

Legislation Amendment Impact on Coastal Management Pattern: *An Edge of Chaos towards Punctuated Equilibrium*

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Abstract. Management of coastal areas and small islands in Indonesia refers to a set of coordination consists of planning, utilizing, monitoring, and controlling coastal resources that are carried out by every level of the government and many related sectors. An alteration has occurred in National Act about Local Government, Act No. 23/2014, which has the implications in the coastal management territorial zone. The issues started by the shifting of the seaward delineation authorities, it is stated that from 0 – 12 Nautical Miles (nmi) are under provincial government which previously 0 – 4 nmi were under city government, and 4 – 12 nmi were under provincial government. That said, there are no territorial management that is handled by the city/local government, including permit regulation. In hierarchy, provincial government are in upper level than city government. Chaos are happening especially in the context of authorities' management level, but to reach the main purpose of the National Act there should be an equilibrium point to normalize the situation and get the stakeholders understand the principles and keep engaged in the new form of management. This article aims to assess the impact of the National Act alteration to the sustainability of coastal management. A case study to simplify the model is in the East Java province. Theoretical framework to assess the alteration impact were related to Integrated Coastal Zone Management principles and regulatory review of the coastal zones. The analytical methods used in this article is descriptive comparative to observe the alteration in the pattern of coastal zone management variables. The comparative study was then mapped in a flow diagram to be compared on different management situation. As a result, significant changes were revealed in the pattern of the coastal management factors: (i) Authorities delineation; (ii) Planning documents; (iii) Permit system; (iv) Control; and (iii) Program Accreditation.

1. Introduction

Coastal zone defined as an area of transition between terrestrial and marine ecosystems that are affected by the biophysical and oceanography dynamic; while small island defined as an island with an area of less than or equal to 2,000 km² and its unity ecosystem (Diposaptono, 2016). Management of coastal areas and small islands according to Act No. 27/2007 jo Act No. 1/2014 on the Management of Coastal Zone and Small Islands is a coordination set consists of planning, utilizing, monitoring, and controlling of coastal and small islands resources are carried out by the Government and Local Government, sectors, between terrestrial and marine ecosystems, as well as between science and management to improve the welfare of the people. Coastal zone and small islands has large varieties of natural resource potential and very important for the development of social, economic, cultural, environmental, and sovereignty of the nation, so it needs to be managed sustainably and considering global issues, taking into account the aspirations and community participation.

Changes in regulation about Local Government that was stated in Act No. 32/2004 is now updated in Act No. 23/2014 has ample implications for the authority in the management of coastal zone and



small islands. Previous policy established that marine area 1-4 miles or one-third of the provincial management of the authority of the local government that latter in this article will be defined as *regional government*. Act No. 23/2014 mandated the provincial government, the upper level of the regional government, the authority to manage the natural resources from 0 nautical mile to 12 nautical miles; from the coastline to the open sea and / or toward the archipelagic waters (Article 27 of Act No. 23/2014). This has led some chaos to the regional government which no longer has the authority to manage their coastal zone and small islands. Whereas in planning, regional government has already prepared their twenty years planning document and permit system for coastal use. The plan covers the mainland from the *kecamatan pesisir* (coastal sub-districts) to the most distant waters maximally 4 nautical miles from the coastline of the highest tides.

East Java province covers 2,128 km coastline. Marine and coastal area of East Java has the area nearly twice the land area or reach 75,700 km² on calculation with the 12 nautical miles limit of the province (Centre for Research and Development of Marine Geology, 2012). East Java Province not only broad in terms of area, but also rich in natural resources that are really potential to become the supporting capacity development of the region. Management of resource utilization through spatial allocation in coastal zone and small islands in East Java Province are stated in Local Regulation No. 6/2012 on the Management and Zoning Plan for Coastal Areas and Small Islands (RZWP-3-K) for the period 2012-2032. Substantial changes to the legislation on local government also has implications for the relevance of the stated local regulation, including its set of management: planning, utilizing, monitoring and controlling aspects of the whole resource management. Post changes in Local Government Act enacted that the provincial government has greater authority for the management of fisheries and marine sector.

Enactment of the new local government regulation has many impacts. Some regional government in East Java province, with previously formulated spatial planning on their coastal area has specific zoning as marine protected areas, reclamation areas, and fisheries. However, due to the change of authority in coastal zone management, what had been initiated by the regional government are no longer enacted, at least waiting to be adopted in the provincial level document. Observing the conditions of the problems described above, this article is based on a fundamental question: "In what extend does the legislation amendment impact the pattern of sustainable coastal management in East Java province?"

2. Methods

Based on the type of problems that were explored, this study is using qualitative approach. Qualitative approach in research involve activities that focused on meanings and interpretations of an event through describing, writing, and reporting. The population in this study were the resource people of the parties who give and get influenced and have interests in sustainable coastal management in East Java province. The samples in this study were taken using a non-probability sampling method, which is a sampling method that is not grounded by chance because the unknown population, instead a criterion has been specified before. Terms of selection of respondents in this study consists of two groups involved, as follows:

1. Government Group:

- a. Regional Development Planning Agency of East Java Province
- b. Department of Fisheries and Marine Resources of East Java Province
- c. Legal Bureau Regional Secretariat of East Java Province

2. Civil Society Group:

- a. Association of Indonesian Coastal Management Specialist (HAPPI) East Java Branch
- b. Expert Coastal and Marine Policy and Regional Planning Lecturer ITS Surabaya

Aspects of coastal management is based on the Law on coastal management is divided into four that consists of planning, utilizing, monitoring, and controlling. Each of these aspects are then translated into variables that were observed in the study (shown in Table 1).

Table 1. Coastal Management Aspect Observed

	Variable Observed
Planning	Area Delineation, Zoning
Utilizing	Permit System
Monitoring	Mechanism of Evaluation
Controlling	Incentives and Disincentives

In order to measure the variables in the research context, both primary and secondary data are collected and analysed. The primary data collection is specifically important to describe the effect of changes in Local Government Act on the pattern of sustainable coastal management in East Java province. The method of primary data collection in this study were using in depth interviews and discussions. Secondary data collection was conducted by reviewing the contents of the documents concerned with this study, including books, research, spatial planning documents, legislation, as well as articles in internet and mass media.

3. Result and Discussions

The coastal area, as transitional area between land and sea, is a concentration of attention and interests, where human activities are interrelated with the environment and the mainland [1]. Management of integrated coastal is the management of the utilization of natural resources and environmental services that exist in coastal areas, done by conducting a full assessment of coastal areas and their natural resources and environmental services contained therein, determines the goals and objectives of utilization, and plan the management of all activities in order to achieve an optimal and sustainable development [2].

Sustainability is the use capital in many forms i.e. natural resources, human resources, man-made resources, and socio-cultural resources in a controlled and prudent way, to ensure that the current generation and future generation can achieve good security in economy and keeping the ecological integrity as an attitude. Sustainable development depends on three basic elements, namely:

1. Natural environment, where ecological integrity is to be achieved when the public, either individually or in groups, live in harmony with the natural environment;
2. Economic development, to achieve the level of economic security, which can control the community, both individuals and groups, can live with their own socio-economic conditions;
3. Community-based development or governance-centered development, which can create democracy by the involvement of public participation.

Sustainability in the coastal area has their own specification. The so-called Integrated Coastal Management (ICM) or Integrated Coastal Zone Management (ICZM) is now become the widely-adopted term in a way countries develop their coastal area. ICZM is a process of achieving the goals and objectives of sustainable development in the coastal areas, within the constraints of physical, social, and economic, as well as within the limits of law, institutions, as well as financial and administrative systems and it is focuses on the relationship between sectoral activities to achieve more comprehensive management (UNEP, 1995). Some principles are as follows:

1. Holistic Approach: all sorts of elements relating to hydrological, geomorphological, climatic, ecological, social, economic, and cultural systems must be considered in an integrated and holistic. Sea and land area in the coastal area should be well managed jointly.
2. Ecosystem approach: conserving ecosystem as priority approach to coastal planning and management should be implemented to ensure the sustainability of coastal development.
3. Good Governance: good governance of coastal areas requires cross-sectoral coordination of the various administrative services coastal region, both horizontally and vertically.
4. Inter and Intra-Generations Solidarity: ICZM should be implemented to ensure the distribution of coastal resources is better between this generation and the future generation.
5. Maintain originality: activities that occur in the coastal area is very complex to be considered properly, and prioritized to maintain the distinctiveness of local identity.

6. The principle of prevention: deterrence is necessary for controlling the activity that may exceed the carrying capacity of coastal and to minimize the negative impacts of tourism and development.

Ecological boundary concept in is an initial part that is very important to start the sustainable coastal management. To achieve the welfare of society, through economic interests and sustainability of ecosystems through spatial planning, integrated planning needs a boundary that is not only accommodate its administrative needs as it mostly done in planning, but more to a boundary that accommodate characteristics in the coastal area, both ecology and physical (Pratikto, 2006). The approach of this boundary could adopt the principles of ecoregion planning that consists of principles such as natural domain as the main boundary, coastal area as the headwaters with specific handling, maritime integrated approach, and proportionally land use management.

In Indonesia, the law that controlling issues about Local Government was managed in Act No. 32/2004, and it has been updated on Act No. 23/2014. According to normative and empirical jurisdiction perspective, there are at least four important changes that laid in the updated law. These changes are as follow:

First, classifications of government affair. According to Article 9 Paragraph 1, Government Affairs consists of absolute concurrent, and public categories. In the previous Act it contained two categories; obligatory and optional.

Second, the divisions of government affair. According to Article 13, the division of concurrent government affairs are divided under the authority of the Central Government, Provincial Government, and Regional Government. The management is based on the principle of accountability, efficiency, and externalities as well as prioritizing on national strategic interests. The significant changes related to the divisions of government affair in the amendment laid on the specific issues for forestry sector, marine sector, and energy and mineral resources sector. As stated in Article 14 Paragraph 1, the implementation of government affairs in forestry, marine, and energy and mineral resources sectors are shared under the authority between Central Government and Provincial Government. That said, implementation for those specific sectors are released from the Regional Government authority.

Third, of the effectuation of authority. Based on the authority of the government affairs, each level of government has the governance guidelines on authority. In more detail, the authority of government management are presented in Table 2 below.

Table 2. Governance on Authority	
What to Govern	
Central	<ul style="list-style-type: none"> • Alone by the Central Government; • Delegate to the Governor as a representative of the Central Government or the vertical institutions in the region based on the principle of deconcentration; or • Assigning to the Regional Government based on the principle of Assisting Tasks (<i>Tugas Pembantuan</i>).
Provincial	<ul style="list-style-type: none"> • Alone by the Provincial Government; or • Assigning to the Regional Government based on the principle of Assisting Tasks; • Assigning to <i>Kepala Desa</i> (Headman/ Village Head)
Regional	<ul style="list-style-type: none"> • Alone by the Regional Government; or • Delegated partly on implementation to the <i>Kepala Desa</i>

Fourth, the management on the coastal zone and small islands. In this issue, there are several important changes about the authority of management, benefit share on resources, delineation authority, and archipelagic provincial. These changes are discussed below:

a. The authority of management;

According to Article 27 Paragraph 1 of Act No. 23/2014, the Provincial Government is given the authority to manage marine resources in the area of 0-12 nmi. That said, this article stipulates that only the provincial who has the right to manage marine resources. In contrast with the previous act that was dividing the authority of Regional Government with marine areas are given the authority to manage the resources in the sea areas from 0 nmi to 4 nmi, and Provincial Government were managing the areas from 4-12 nmi (Article 18 Paragraph 1 of Act No. 32/2004). That said, Article 27 Paragraph 1 of Act No. 23/2014 has released the authority of the Regional Government in the management on the coastal zone and small islands. The authority of management is explained into several categories as presented in Table 3.

Table 3. Important Points in Authority of Coastal Management

	Explanation
Permit System	In order to optimize the management of coastal area and small islands, the State used to implement HP-3, a form of right and authority permit. It is then updated on the Act No. 1/2014 which provide a new form of licensing divided into two stages: izin prinsip (principle permit) and izin lokasi (location permit) which are more deconcentrated in the activities systems. These new licensing form are then making HP-3 no longer applicable. Licensor for HP-3 were given to the regional government, the updated form of licensing are now under the authority of the governor as the authorities are shifted to the provincial level.
Recommendation	The rules of authority of the Recommendation by the Regent / Mayor were disrupted. As stated in Article 11 paragraph (1) PP. 62 of 2010, that the utilization of PPKT as meant in Article 5 paragraph (1) letter c shall obtain permission from the Minister after receiving recommendation from the governor and / or regent / mayor in accordance with their authority.
<i>Polsus</i> (Special Agent for Controlling Coastal Area) Management	Proposals for the appointment and dismissal of the <i>Polsus</i> from Civil Servants at the Regional Government shall be the authority of the Province; but for coaching process are able to be an assisting task of the regional government.
Reclamation	Article 5 paragraph (2) minister regulation No 17 / Permen-Kp / 2013 on Reclamation Licenses in Coastal Areas and Small Islands stated that the Reclamation Site Permit and the Reclamation Implementation Permit as meant in paragraph (1) for Certain National Strategic Area, Coastal areas within the National Strategic Area, and cross-province reclamation

	Explanation
	activities are published after consideration and recommendation given by the bupati / mayor and governor to the minister of sea and fisheries.
Activities	The authority of the Provincial Region to manage resources in marine areas as set forth in Article 27 paragraph (2) of Law Number 23 Year 2014 includes: (a) exploration, exploitation, conservation, and management of marine resources excluding oil and natural gas; (B) administrative arrangements; (C) spatial arrangements; (D) help maintain security at sea; And (e) help maintain the sovereignty of the State. This provision are specifically given for non oil and gas resources.

b. Benefit share on resources;

Although regional management authority is repealed, the resources producing and non-producing regional having the right to receive revenue sharing from the administration of Government affairs. Determination of regency / municipality producing region for marine sharecropping is a marine product within the 4 (four) mile mileage boundary measured from the baseline to the high seas and / or toward the archipelagic waters. In the case of the Regency / City borders referred to in paragraph (5) less than 4 (four) miles, the boundaries of the territory shall be divided equally or measured in accordance with the centerline principle of the adjacent territory. That is, the district / city government still gets the their right in different form for the resource sharing of 4 nautical miles.

c. Delineation authority;

According to Article 27 paragraph (3) of Law No. 23 of 2014, the Provincial Authority is to manage natural resources at sea is at most 12 (twelve) nautical miles measured from the coastline towards the high seas and / or towards archipelagic waters. If the territorial sea between two (2) Provincial Areas is less than 24 (twenty four) miles, the authority is to manage natural resources at sea whereas divided equally or measured in accordance with the centerline principle of the territory between the two Provinces (Article 27 Paragraph (4) This means that there is a change of authority on the management of marine resources that is only for the Provincial Region, and also the change of distance sharing of marine resource management area only for Provincial Region, so that the division of marine resource management area for regional is removed.

d. Archipelagic provincial.

According to Article 28 paragraph (2), in addition to have the authority managing natural resources at sea, for the island-characterized Provincial Region, the Central Government shall implement its authority in the field of maritime based on the Task of Assistance principle. A new assignment may be undertaken if the Provincial Government of the island characterizes the norms, standards, procedures and criteria established by the Central Government (Article 28 paragraph 3 of Law No. 23 of 2014).

Based on the aspects of coastal management (Planning, Utilization, Supervision, and control). Identifiable changes affected by changes in existing coastal management-related legislation are presented in Table 4.

Table 4. Pattern on Coastal Management due to the Legislation Amendment Impact

	Management Pattern	
	Before the enactment of Act 23/2014 and Act 1/2014	After the enactment of Act 23/2014 and Act 1/2014
Planning; Area Delineation	Authority to manage resources in marine areas furthest 12 (twelve) nautical miles is measured from the coastline to the open sea and / or towards the archipelagic waters for the province and 1/3 (one third) of the provincial authority area for the district / Law No. 32 of 2014 on Regional Government).	The authority of the Provincial Region to manage natural resources at sea is at most 12 (twelve) nautical miles measured from the coastline towards the high seas and / or towards the archipelagic waters. What is meant by "coastline" is the boundary of the meeting Between the sea and the mainland at the time of the highest tidal sea.
Planning Documents	District / Municipal Government is authorized to prepare Zoning Plan, Management Plan, and Action Plan of Management with coastal area consisting of the mainland, the outer coastal subdistrict and the waters area, which is 4 miles from the coastline.	The authority to draft a Strategic Plan, Zoning Plan, Management Plan, and Action Plan for Management with a coastal sphere of 12 miles from the coastline is fully available in the Provincial Government.
Utilization; Permit	The Bupati / mayor is authorized to grant and revoke Location Permit And Management Permits in the region Coastal waters and small islands according to their authority. (Law No. 1 of 2014 on the Management of Coasts and Small Islands)	Since the Regency / City Government is no longer authorized in water management, granting and revoking the location permit and water management permit 0-12 miles becomes the authority of the Governor. On the other hand, a coastal area permit on the mainland is granted and revoked by the Regent / Mayor in accordance with its authority
Supervision; Patrol	Supervision over planning and implementation of management of Coastal Zone and Small Islands shall be coordinated by related institutions in accordance with their authority. This means that the waters 0-4 miles coordinated by the Government District / City. (Law No. 27 of 2007 in conjunction with Law No. 1 of 2014 on the Management of Coasts and Small	Supervision over planning and implementation of management of Coastal Zone and Small Islands shall be carried out in a coordinated manner by the relevant agencies of the Provincial Government.

	Management Pattern	
	Before the enactment of Act 23/2014 and Act 1/2014	After the enactment of Act 23/2014 and Act 1/2014
Islands)		
Control;		
Program Accreditation	The Bupati / Mayor has the authority to draft and / or propose the accreditation proposal for the Management of Coastal Areas and Small Islands which is the authority of the Governor and / or Government in accordance with the standards and guidelines (Law No. 27 of 2007 in conjunction with Law No. 1 of 2014 on the Management of Coasts and Small Islands)	Regents / mayors are no longer authorized to draft and / or propose accreditation programs for the Management of Coastal Areas and Small Islands, but the authority becomes the authority of the governor.

4. Conclusions

The enactment of Act 23/2014 provides significant implications for the pattern of coastal management, as shown in the study case in East Java Province. Significant changes were revealed in the pattern of the coastal management factors: (i) Authorities delineation; (ii) Planning documents; (iii) Permit system; (iv) Control; and (iii) Program Accreditation. In order to answer the main question about the extent of how these changes leads to a sustainable pattern in coastal management, it should be seen from the main activities in the whole management process, i.e. planning, utilizing, monitoring, and controlling of coastal resources based on spatial allocation and authorities. Planning aspect revealed that on the delineation of its territory, the authority of the provincial government for coastal areas is as far as 12 nautical miles. The authority is to draw up a Strategic Plan, Zoning Plan, Management Plan, and Action Plan for Management is entirely the responsibility of the provincial government. The existence of community involvement in the planning process is needed still. In terms of licensing, changes in authority have implications for the granting and revocation of location permits and a 0-12 nautical miles water management permit that eventually becomes the authority of the Governor. On the other hand, a coastal area license on the mainland is granted and revoked by the regional government in accordance with its authority. In utilizing aspect, the elimination of the mechanism for granting the Right of Coastal Waters (HP-3) is also marked the shifting of delegated mechanism to the non-governmental parties, especially private sector. Monitoring over the planning and implementation of the management of Coastal Zone and Small Islands is fully coordinated by related agencies of the Provincial Government. Regional government are no longer authorized to draft and/or propose accreditation programs for the management of coastal areas and small islands, and the authority becomes the authority of the governor.

The important thing is also to describe how does it stand as a part that establish a punctuated equilibrium situation. In the process, coastal zone management processes must establish a system to achieve sustainable use of coastal resources. Sustainable in this case is that the utilization of natural resources at the present time does not reduce the opportunity of future generations to utilize the natural resources in the same portion in a better quality. Changes in the pattern of management must be addressed wisely in the process, there is no impact that violates the intended sustainable indicators economically, socially, and environmentally.

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