercise human rights which are limited by accountability and compliance with *sharī'ah*. The available natural resources are not only for the present generation but also bequeathed to the next generations through a sustainable development system which is one that can fulfill the needs of the present life without the expense of future generations' ability to meet theirs. Even Imam Al-Thufi (1993) states that *ri'āyah al-maṣlaḥah* (taking care of benefit) is part of the main points of *sharī'ah*. Should there be a contradiction between *maṣlaḥah* (benefits) and *naṣṣ* (legal texts), then, according to Al-Thufi (1993), *maṣlaḥah* must be prioritized employing the *takhṣīs* (specifying) and *bayān* (explaining) approaches. To him, *naṣṣ* is *wasā'il* (devices), while *maṣlaḥah* is *maqāṣid* (objectives), therefore, *maqāṣid* must be championed over *wasā'il* (Al-Thufi, 1993). Exercising one's rights must be in line with the five pillars of *maqāṣid al-sharī'ah* that must be preserved as previously mentioned namely one's religion, soul, intelligence, lineage, and wealth. In its development, these pillars were added with other substances namely preserving one's honor (*hifẓ al-'ird*) and preserving the environment (*hifẓ al-bī'ah*). And, it is very possible that in the future these pillars will develop in accordance with the socio-cultural conditions of the Islamic community.

In Islam, every legal conclusion must always be dialogued with the seven legal classifications (*al-aḥkām al-sab'ah*). One other thing to consider is that something which is *mubah* (permissible) is not always neutral but may shift due to the

condition related to *maṣlaḥah* and *mafsadah* that goes along with it. Such a shift in the conception of *maqāṣid* intertwines with the adagium that every action must be motivated by *maqāṣid*. On this basis, any action which is *mubah* from the aspect of formal law but not useful is only allowed partially, however, they must be abandoned altogether. Al-Shaṭibi, Ibn 'Ashur, 'Allal al-Fasi, and other philosophers of Islamic law built their views based on the magnum opus of *maqāṣid al-sharī'ah* from a number of verses of the Qur'an regarding the prohibition of conducting anything not useful (*lahw*) such as the QS Luqmān [31]: 6, and *al-Jumu'ah* [62]: 11 (Ali, 1992).

Prohibition of abandoning vain conducts despite their permissibility is stipulated by the method of *istiqrā'* or examining several verses which are understood from what is called "the meaning behind the text" (*maskut 'anhu*) and the teachings of the Sufis about avoiding the vain conducts even if they are allowed. The moderate attitude (*ṭarīq wasaṭ*) between the hard and permissive attitude, in addition to the moral-ethical dimension, is an element that supports the "formal selection of law", since it may happen that something is legally justified (legally rights) but morally wrong. For example, an entrepreneur is considered to be right in mining natural resources based on legal mining area ownership he/she possesses and in accordance with formal procedures, but when such an activity is carried out without taking into account the survival of the next generation, then it is morally and ethically wrong.

Islamic law that is always associated with the jargon '*ṣāliḥ fī kulli zamān wa makān*' (beneficial in all time and place) and is always oriented to the benefit of God's servants (*maṣāliḥ al-ibād*) is a character of Islamic law itself. So, actually, *al-aḥkam al-sab'ah* contained in Islamic law as an ethical concept should be developed into a worldly concept not just a heavenly one so that it is directly manifested in worldly social life.

Maslaḥah, in the context of Islamic law, is an urgent thing and becomes the esoteric value of teaching from its formal legal institutions which, in accordance with the mission of the Islamic religion itself, is to realize the benefit of mankind. Likewise, is with the legal provisions in which the process of *ijtihād taṭbīqiy* (contextual intellectual exercise) cannot be separated from the consideration of bringing benefits or resulting in harms.

An understanding about environmental issues through the Islamic environmental jurisprudence (*fiqh al-bī'ah*) and their handling, saving, and preservation needs to be placed on a moral foundation to support all efforts that have been

made and developed so far although they have not been able to overcome the environmental damages that already exist and still keep occurring. The Islamic environmental jurisprudence seeks to awaken the believers to realize that environmental problems cannot be separated from their responsibilities as faithful persons and are the mandate they carry to preserve and protect nature given by the Creator as a place where they live in this earth.

According to Yafie (2006), there are two basic foundations in *fiqh al-bī'ah* namely: 1) the preservation and protection of the environment from damages is part of faith. One's quality of faith can be measured, one of which is his/her degree of sensitivity and concern towards environmental sustainability, and 2) preserving and protecting the environment is the duty of every sane and *bāligh* (mature) person. Conducting it is a worship and is regarded as a form of human servitude to God. Meanwhile, the main responsibility of carrying out the obligation to preserve the environment and prevent it from damages lies on the government. The government has received the mandate to hold the power to preserve and protect the environment and not to exploit and damage it (Yafie, 2006).

Looking at the aforementioned context, the environmental ethics based on religion is intended to preserve the existence of one's religion, soul, life, intelligence, lineage, wealth, honor, and the environment in relation to maintaining the balance of the ecosystem. Should the environment's existence be threatened and resources for life no longer exist, the future generations of mankind and the religion are also threatened. Addressing the religious ecological conservatism project with *fiqh al-bī'ah*, when the formal legal category measures actions with right and wrong, permissible and prohibited or *ḥalāl* and *ḥarām*, then the moral-ethical category measures them in terms of good and bad.

In general, the Jakarta Bay reclamation projects had caused several bad impacts. First is the social impact. Due to the reclamation, the eviction of fishing communities' residences in the Jakarta Bay could not be avoided. In any big city, including Jakarta, evictions of poor villages cause damages to neighboring social networks and families, destabilizing daily life such as losing jobs which eventually threatened their income to support their daily lives, difficulty for children to attend schools, and eliminating residential assets. People who used to live in a Jakarta Bay fishing community are now scattered since their residential areas were evicted for the purpose of building various supporting facilities for coastal reclamation. In the concept of *maqāṣid*, this is

certainly contrary to *ḥifz al-nafs* (preserving one's soul), *ḥifz al-nasl* (preserving one's lineage), and *ḥifz al-'aql* (preserving one's intelligence).

Second is the economic impact. The loss of livelihood (as fishermen) is a social as well as economic impact felt by the residents. The development projects in the Jakarta Bay had damaged the ecosystem around the coast and the waste pollution had caused a decline in marine water resources. This caused a difficulty for fishermen to catch fish and various other marine resources that have been becoming their livelihoods. Such a condition not only reduces their level of income but also makes them fall into poverty. This eventually raised the number of poor people in the city which, ironically, contradicts to the grand objective of development projects done by the country. In the *maqāṣid* conception and considering that poverty is not in line with high level of human welfare, this condition is contrary to *ḥifz al-māl* (preserving one's wealth) and *ḥifz al-'ird* (preserving one's honor).

Third is the ecological impact. Viewing from this aspect, a coastal reclamation risks the substance of *maqāṣid sharī'ah fī ri'āyah al-bī'ah* or the Islamic law's objective in managing the environment. The environmental impact of the projects was the destruction of the ecosystem in the form of biodiversity extinction. The biodiversity on the site projects which gradually extinct include various species of mangroves, sea grass beds, some fish species, shellfish, crabs, birds, and various other living things. The reclamation projects also increased the potential for flood, rob, changing landscapes (geomorphology), and water flow (hydrology) in the reclamation areas and their surroundings. Furthermore, they also caused changes in slope rates, river sediment composition, tidal patterns, and patterns of ocean currents along the coast as well as damaged water zones. The flood potency due to the reclamation projects will increase when an increase in sea level caused by global warming is taken into account. Eventually, the destruction of the marine ecosystem will affect the balance of the whole natural ecosystem. Large changes in seascapes will gradually destroy this planet Earth in total.

A reclamation as a development project of coastal areas in the context of regional development activities means replacing a natural environment to an artificial one. The analysis of environmental impacts on the three aspects, - economic, social, and ecological, - risks the essence of *maqāṣid* on the substances preserving one's soul, lineage, intelligence, wealth, honor, and the environment. All of these must be taken into serious consideration and maintained

properly should the reclamation projects be considered vital to progress. Otherwise, if one of these *sharī'ah* objectives is ignored and neglected, then the reclamation of the Jakarta Bay must be stopped as a form of implementing God's universal law that has placed a mandate to mankind to preserve the planet and their lives as much as possible.

CONCLUSION

A coastal reclamation requires the following prior to its execution: 1) guaranteeing the safety of environmental aspects, 2) based on accountable environmental impact analysis, 3) analysis of its benefits that prioritizes public interests and not of certain business corporations, 4) paying attention to strategic environmental studies, spatial planning, environmental quality standards, and environmental damage standard criteria, 5) analysis of community's life and their livelihood sustainability, 6) maintaining the livelihood of the impacted people including the fishermen, fish farmers, and other marine and fisheries businesses, 7) providing due compensation to surrounding communities affected by reclamation, 8) relocating settlements for residents of the reclamation areas; and 9) empowering the surrounding communities affected by reclamation.

A coastal reclamation had been proven to cause the extinction of biodiversity of various species of mangroves, sea grass beds, fish species, shellfish, crabs, birds, and various other living things, the increasing potential for floods and tides especially when coupled with rising sea levels due to global warming, the changing slope rates, river sediment compositions, tidal patterns, patterns of ocean currents along the coast, the damage of water system, and the changing of the landscape (geomorphology) and water flow (hydrology) in the reclamation area and its surroundings. Disruption of the balance of ecosystems in large numbers can ultimately damage the planet completely. Reclamation that causes total destruction of the planet Earth is not only contrary to *maqāṣid sharī'ah fī ri'āyah al-bī'ah* (Islamic law's objective in taking care of the environment) but also against *maqāṣid sharī'ah fī hifz al-nafs wa al-nasl wa al-'aql wa al-māl wa al-'ird* (Islamic law's objectives in preserving one's soul, lineage, intelligence, wealth, and honor).

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