

**INTEGRATED COASTAL ZONE MANAGEMENT IN INDONESIA:
FRAMEWORK ASSESSMENT AND COMPARATIVE ANALYSIS**

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Oceans and Law of the Sea

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SUMMARY

Working Title:

Integrated Coastal Zone Management in Indonesia: Framework Assessment and Comparative Analysis

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ACRONYMS

AOP	Australia Ocean Policy
Bappeda	Badan Perencanaan Pembangunan Daerah (Regional Body for Planning and Development)
BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Planning Development Board)
BPPT	Badan Pengkajian dan Penerapan Teknologi (The Agency for the Assessment and Application Technology).
BSPA	Baltic Sea Protected Area
CBCM	Community Based Coastal Management
CEPI	Collaborative Environmental Project in Indonesia
Coremap	Coral reef rehabilitation and management program
CTI	Coral Triangle Initiative
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
DISHIDROS	Dinas Hidro Oceanografi (Indonesian Hydro-oceanographic Service)
DOALOS	Division of the Law of the Sea
DKI	Daerah Khusus Ibukota (Special Capital Area)
DPR	Dewan Perwakilan Rakyat (People Representative Council)
EEOS	Environment Earth and Ocean Science
EIA	Environment Impact Assessment
EU	European Union
FAO	Food and Agriculture Organization
GESAMP	Group of Experts on the Scientific aspects of Marine Environmental Protection
Helcom	Helsinki Commission
HP3	Hak Penguasaan Perairan Pesisir (Concession rights on marine and coastal areas)
HPH	Hak Pengelolaan Hutan (Forest Concession)
ICZM	Integrated Coastal Zone Management
InteCoReef	Integrated Coral reef Management Plan
IPB	Institute Pertanian Bogor (Bogor Agriculture Institute)
IUCN	International Commission on Conservation of Nature
KKLD	Kawasan Konservasi Laut Daerah (Local Marine Protected Area)
KP3K	Kelautan Pesisir Dan Pulau-Pulau Kecil (Coastal and small islands)
LAPAN	Lembaga Penerbangan dan Antariksa Nasional (Institute of Aeronautics and Space)
LIPI	Lembaga Ilmu Pengetahuan Indonesia (Indonesian Institute of Sciences)
MAMTI	Marine Aquarium Market Transformation Initiative

MPA	Marine Protected Area
MPRS	Majelis Permusyawaratan Rakyat Sementara (People's Consultative Assembly)
NGO	Non Government Organization
Poskamladu	Pos Keamanan Laut Terpadu (Sea controlling Unit)
P2O	Pusat Penelitian Ocenografi (Research Center of Oceanography)
PPNS	Penyidik Pegawai Negeri Sipil (Civil servant who has the right to search and seizure)
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
USA	United States of America
USAID	United States Agency for International Development
VASI	Vietnam Administration of Seas and Islands
WHS	World Heritage Sites

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CHAPTER 1. INTRODUCTION

Indonesia as an archipelagic State still faces many problems regarding management of

improving with the good condition increasing to 25 % and the bad condition 31 %.⁷ This improvement is basically because of the effort of Indonesian Government to restore the coral reefs since 1998 and the increasing community education and awareness on local fisherman not to undertake destructive fishing activities. Moreover, the degradation of coastal ecosystems also resulted from land-based marine pollution. Waste and garbage from domestic and industrial waste from the river end up in the sea. To some extent, this land based pollution has caused an increased mortality of fish and resulted in damage to sea farming. The problem is not only in the implementation but also in the regulation. There is unclear responsibility as to who manages this transboundary land based marine pollution between provincial and municipals level and central Government.

Overfishing or fisheries resources over-exploitation is one of the problems facing in several Indonesian waters. This overfishing is caused by overcapacity, open access and the use of unfriendly fishing gear. Too many vessels catch the fish intensively in several waters such as in Java and Bali which has resulted in these areas being declared as overfished areas.⁸

The other problem is the conflict of utilization and management of coastal areas. This conflict is either user conflict or a jurisdictional conflict. The conflict of utilization of coastal areas usually happens between Government central and local, provincial and municipal levels, industries or companies and local people and the Government and local people. For example, the conflict in the utilization of Pantai Indah Kapuk in Jakarta between the interest to protect mangrove areas and development of housing and a golf course. The other example is the development of Lamong Bay, where here is conflict between conservation areas (provincial level) and the extension of a port (municipal

Lembaga Ilmu Pengetahuan Indonesia (LIPI) (Indonesian Institute of Sciences), P2O (Research Center for Oceanography), 2009

⁸ Suara Merdeka Cyber News, 2006

level).⁹ In this regard, the economic interest always wins over the conservation and environment interest. The conflict between the fisherman and the owner of villas in Bali regarding no more space for local fisherman to put their boats on shores is another example. And the recent is the conflict between the Government and local peoples in the management of marine and coastal resources especially in regard to the conservation issue versus access of local people to marine and coastal resources. The issue lies in the need to more public participation in decision making and access of local people on marine and coastal resources is raising especially to the establishment of marine protected areas (MPAs).

The Government can not solve these problems effectively because there are overlapping and conflicting laws regarding the management of marine and coastal resources; lack of law enforcement mechanism; unclear roles and responsibility of institutions who manage marine and coastal resources, lack coordination between sectoral Government, and a lack of capacity of local Government and lack public participation. This paper will analyze the roles of regulatory framework and institutional framework in promoting sustainable use of marine and coastal resources. This includes promoting conservation, public participation and reducing conflict between stakeholders.

4.4 Background and Context

The need to integrated coastal management, especially at the provincial and local levels in Indonesia is hampered by the current sectoral approach to the management of marine and coastal resources. In addition, overlapping and conflicting laws and regulations on the management of marine and coastal resources have created confusion, unclear mandates, roles and responsibilities of institutions who manage marine and coastal ecosystems. This has lead to unsustainable patterns of development in coastal areas.

⁹ In this case the municipal level win over conservation interest to built the extended port in Lamong Bay, despite with the protests of environmentalist and academic

There is an urgent need for a more integrated approach and more public participation in decision making in the management of marine and coastal resources. Integrated coastal zone management is widely endorsed by the international community as the approach to conservation and development of coastal zone which is necessary to assure sustainable development.¹⁰ A sectoral approach to the management of resources and development has proved inadequate in response to the complexities arising from the interaction between human and nature.¹¹

There are more than 14 sectors which directly or not directly govern the coastal resources of Indonesia.¹² This includes the land sector, mining, transportat

The conflicting laws mainly occur with respect to natural resources, including the coastal resources sector. This is because the statute or the

environment policies into action.¹⁶ Without coherent laws and regulations uncertainty in the implementation will remain. It has also been pointed out that the complicated and inappropriate legal framework currently in place in Indonesia has contributed to serious degradation of coastal and marine resources.¹⁷ Of course, harmonization is not a single solution to the complex issues of degradation of the marine and coastal ecosystems and resources and conflict on the utilization of coastal resources. At least it will create certainty in the law and its implementation and there will be a clear authority who has responsibility to manage marine and coastal resources. Furthermore, with the assessments or reviews of laws governing marine and coastal resources gaps, overlaps, redundancies, conflicts within the legal framework will become clear. The work of this harmonization will provide a solution in support of better management and integrated approach on management of marine and coastal resources. In this regard, a comparative stu26262()-192.036(s)-1.6

CHAPTER 2. THEORITICAL FRAMEWORK OF INTEGRATED COASTAL ZONE MANAGEMENT: CASE

The other definitions of ICZM are from Cincin-Sain and Kneeth which give definition of ICZM as “continuous decision making process aimed at maintaining, restoring or improving specified qualities of coastal ecosystems and the associated human societies.”²⁰ While Mark Frost defines ICZM more as conflict resolution tools, he defines ICZM as “a management model that had its beginning in the practice of conflict resolution which was employed at regionally local levels in attempt to mediate dispute between coastal zone stakeholders.”²¹ In addition, IPCC believes and defines ICZM as the “most appropriate process to address current and long term coastal management issues, including habitat loss, degradation of water quality changes in hydrological cycle, depletion of coastal resources, and adaptation to sea level rise and other impact of global climate change.”²² On the other hand, UNEP defines ICZM as “An adaptive process of resources management for environmentally sustainable development in coastal areas. It is not substitute for sectoral planning but focuses on the linkages between sectoral activities to achieve more comprehensive goal”.²³ Ruppert Consult and International Ocean Institute gives more complete definition of ICZM similar to the European Union, They

Similar definition on ICZM with the EU is provided by Alejandro Yanes Arancibia²⁴ which stated that ICZM is as following:

Dynamic process by which decision are taken for taken for the use,

air, earth and living beings; major and undesirable disturbance to the ecological balance of the biosphere; destruction and depletion irreplaceable resources.”²⁵

Thus, in Principle 13 of the Stockholm Declaration, its mentioned that in order to achieve a more rational management of resources and thus to improve the environment, States should adopt and integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve environment for the benefit of their population.²⁶ This is the international document stating that something should be done to reduce environmental degradation, this includes coastal degradation by using an integrated and coordinated approach in development planning. In addition, Principle 10 of the Rio Declaration (1992) indicating the importance of public participation to handle environmental issues. It further states that

Table 1.1 History of ICZM

1965	The first ICZM program is established (The San Francisco Bay Conservation and Development Commission)
------	---

the national, sub-regional, regional and global levels approaches that are integrated in content and are precautionary and anticipatory in ambit.³⁵ The key to sustainable use and development of coastal zone is on the full integration of economic, physical planning and environmental policies.³⁶ Thus, decision making is the key to determine whether the development will be sustainable or not. Agenda 21 has recognized that the current practice of many countries in decision making tend to separate economic, social and environment into the policy of planning and management.³⁷ This separation has created negative impacts on the environment. Thus, Agenda 21 calls for a fundamental reshaping of decision making which is more integrated and new forms of dialogue between stakeholders. To make the integration effective, it is reported that some Governments have began to make significant changes in institutional structures in order to enable more systematic consideration of economic, social, fiscal, energy, agr24(u)-3.71568(s)-1.63706(()-kgac(e)1.96

It is interesting to note how decision making, planning and management systems are improved. Agenda 21 provides the examples of how to improve decision-making process

reduced conflicts among user groups and control of destructive forms of behaviour.⁵⁰

issue, identification of existing policies and goals relevant to these issues). Thirdly,

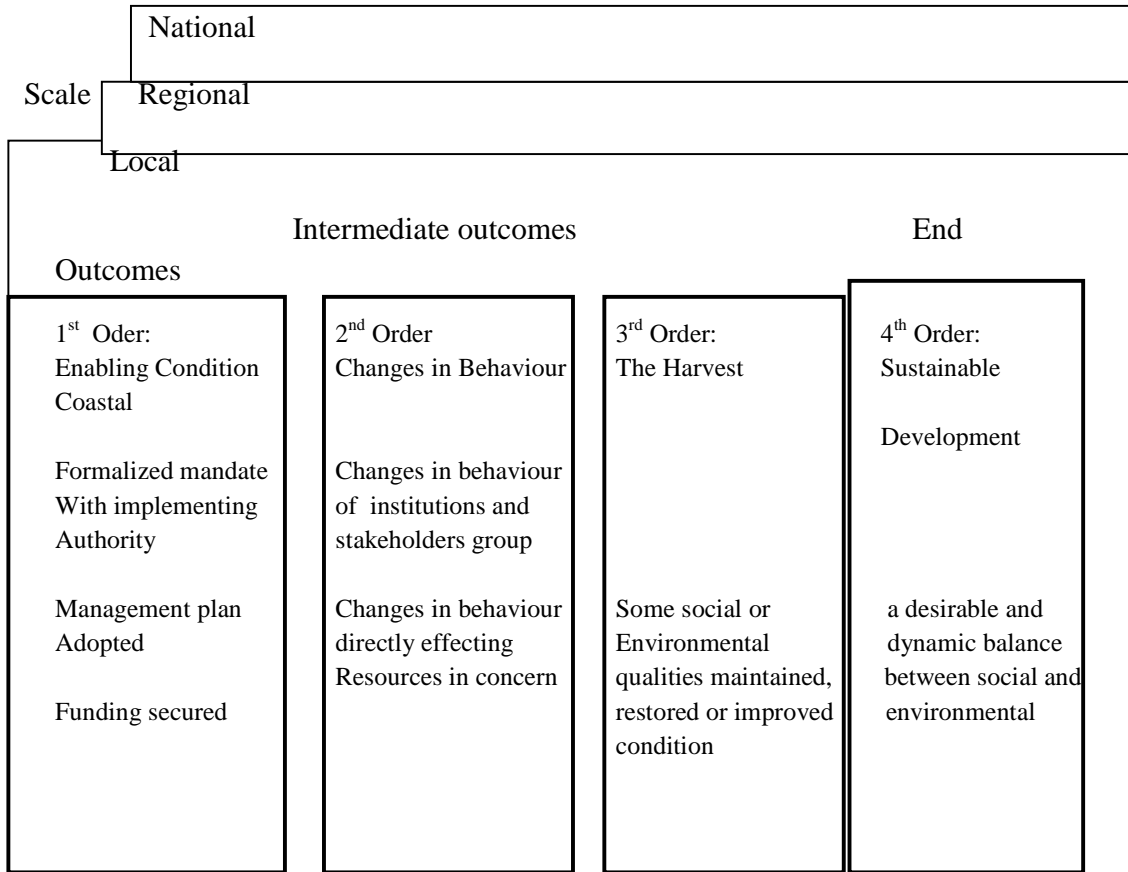
incentives.⁵⁴ Enforcement is an essential element of this stage. Priority activities conducted at this stage include, for example conflict resolution, public education, inter-agency coordination, training of management or enforcement personnel, infrastructure construction, planning and research on new planning and problems.⁵⁵ The enforcement is a significant challenge one especially in developing countries where a lack enforcement and implementation resource is one of the problems.

Stage 5, evaluation, in this stage the evaluation begins with looking into the changes since the program was initiated especially on priority issues and environment governance.

The question how to measures the progress of ICZM has been addressed by Olsen who developed an outcome model of ICZM initiatives (Figure 2.3).

Ibid
⁵⁵ Ibid

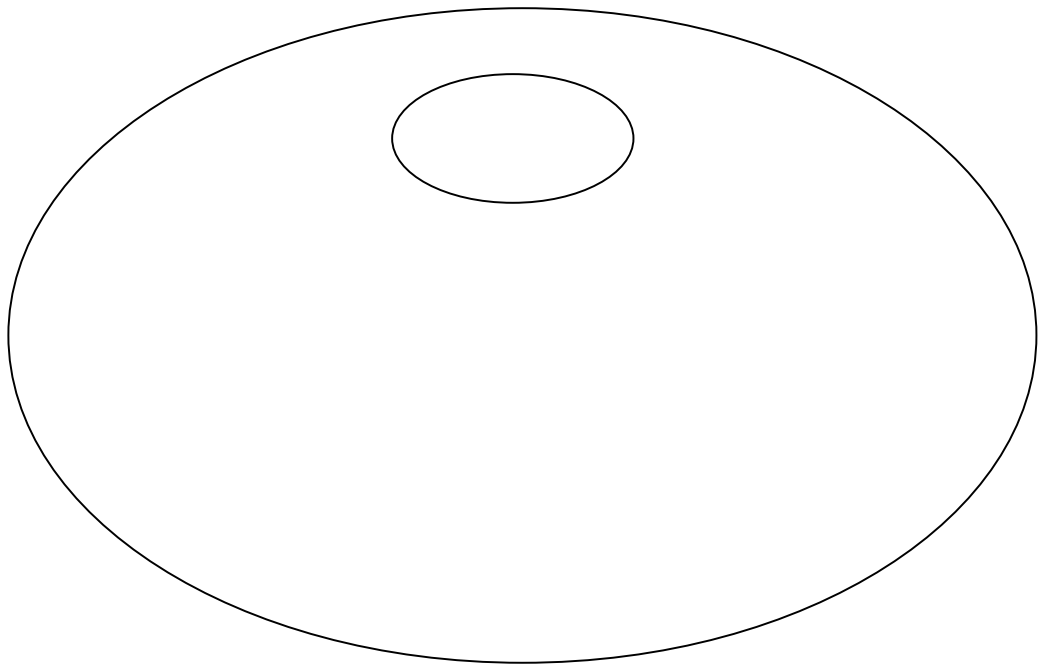
Figure 2.3 The Four Order of Coastal Governance Outcome



target as it is planned to change the behaviour of institutions and other stakeholders. Olsen again suggested that funding is not the main factor that limits the progress in

8. Consistency		32. Networking	
9. Contingency		33. Participation	Pluralism
10. Education		34. Practical Application	

Table. 2.3 Challenges of Consensus Building



2.4. ICZM in Indonesia the implementations and its challenges

There was no national framework and policy on Integrated Coastal Management in Indonesia before the enactment of law No 27/2007. The coastal management in Indonesia was sectoral in approach and the coastal management program is not sustainable and continues and not to be comprehensive in geographical (it is not cover the entire coastal areas in Indonesia). It has been suggested that the sectoral nature of coastal resources management in Indonesia is the greatest single factor impeding better, sustainable and integrated resource management.⁶² This is because many agencies have implemented their own development which may conflict with other agency programs and interests. For example, recently there has been a bribery case relating to mangrove forest (department of forestry interest) which was converted into a port (provincial government interest) in Tanjung Api-Api Banyuasin-South Sumatera, the conversion of Lamong Bay (mangrove conservation area, Provincial level interest) for port (municipal level interest), the

The evolution of coastal management initiatives in

Buton Southeast Sulawesi, Sikka East Nusa Tenggara,

2.4.1 Legal and Institutional Framework

Now how is marine and coastal management in Indonesia? How is the legal framework?

Before the enactment of the law no 22/99 and it was revised by the law no 32/2004 on

resources governance are regulated scattered in many legislations. There are some opinions from academics that there should be a legislation to govern sea in comprehensive way. The bright side is the Government is now in progress to prepare the draft of law on sea and ocean policy. Below are the lists of legislations concerning marine management and costal resources.

Table 2.4 The law related marine and Coastal Management

-

Before the establishment of the Ministry of Marine Affairs and Fisheries in 1999, there was no specific legislation concerning coastal resource management. Thus, marine and coastal management was sectoral in approach. The regulation regarding marine management and coastal areas is heavily based on three regulations, namely the Fisheries Act no 9/1985 which has been revised by the law no 31/2004; the Law no 5/1990 on conservation of living natural resources; and the Law no 23/1997 on environment management. After the enactment of the Law no 5/1990 on conservation living natural resources, six national marine parks have been established. These include:

- Kepulauan Seribu
- Karimun Jawa
- Takabonerate
- Bunaken
- Wakatobi
- Cendrawasih
- Togian Marine National Parks.⁸⁴

These six marine national parks are under the management of Ministry of Forestry who become the designated institution in managing marine parks under the Law no 5/1990

conflicting legislation to maintain their respective authority. In addition, with the “sectoral ego” makes the management conflict is more difficult to resolve and to make the situation even more complex many institutions are involved in marine and coastal resources management. Table 2.5 below lists the nat

Conservation Department of Mining and Energy	marine protected areas Regulate oil & Gas exploration and
---	--

include naming a lead agency, creating a new agency and training agency personnel. For example, the creation of special inter-Ministerial coastal coordinating council or

provide a framework and a mechanism on how the decision making is integrated between sectors. The lack of coordination between sectors and stakeholders for the management of marine and coastal resources is because there is no system and agency to coordinate every activity in the marine and coastal areas.⁹⁵ In addition, until now most local Governments tend to prioritize terrestrial planning rather than marine space planning. They do not have any mapping and zoning for marine areas, this is because development in Indonesia has favoured the terrestrial areas rather than marine areas. Most spatial planning is intended for the zoning of terrestrial areas while in marine areas zoning is limited to marine protected areas. Many local Governments do not have any capacity in marine zoning and mapping.

With the euphoria of decentralization, many local Governments enacted local regulations regarding the management of marine resources. This local regulation sometimes is not consistent with the pre-existing central law, even with pre-existing provincial laws. However, within the hierarchy of the Indonesian legal system, lower regulation can not be inconsistent or contradict higher level law. The Ministry of Home Affairs may review the local regulations and if these contravene higher regulation it will be gcho

Table 2.6 The Hierarchy of Indonesian Legal System Based on MPRS Decree 1966

MPRS Decree No XX/MPRS/1966

- Basic Constitution
 - General People Assembly Decree
 - Laws and Acts
 - Government Regulation substitute Law or Act
 - Government Regulations
 - Presidential Decrees
 - Ministerial Decrees
 - Provincial Government Regulations
 - District or City Regulations
 - Village Regulation
-

Source: MPRS Decree No XX/1966

Table 2.7 The Hierarchy of Administrative Level in Indonesia

- National Level (Central Government) in Jakarta
-

caused significant environment degradation in coastal areas.⁹⁸ With this massive coastal degradation phenomenon, the export of sea sand mining is prohibited under the decision of Ministry of Trade No 117/2003 and No 2/2007. However, illegal sea sand mining still occurs. This phenomenon occurs because the devolution of power from the central Government to the local Government is very fast and does not take into account the capacity of the local Government. It is argued that without capacity building greater

Ministry of Marine Affairs and Fisheries. Both institutions have the authority to manage marine conservation but with different approaches and different criteria in assessing marine conservation areas. For example, in Buleleng Bali, the Ministry of Forestry has assessed and intended to include all 144 km² coastline in Buleleng Bali become a conservation areas. However, according to the Ministry of Marine Affairs and Fisheries only three designated areas in Buleleng Bali namely Gerokgak, Lovina and Tejakula are suitable and thus to be designated as marine conservation areas within the zoning system. There are two systems of marine conservation areas centralized: the Ministry of Forestry as the leading institution and decentralized with Ministry of Marine Affairs and Fisheries as the leading institution.¹⁰⁰ It has been suggested that the Ministry of Forestry does not believe that the local Government is capable of handling the management of conservation areas so centralized approach is still conducted.¹⁰¹ On the other hand, the Ministry of Marine Affairs Fisheries has begins to decentralize the management of conservation areas to local Governments with the de

- Lack of law enforcement to the village regulation¹¹³
- The sustainability of funding¹¹⁴
- Lack of government support¹¹⁵
- Lack of public awareness.¹¹⁶

It has been observed is point out that externally funded projects generally have been the main means of implementation of ICM within developing countries.¹¹⁷ The dependence on external financial and technical assistance creates unsustainable institutions and policies as project are terminated and support staff and funding are withdrawn.¹¹⁸ For example, in the Philippines the majority of marine protected areas are not maintained for an appreciable amount of time.¹¹⁹ The example of abandoned marine protected areas may also occur in Indonesia. This because the local communities have difficulties to secure sustain funding, and it is made worse by the lack of Government support and incentives to maintain marine protected areas that have been established by local people. The lack of Government support also occurs in Proyek Pesisir marine sanctuaries in North Sulawesi. Even though line Government, such as the Forestry and Fisheries agency has been fully informed and supported the activities.¹²⁰ However, they only occasionally

¹¹³ In case of Bondalem village the community become angry if they warned by pecalang laut not to take sand or stone from the sea. The pecalang laut who con.815178213r8(n)-13.9951.88689(d)-7.7173(a)-1.8011693(i)0.44p715(t)0.4

the basis of conflict between uses/user may be anchored in one or more following reference points:¹²⁴

- Incompatible uses of coastal space and/or resources because one use fully occupies the space, completely utilizes the resources, or damage the resource for the other user.
- Different environmental values and world views, particularly the balance between development versus conservation
- Level of government, the public authority, or the institutional arrangement that makes the allocation regarding resources use
- Involvement of public in the decision making process
- Use and interpretation of scientific and technical information in decision making
- Allocation of funding for the government action or intervention.

The conflict in Indonesia is basically because management of marine and coastal resources sectoral in approach. The conflict in the coastal areas mainly between different stakeholders such as conflict between agencies of local Government or authorities, conflict between different levels of Government (central, provincial and municipal) and conflict between company and local people. It has been observed that national, provincial and local Governments tend to play different roles, address different public needs, have different perspectives. These differences often pose problems in achieving harmonized policy development and implementation between national and sub-national level.¹²⁵ The other conflict is between local people and private sector or investors. This conflict is trigger because there are overlapping regulations between the provincial level and the municipal or regency level, especially regarding spatial planning law. For example, in Bali the provincial level has set up regulations prescribing that no development is allowed less than 100 meters from the beach in order to conserve and prevent the beach from further erosion. This 100 meters is allocated as green space areas. However, in Buleleng Regency under the regulation on spatial planning, they are allowed to develop near the beach or between 25 meters and 50 meters from it. This regulation has allowed

bid
Biliana Cicin-Sain and Robert W Knecht, Integrated Coastal Zone Management Concepts and Practices, 1998, p 45

The conflict also occurs in the uses of marine areas between stakeholders such fisherman, sea farmers, tourism agencies and local Governments

zone management is absolutely needed to reduce the conflict. Coordination and harmonization of sectoral policies are a simple mechanism of ICZM management, as FAO proposed for Chapter 17 of Agenda 21 at the Earth Summit.¹³²

A viable ICM Program must be comprehensive but its content and complexity will vary from area to area according to development trends, conservation need,

environment. This type of ICZM requires a lot of funding for the implementation. However, FAO proposed “if human and financial resources are limited, ICZM programs can be simplified to be include only the following components: (i) harmonization of sectoral policies and goals; (ii) cross sectoral enforcement mechanism; (iii) a coordination office and, (iv) permit approval and Environmental Impact Assessment Procedures (EIA)”. That kind of approaches on ICZM proposed by FAO is more suitable to CZib.037(i)-9.81.63635(m)3(o)-3.71631()-109()d4195()-6.9933.56424(c)1.96;-i1 256.4(O)2.4068531(

edson F AO approach on ICZM that show sectoral

- The law on the Living Natural Resources Conservation and their Ecosystems no 5/1990
- The law on Autonomy no 32/2004
- The law on Fisheries no 31/2004
- The law on Management of Coastal and Small Island no 27/2007
- The law on Spatial Planning no 26/2007.

All These legislations also prescribe the public participation. However, to some extent many of the legislations are not clear about public participation mechanism. It has been noted that public participation in Indonesia is still weak, there is lack of standards and criteria for decision making in most legislation.¹³⁴ The Government sometimes does not conduct public participation in decision making. There is an urgent need for more accountability and transparency in Government decision making. Conflicts arising from the utilization of marine and coastal resources have also become a problem and needs conflict resolution mechanism to resolve that. Some of the legislation is overlapping and discriminates against poor fisherman and local communities which result in potential conflicts in their implementation. For example, the new law on the management of coastal areas and small islands no 27/2007 has triggered rejection and controversy (pros and cons) in the society, especially on the issue of marine tenure rights or concession rights. Some have argued that this legislation favours the private sector which has lot of money to invest, secure the marine tenure rights, and creates disadvantages for the local community and traditional fisherman especially with respect to the privatization of marine and coastal areas. Local people or traditional fisherman will have limited access to the resources that already has marine tenure title. This marine tenure rights has the potential to create conflict in its implementation. On the other hand, some of the supporters of this legislation argue that this legislation has recognized community/local

¹³⁴ The same case also happened in Belize. See: Donna R Christie, *Legislation, Policies and Regulations Relevant To Coastal Zone Management in BELIZE: A review and Proposals For Better Implementation of The Coastal Zone Management Act Of 1998, 2006*, FSU College of Law, Public Law Research Paper No. 187. Available at SSRN: <http://ssrn.com/abstract=882453>

customary rights over marine resources which is stipulated in article 61 on the law No 27/2007.¹³⁵

3.2 The Law on Management of Coastal and Small Island (No 27/2007)

This is the new law enacted by the Government to govern the management of coastal areas and small islands. It is intended to integrate the management of the coastal zone in Indonesia. However, this regulation is still regarded as sectoral legislation. It is drafted by the Ministry of Marine Affairs and Fisheries. The idea to enact this legislation is that marine and coastal resources are a common property, and there is an increasing coastal environment degradation and depletion of marine resources. Thus, the Government has shifted from open access policy to a privatization or concession registration

lie in the requirements of the local Government to firstly undertake zonation and marine spatial planning.

3.2.1 Purposes and Definition

The purposes of this act as codified in article 4 is as follow:¹³⁹

- To protect, conserve, rehabilitate, utilize and enhance coastal resources and small island and its ecosystem in sustainable manner
- To develop the synergy between central government and local government on the management of coastal areas and small islands
- To strengthen the participation of community and government institution on the management of coastal resources and small island to achieve justice, balance and sustainability.
- To increase social, economic and culture value through public participation on the community on management of coastal resources and small island

It is clear from the purposes of this act there are three broad aspects it seeks to achieve, namely: to promote conservation, integration and public participation. The purpose of this act is thus sound. However, there are still weaknesses and questions, particularly regarding the mechanism of integration between stakeholders on decision making and mechanisms of public participation. Moreover, if we look at to the definit15(a)1.96262(l)0.441715()250]T

The definition is missing public participation. It

17/2008 on the conservation areas in coastal areas and small islands. On the other hand, local Government has an obligation to make management plans (strategic planning, zoning, action plan) with the involvement of local people or communities which are based on the guidelines of the Ministry of Fisheries Decree.¹⁵² Strategic planning should be in accordance with national strategic planning and zoning should be in accordance with provincial and municipal spatial planning.¹⁵³ In this planning, the Government has an obligation to allocate space and access for communities to fulfill their economic and social needs.¹⁵⁴

There is a gap and shortcoming in this legislation on institutional arrangements and mechanism to coordinate and integrate decision between sectors. If the aim of this Act is to integrate sectors and different level of government, why is the Ministry of Marine Affairs and Fisheries designated to implement this regulation. The designation of Ministry of Marine Affairs and Fisheries as the single authority has caused this legislation to be regarded as sectoral legislation and as such does not achieve its purpose to integrate decision making between sectors. Article 53 prescribes that at the national level the management of coastal areas and small islands is coordinated and lead by the Ministry of Marine Affairs and Fisheries. However, no detail on the mechanism to integrate sectors for the management of coastal and small islands is provided. There should be another board or agency who has full authority to coordinate a cross sectoral planning and policy for the management of marine and coastal resources. For example, the creation of special inter-Ministrial coastal coordinating council or commission; Assignment to an existing planning, budget or coordination office; and designation of an existing line ministry to act as lead Ministry.¹⁵⁵ This is because there is an underlying problem of sectoral ego between line agencies in Indonesia regarding the management of natural resources. Every Ministry wants to be the champion of its own statue and secure

¹⁵²

their department interest. More mandates, authority and money allocated from the Government allocation budget to execute the mandates in their department is much better for them. This is why it is hard to resolve the overlapping authority between the Ministry of Forestry and the Ministry of Marine Affairs and Fisheries on the management of national marine parks and MPAs. The only board relating to the management of coastal and marine affairs that is already established by Presidential Decree No 161/1999 is the Indonesian Maritime Board (DMI). However, this maritime board, which was subsequently changed to the Indonesian Ocean Board by Presidential Decree No 21/2007 has limited power and authority and no significant hierarchy in Government This Board is just like a

iao.(a)196262(l [(h)-3.71693(i)0.441715(e)1.96262(h)3656299

example, *sasi*, *mane'e*, *awig-awig* and *panglima laot*.¹⁶⁴ This regulation is not so as to accommodate the trend of community-based coastal management which is increasingly supported by international donors and also increasing in numbers in some regions of Indonesia. For example, community based protected areas in Spermonde archipelago¹⁶⁵, community based coral reef rehabilitation in Bondalem Bali,¹⁶⁶ and community based marine protected area in Buton Distric South Sulawesi.¹⁶⁷ All these conservation areas have been initiated and managed by local people assisted by NGOs. Below is the model of existing marine conservation area in Indonesia.

Tabel 3.1 The Type of Marine Conservation in Indonesia

<i>Level</i>	<i>type</i>	<i>Management Authority</i>	<i>Approach Model</i>	<i>Supporting Agency</i>
National	Marine National Park (TNL)	Balai Taman Nasional (BTN-MF)	Government-Based Management	Ministry of Forestry
	Aquatic National Park (TNP)	BBKSDA-MF *	Government Based Management	Ministry of Forestry
Local	Local Marine Conservation Area (KKLD) Fish Sanctuary	Local Government (Municipal level) Local People Local Government	Government Based Management Co-Management	MMAF**

Without local involvement marine protected area wil

mangrove ecosystem,¹⁷⁶ flooding because sea levels rise,¹⁷⁷ and the removal of local people or fisherman from their livelihood.¹⁷⁸

In order to reinforce conservation measures the legislation also governs several activities which are prohibited:¹⁷⁹

- Coral reef mining;
- Taking coral reef in conservation area;
- Using bomb or poison in taking fish;
- Using equipment, method which caused damage to coral reef;
- Using equipment, method which caused damage to mangrove;
- To convert mangrove ecosystem in the area or farming zone without taking into consideration the sustainability of coastal ecosystem;
- To cut the mangrove in conservation area for industry or housing;
- Using method which damage the sea grass;
- Conducting sand mining in the area which is technically, ecologically and socially causing damage to the environment and society;
- Conducted gas and oil mining in the area which is technically, ecologically and socially causing damage to the environment and society;
- Conducted mineral mining in the area which is technically, .83783(c)t1.96262(h)]T71568(g)16.

enforcement mechanism because the Government is more in favour of economic development rather than conservation.

3.2.4 Public Participation

Public participation of local community in the management of marine and coastal resources is important. This because the local community is one of the main stakeholders and is sometimes marginalized by the Government policy and decision making. Local community, especially traditional fisherman, live mostly in poverty and lack education, they are unaware of their right to public participation. There is a lack of public participation in decision making. The poor traditional fishers are very vulnerable. Every decision or policy made by the Government in marine and coastal management will have direct impacts on them. For example, reclamation of the coastal areas in Pantai Indah Kapuk Jakarta has forced 125,000 fishermen to relocate or be removed.¹⁸¹ Thus, it is important to strengthen their public participation in decision making especially the local community and traditional fisherman. Note that in Indonesia public participation is still weak. All stakeholders deserve to be heard in the decision making process including coastal communities (fisherman) and business people. The government is much in favour of securing the interest of private sector rather than that of the local people. Again local Government revenue is the main consideration in securing the interest of private sector.

Chapter XI, article 60 of the law no 27/2007 stipulates rights, obligations and public participation of local community in the management of marine and coastal resources. This chapter on public participation is important considering the give Concession Rights regime to the business entity and company in order not to disadvantage and marginalized local communities and local fishermen. What is a concession right? Concession Rights

regime previously implemented for the management an

of enforcement in the implementation. In fact, there is a regulatory captured phenomenon that is the Government captured by the regulatory they are supposed to be regulating. The Government tends to promote the well being of the private sector rather than to prosecute for non compliance. This situation is presented as bleak as, so far there are many cases relating to the conflict between private sector who have concession rights and the local people who claim traditional customary land rights (*ulayat right*). Most of the cases

administrative cost,¹⁹⁷ most of the local people or local communities living in coastal areas are in low income.

3.2.5 Conflict Management

The increasing concern over the utilization of the coastal zone and small island is leading to potential access conflicts between investors and local people. Most of the conflict is associated with tourism versus traditional fisheries, for example, the conflict between local fisherman and PT Wakatobi Dive Resort (Swiss) on the access of coastal water.¹⁹⁸ The case involved the limitation of local fisherman to fish in the area that was used by PT Wakatobi Dive resort as diving area.¹⁹⁹ The conflict between fisherman and the owner of resort in Bondalem Buleleng Bali on the utilization of space in the coastal area for private beach versus the space for placing traditional fishing boats (jukung).²⁰⁰ The conflict of Togian local community with PT Walea (Italia).²⁰¹ The local Government seemed unaware of the potential conflict in the utilization of this coastal resource. It is indicated by the lack of law enforcement regarding the non compliance of the development in coastal meadow. Looking at conflicts between local communities and investors or businesses recently before the implementation of HP3, the Government should have anticipated that concession rights could possibly increase the potential for conflict. Thus, conflict management is important to reduce this conflict. How can the Governments address the issue? Examining conflict management conducted in Bondalem village, Buleleng Bali. It is interesting to learn how the local community solved this conflict between the owners of a villa and the fishermen. Based on the fieldwork in Bondalem village Bali the conflict resolution is based on negotiations or consensual approach. The leader of the village, leader of adat pakraman, the owners of the villa, and the fisherman

¹⁹⁷ Ibid

Kompas, 20 March 2009 Artikel oleh Yurnaldy "Baru sekedar sadar potensi

¹⁹⁹ Yunalrdi, Kompas 20 March 2009, Is just only limited to Potential aware

Masyhuri Imron *et al*, 2008: In Bali most of the investor built the resort in coastal meadow area which is according to provincial regulation is clasified as non development area. The result of this development is there is limitation to the access of community to the public beach

²⁰¹ Yulinardi, Op cit, p 51

3.3 The Law on Fisheries (Act No 31/2004)

Overfishing, illegal fishing, destructive fishing and poverty of traditional or artisanal

3.3.1 Purposes and Definition

The purposes of this act, as stated in article 3, are to:

- Increase the livelihood of fisherman and small scale sea-farmer
- Increase the government revenue
- Increase and expand job opportunity
- Increase the supply and consumption of fish
- To optimalize the management of fish resources
- To increase productivity, quality, value added, and competitiveness
- To increase the supply raw fish material for fish industries
- To achieve sustainable use of fish resources, sea-farm and its environment
- To guarantee the sustainability of fish resources, sea farm area and spatial planning.

It is clear from the above that this legislation seeks to achieve two broad objectives: this legislation, the welfare of traditional fishers, and sustainable use of marine resources. These objectives are sound, especially the good will of the Government to increase the livelihood of traditional fisherman. However, to some extent this legislation does not reflect its purposes to increase the livelihood of small-scale fisherman. The Government does not recognize Community-Based Fisheries Management (CBFM) systems which have as *de facto* existed over a hundred years in Indonesia.²⁰⁹ CBFM are rooted from in traditional fishing communities, which are scattered in many islands of Sumatera, Java, Sulawesi, Maluku, Papua and Nusa Tenggara Barat.²¹⁰ The recognition of this CBFM is important considering the recognition of the role of the local people as resource managers. As pointed out that there is no article within the revised Fisheries Law No 31/2004 that explicitly addresses devolution to the local people as recognition of CBFM systems.²¹¹ It is pointed out that CBFM has many positive roles, including livelihood security, access equity and conflict resolution, resources conservation, and ecological

²⁰⁹ Arif Satria, Decentralization of property right in Marine Fisheries: Indonesia Perspective, 2004, p2

²¹⁰ Ibid, p2

Ibid, p2

sustainability.²¹²

3.3.2 Institutional Arrangement

In the definition of this regulation there are several authorities responsible for the implementation of this legislation namely: the central Government, the Ministry of Marine Affairs and Fisheries and the local Government. The Ministry on which is mandated in this regard is the Ministry of Marine Affairs and Fisheries has the duty to decide on the policy regarding the management of fisheries. This includes plans for fisheries management, potential and allocation to the fisheries resources, total allowable catch, potential and allocation to aquaculture, type amount and size of fishing gear, location, area, time and season of fishing, fisheries conservation area, type of fish being protected.²¹⁷ To help the Ministry in making decisions, article 7(3) mandates the National Commission on the Assessment of fisheries stock which has the duty to give recommendations on potential and total allowable catch (TAC). This Commission actually already established in 1996, with the initiation of National Board of Planning and Development (BAPPENAS) and its membership includes Indonesian Institute of Sciences (LIPI), Institute of Aeronautics and Space (LAPAN), The Agency for the Assessment and Application Technology (BPPT) and Bogor Agriculture Institute (IPB). However, in this legislation there is no commission on the assessment of fisheries stocks at the local level. This type of commission is needed at the local level because the local level has been given the authority to manage marine and coastal resources. So far, the local Government has difficulties in obtaining valid data on fisheries stocks. Thus, it is hard for them to decide in a timely manner on the on fisheries sector policy. For example, on the ban of fishing gear, or a close season in several waters which are already overfished, or to reduce the number of fishing vess

legislation does not govern several conservation measures which are applied in some countries such as Sweden and Australia. This includes: closed season, by catch limit, limiting fishing effort, fixing the number and type of fishing vessel authorized to fish. This regulation on closed season and fixing the number of fishing vessels is important, considering that Indonesia has a problem with overfishing and fishing fleet management (over capacity). For example, in East Java of some 8500 vessels only 10 % have licence to fish.²²⁷ Over fishing is deeply rooted in fleet over capacity. Too many vessels fish intensively in some waters. For example, the overfishing of lemuru in Bali strait is due to too many vessels fishing in lemuru season; 400 vessels fish in the lemuru season but the quota is only 150 vessels.²²⁸

In addition, the conservation measures on the protection of fish habitat, including the establishment of marine conservation areas is also regulated.²²⁹ However, there is no detail in the provisions on marine conservation areas and fish habitats. It is stated in

Table.3.2 Marine Conservation Areas in Local Area 2002-2004

No

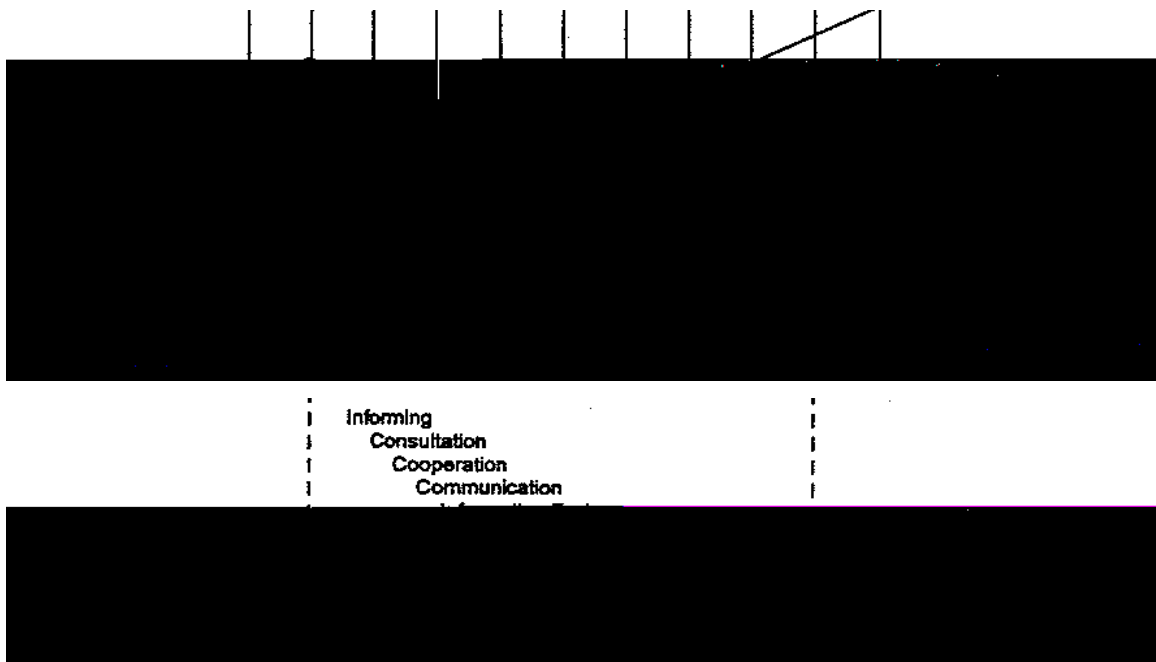
Source: adapted from Arif Satria, 2006²³¹

In addition, in order to protect the fish habitat and its ecosystem, this legislation prescribes the prohibition of destructive fishing practices such as the use of bombs and poison for which the penalty is six years imprisonment

fisherman are rarely involved in the decision making process. Their lower education levels make them not aware on their public participation rights. For example, in the establishment of maximum sustainable yield by the central Government little participation or effective consultation with the fishers are occurs. To some point local participation in decision making especially the recognition and the use of local

the hierarchy of a co-management initiative. It has been observed that “co-management can serve as mechanism for both of fisheries management and for community and economic development by promoting participation of fishers and the community in actively solving problems and addressing needs”.²⁵²

Figure 3.1 A Hierarchy of Co management arrangements



Source: Berkes, 1994²⁵³

In addition, community based fisheries management has a great role in promoting sustainable fisheries management. This is because community based fisheries management involves the participation of fishers and the community in actively solving problems and addressing needs. This is a key feature of co-management arrangements.

group “Mina Bakti Soansari” which later became a lo

Below are outlined examples of these types of conflicts between fishermen:

Table 3.3 Conflict between fisherman

No	Incident	issues	Location	time	source
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1.

the community. However, this conflict can be reduced if outsider fishers respect the local customary law on the management of fisheries. This provision is not explicitly mentioned in this legislation. For example, if the local fisherman is disturbed by outsiders fishers' activities who use excessive lamps in the night to catch fish. So the outsiders should respect the local customary law and follow what the tradition of the local fishers. To some extent, according to the interviews with fisherman in Bali the local fishers can not ask the outsiders not to use excessive lamps because there is no regulation to prohibit this fishing technology.

Thus, the responsibility for conflict management now rests with the provincial and regency level, for example, in the case of conflict between Masa Lembu and Central Java fisherman. The Central Java Provincial Government held coordination meeting with East Java Government to solve the conflict.²⁵⁸ Based on this coordination meeting there were several approaches undertaken:

- The socialization (to educate fishers) of the fisheries act
- To improve the coordination between institutions.
- To mediate between the fishers in conflict
- To establish poskamladu (station of monitoring and controlling).
- The empowerment of pokwasmas (the community monitoring group)
- The cooperation on monitoring with the Indonesian Navy and Police
- The monitoring and controlling together between two provincial levels.
- The implementation of an agreement between East Java and Central Java which establishes actions to be taken by each provincial and regency levels in Central Java and East Java as follow:²⁵⁹
 - Improve management of fishing fleet (vessel license issue)
 - To educate outsiders fishers

- To control of rumpon license²⁶⁰
- To improve the environment the outsiders fishers should follow legislation and follow the local customary law.
- To response fastly with the coordination between authorities involved to solve the conflict between fishers

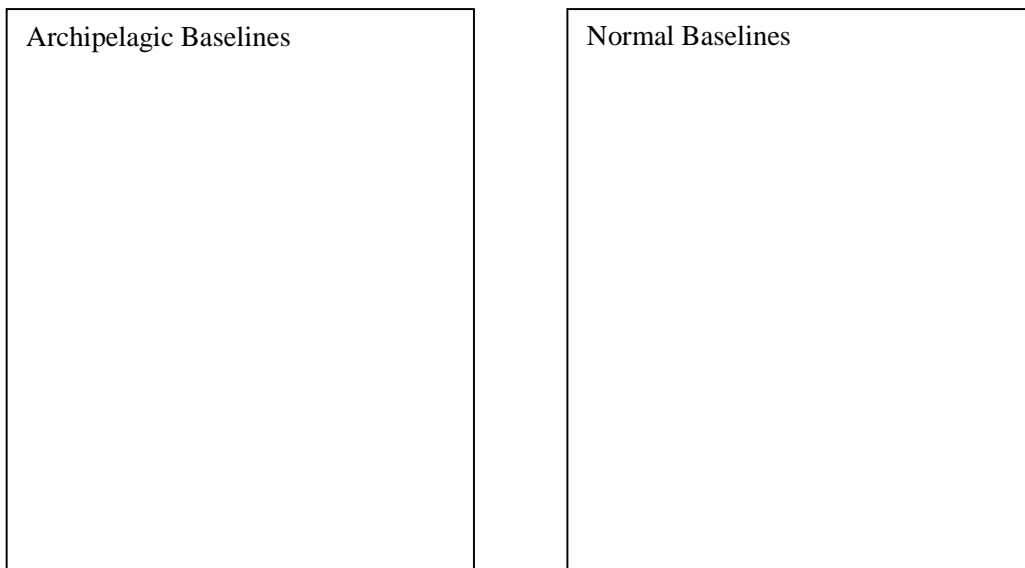
legislation, the law no 31/2004 on fisheries and the law no 27/2007 on management of coastal zone and small island the responsible authority for marine conservation areas is the Ministry of Marine Affairs and Fisheries.²⁶⁴ Note that those legislations also govern marine conservation areas with a different approach which is to also included decentralization approaches to the local Government. However it does not include devolution to local people: community based marine conservation areas. Thus, to some extent the overlapping legislation creates confusion and overlap in the implementation through the local Government. Two different authorities manage the same targeted conservation areas with different approaches: centralistic approach (Ministry of Forestry) and decentralistic approach (Ministry of Marine Affairs and Fisheries) and different criteria: ecosystem approach (Ministry of Forestry) and zoning system modification from IUCN (Ministry of Marine Affairs and Fisheries).²⁶⁵ This despite *lex posteriori derogates legi priori* and thus, a revision of the law no 5/1990 is needed

externalities, environment funds and incentives and disincentives.²⁶⁷ The authorities appointed by this legislation to manage the environment are the central Government (president), local Government (governor, mayor) and

authorities for management of marine and coastal re

Governments have a requirement to manage this mining because the area of mining is outside 12 nautical miles which is managed by the central Government.²⁸² Thirdly, some municipal levels are not clear on the concept of this regional delimitation. The local municipal Governments do not have capability to measure their marine areas. Some of the local Governments, for example in Sumenep Madura have different mapping of their marine areas with the mapping of the central Government. The mapping of marine area conducted by the local Government in Sumenep is based on archipelagic baselines while the central Government used normal baselines. Thus, consequently the area generated by this archipelagic baseline is double than of the central Government mapping data. The doubling of this marine area has a direct consequence on the national budget subsidies to the local Government to manage this marine area. Below is a figure depicting the difference between archipelagic baselines and normal baseline method.

Figure 3.2. Type of Baseline



Source: Francois Bailet, 2010

Tribun Batam, Share benefit become polemic, 16 July 2009

To some extent, the devolution of management of marine and coastal resources to the local Government had positive effects with respect to stewardship. However, there are many aspects which need improvement to make decentralization successful. The success of decentralization is not taken for granted but there is a prerequisite to be considered.²⁸³

First is the improvement of regional legislation, t

planning includes land space, marine space and air space.²⁸⁷ Unfortunately marine and coastal areas are not specifically regulated by this legislation. As it is specified in article 6 (5), marine space and air space are regulated by other specific regulations.²⁸⁸ As a matter of fact, this specific regulation on marine spatial planning is not yet enacted. The existing law no 27/2007 governs zoning and planning in coastal areas and small island, and provides the technical guidance on spatial planning and zoning in small islands.

3.7.2 Discussion

The issue of marine spatial planning lies in that the regulation has not been enacted yet. This is due to the recent approach in spatial planning adopted by many regions which is based mostly on terrestrial areas thus zoning and marine spatial planning remain mostly absent in the local planning documents. For example, in Buleleng Bali they do not have marine spatial planning and zoning of coastal areas.²⁸⁹ This is why conflicts exist between marine users, and it is increasing largely because there is no clear designation or marine spatial planning from the Government.

The other problem is that the principle of coherence and integrated planning which is stipulated in the law no 26/2007, is not implemented by the local Government. For example, in Buleleng Bali where the municipal Government has set different measures on the limit of coastal meadow. According to provincial spatial planning document the Government should provide a coastal meadow of 100 meters from the highest water mark to the land. This non-development area is intended for conservation, disaster reduction, and reduction of erosion. However, in Buleleng and Karangasem municipal Governments they have set 25-50 meter wide coastal meadow. This inconsistency between provincial

²⁸⁷ See: Article 6 (3) the law no 26/2007

²⁸⁸ See: Article 6 (5) the law no 26/2007

KT-8.728695((KT-8.7286a)10)5262(g)16.84-3.71693(n)6.56297484-5140-1.637.h(7w 7

spatial planning and municipal spatial planning is causing some problems, including worsening erosion, limited access of local people to the beach and increasing conflicts between fisherman and owners of villas and resorts erected near the beach. There is no mechanism for resolving the overlapping regulations, except through the recommendation by the provincial level to the municipal level to revoke its regulation. The provincial Government can not enforce the law because the enforcement mechanism is at the municipal level. Thus, there should be a mechanism in this legislation to resolve overlapping and conflicting legislations between the provincial level and the municipal level. In fact, according to the hierarchy of law in Indonesia, the lower level legislation should be in accordance with the higher level legislation. But there are few mechanisms to resolve this situation except by revocation by the Ministry of Home Affairs which is to some extent, not really effective due to the vast areas of Indonesia. They can not control all overlapping legislations.

CHAPTER 4

COMPARATIVE STUDY ON ICZM IN THE UNITED STATES, THE EUROPEAN UNION, AND VIETNAM: A LESSON LEARN FOR INDONESIA

4.1 Introduction

best practices, between successes and failures. Furthermore, observations will be made by examining the similarities and differences between approaches in addressing similar problems in coastal and marine environment degradation. In this regard, Vietnam probably is the most appropriate country to compare with Indonesia because of the similarity in problems as developing countries in the degradation of marine and coastal environment and resources.

4.2 The European Union

4.2.1 Overview to ICZM in EU

ICZM initiative of in Europe started in 1992 when the European Council in its resolution on the future community policy concerning the European Coastal Zone recognized that “the key to sustainable use and development of coastal zone lies in full integration of economic, physical planning and environmental policies.”²⁹³ In this resolution, the Council invited the European Commission to propose a community strategy for ICZM which would provide a framework for conservation and sustainable use of coastal areas.²⁹⁴ The ICZM initiative was conducted 631(n)6. (m)7.005967.9622wruey 150.441715(3(r)4.0432(

Tabel 4.1 EU Maritime and Marine Policy document

Usual short title	Title	Type of document	Date	Reference
2002 ICZM Recommendation	Recommendation of European parliament and council concerning the implementation of integrated coastal zone management in Europe	recommendation		

While there is uniformity in the acceptance of ICZM in the United States, the response to ICZM in Europe is largely fragmented.³¹³ Based on an evaluation conducted in 2006, no country has implemented an ICZM national strategy as prompted by EU ICZM recommendation.³¹⁴ In seven countries, namely: Finland, Germany, Malta, Portugal, Spain, Romania, and United Kingdom the implementation of a national ICZM strategy is pending.³¹⁵ In six further countries, namely: Belgium, Cyprus, France, Greece, Netherlands, and Slovenia documents considered as equivalent to a national ICZM strategy has been developed, or coastal management strategies have become an integral part of its spatial planning processes.³¹⁶ In eleven countries, namely: Bulgaria, Croatia, Denmark, Estonia, Ireland, Italy, Latvia, Lithuania, Poland, Sweden, and Turkey no ICZM equivalent policies are in advanced stages of preparation only fragmented tools are in place to address coastal issues.³¹⁷ To some extent, even though no ICZM programmes are implemented in some European countries (for example Sweden),³¹⁸ the traditional approach to coastal management and planning has been

coordinate their activities. These regional seas in Europe include the Baltic sea,³²² the North Sea,³²³ the Atlantic,³²⁴ the Mediterranean sea,³²⁵ and the Black Sea.³²⁶

4.5 Marine Conservation

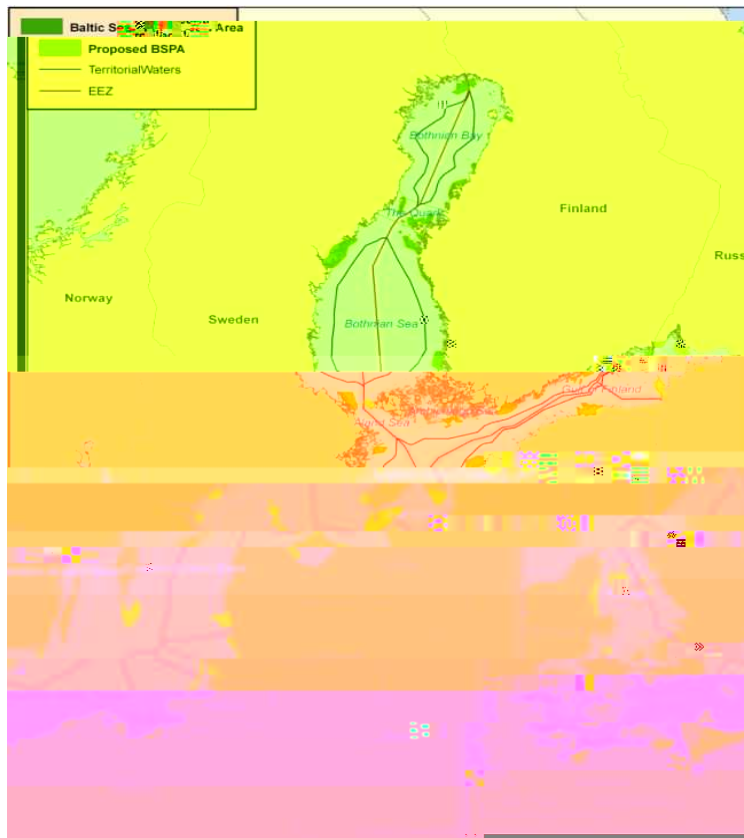
The framework for marine conservation areas in Europe is based on the Habitat Directive (1992).³²⁷

Besides the Habitat Directive initiated by the EU, the conservation of marine areas in Europe is also based on the regional initiative. For example, in the Baltic Sea, and North Sea. In the Baltic Sea there is the Helsinki Commission (Helcom Regional Convention)³³² and the Oslo and Paris Commissions (OSPAR regional Convention)³³³ for North East Atlantic (Arctic Waters, Greater North Sea, Celtic seas, Bay of Biscay and Liberian coast, and wider Atlantic). Both HELCOM and OSPAR conventions regulated marine protection issue by aiming to establishing a representative ecologically coherent and well managed network of Marine Protected Areas by 2010 in Baltic Sea Protected Area (BSPA) and North East Atlantic.³³⁴

There are strengths and weaknesses in both HELCOM and OSPAR conventions. The strengths it lies in that international political commitment, regional representative system and common assessment and common guidelines and criteria.³³⁵ On the other hand, the weaknesses lie in that it is not legally binding legislation and there is no national implementation and criteria and guidelines are not always adjusted to national legislation and management of organization.³³⁶ However, some pointed out that these two conventions are an important driver for better marine protection.³³⁷ Thus, all EU recommendations and regional conventions are only drivers to more and better management of marine areas, the important aspect is the domestic implementation and legislation. Below is the map of Baltic Sea Protected Areas. Note that the network of marine of marine and coastal Baltic Sea Protected Areas is not fully implemented.³³⁸ In

many cases, the contacting parties have not yet managed to demarcate Baltic Sea Protected Areas (BSPAs) or prepare management plans.³³⁹

Map 4.2 Baltic Sea Protected Area (BSPA)



Source: HELCOM, 2008

One of the efforts of the EU in addressing the declining fisheries stocks (for example cod species) is through the Common Fisheries Policy (CFP). Common Fisheries policy was entered into force in 2003, with the objective of conservation and sustainable exploitation of fisheries resources. According to the basic regulation before the end of 2012 the

³³⁹ Ibid

The CZMP initiative was undertaken in response the concern from Congressional findings regarding the loss of living marine resources, wildlife, nutrient rich areas,

the state program. The State should demonstrate that the funds would be used appropriately to develop coastal management programs. And to qualify for implementation assistance the State programs are required to have met the approval of Federal Office of Ocean and Coastal Resources Management (OCRM).³⁵⁸ The approval is based on conformity with national policies and plan.³⁵⁹ The Federal consistency provision set out in section 307 emphasizes coordination and cooperation between federal and State levels.³⁶⁰ It stated that:

Each Federal Agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner in which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. A federal agency activity shall be subject to this paragraph unless it is subject to paragraph (2) or (3).

The CZMA is designed to ensure that the coastal zone is managed in a manner that is consistent with the national policies and plan. The CZMA is designed to ensure that the coastal zone is managed in a manner that is consistent with the national policies and plan.

The National Marine Sanctuaries Program was created in 1972 as part of the Marine Protection, Research and Sanctuaries Act. The purpose of the program is:

To identify marine areas of special national or international significance

protected areas as part of its National Marine Sanctuaries Program.³⁶⁸ The agency also manages a variety of fishery zones and area closures to protect critical habitat for threatened or endangered species.³⁶⁹ The Department of the Interior (DOI), through the National Park Service (NPS), NPS manages the National Park systems, which include national parks, monuments and preserve in ocean areas. The U.S. Fish and Wildlife Service (USFWS) is also authorized to create and manage marine protected areas and the US Environmental protection Agency's (EPA's) National Estuary Program.

The lesson that can be learned from this ecosystem approach is that conservation should be based on natural and physical processes not on political boundaries and jurisdictional and administrative barriers should be eliminated as much as possible.³⁷⁵ Management plan development and implementation should involve

on of a body or the appointment of an existing body to coordinate cross-sectoral activities in the management of marine and coastal resources.

4.5.2 Marine Conservation

Recently there has been a trend toward the establishment of MPAs in Vietnam based on ICZM and ecosystem approaches and the establishment of a network of MPAs, for example in North Tonkin Archipelago. The two neighboring provinces of Quang Ninh and Hai Pong share management responsibility throughout the North Tonkin coastal region of Vietnam from Hai Pong to the border with China. The coastal area lies in the dynamic Hai Pong-Quang Ninh Hanoi development triangle. It consists of 2000 islands

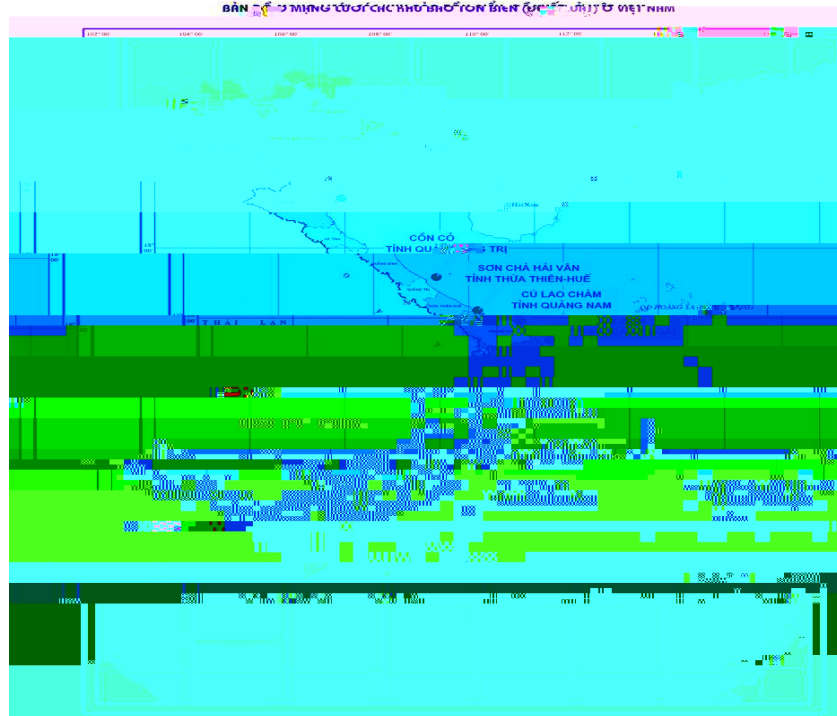
Below is the map of North Tonkin Gulf and marine protected area in the region and network of 15 MPAs in Vietnam.

Map 4.3 North Tonkin Gulf



Source: IUCN Vietnam country office, 2007

Map 4.4 Network of MPA in Vietnam



Source: Vu Thi Hoai Thu

The ICZM approach to MPA management was adopted due to the significant impacts from human activities outside the boundaries of the MPA, for example, land-based activities, aquaculture, tourism, agriculture, urban development, port development and maintenance (dredging and dredged material disposal).³⁸⁵ It is argued that MPAs can not be managed effectively in isolation from their surroundings in the coastal zone. This argument is based on the lesson learned from the management of the Nha Trang Bay

coastal zone discharge into drainage channels via septic tanks. The source of pollution in Ha Long Bay is not only domestic waste but also industrial waste, coal mining activities, commercial waste water and livestock waste.³⁸⁶ The coastal areas in Ha Long Bay have multi use and to some extent this has create conflict among the users. The Ha Long Bay is significant economic development zone with economic activities such as sea ports, coal mining industry, the development of aquaculture and near shore fishing, and the development of tourism. In addition, in the area of Ha Long Bay there is a coastal community named Hung Tang of which half of the population lives in a floating fishing village in the core zone of the natural heritage site. The community's main activities are fishing, aquaculture, coral exploitation, tourism and transportation. With this multi-use of the marine and coastal areas in the Ha Long Bay, there is absolutely needed to balance between economic development, social issues and environment. The primary challenge of managing Ha Long Bay is to conserve the area is eco

marine ecosystem through collaboration and cooperation between countries in the regional sea (i.e. Baltic sea and North sea). The ecosystem based approach is also recognized in the EU Marine Strategy Framework Directive 2008:

By applying an ecosystem based approach to the management of human activities while enabling a sustainable use of marine goods and services, priority should be given to achieving or maintaining good environmental status in the Community's marine environment, to continuing its protection and preservation and to preventing subsequent deterioration.

The ecosystem based approach is taken into consideration because, for example, the Baltic Sea is semi closed, shallow, and brackish water sea with the problem of eutrophication and water turnover.³⁹⁰ In addition, the Sea is very vulnerable to ship discharge. The pollution in one region will consequently affect other regions. It is unavoidable that there should be cooperation and collaboration between States.

In the US ecosystem based approaches and integrated management are also used in the management of the Florida Keys National Marine Sanctuary to address the problem of the pollution coming from outside the boundaries of the marine sanctuaries. In Vietnam, the Nha Trang Bay MPA and the Ha long Bay World Heritage Sites also ecosystem based approaches and an integrated approach in the management of MPAs to reduce the pollution emanating from outside the boundaries of the MPAs.

There is thus a recognition and acceptance that these tools can be used in the context of MPAs so as to ensure sustainable use, protection and conservation of marine biological diversity and its ecosystems. In the European Union, the recognition of MPA is clearly stated in Marine Strategy Framework Directive stated that “the establishment of marine protected areas is an important contribution to the achievement of good environmental

<http://www.unu.edu/unupress/unupbooks/uu15oe/uu15oe0m.htm>

status under this Directive”.³⁹¹ The establishment of MPAs for the European Union, is also pursued so as to fulfill its commitments to the World Summit on Sustainable Development and the Convention on Biological Diversity.³⁹² In the US, Marine Protected Area is an umbrella term used for a wide range of approaches to the US area based conservation and management.³⁹³ In the USA there are different names for MPAs such as sanctuaries, parks, preserves or natural areas.³⁹⁴ Moreover, the establishment of MPA is not only inside national jurisdiction but also outside national jurisdiction. OSPAR for example, has agreed to establish a MPA beyond national jurisdiction (ABNJ). OSPAR 2008 has agreed to take forward work seeking to establish an OSPAR MPA for the Charlie Gibbs Fracture Zone on the Mid Atlantic Ridge.³⁹⁵ The practice of is ranging from multiple uses to restricted areas. It is recognized that the establishment of MPAs is best managed through the ICZM approach. This is because to sometimes problems are

(e))-8.3173(k)6.56299(ii)19619620044175(V)P.9.5165ff163171631.0432(D4921)6286738(1)6256381)12549.275(W)183806

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decisions³⁹⁸ which are legally binding. In regards to ICZM the position of the EU is only to address this issue in a form of recommendation for member States to implement ICZM in their national legislations. This Recommendation is not legally binding thus it is not an obligation for member States to implement ICZM. This instrument is not as strong as a Directive. However, to address environment degradation issues and as a means of conservation policy in the EU region, it enacted the Habitat Directive (1992), Water Framework Directive (2000) and the Marine Strategy Directive (2008). These three

However, the fact that activities on land affect the sea and vice versa,⁴⁰⁰ but the Federal government does not have the authority to manage 3 mile zone. Thus, with this authority Federal Government may not adequately protect Federal interest and State law may be insufficient to protect the state coastal zone from activities outside state jurisdiction.⁴⁰¹ To address these challenges, the CZMA provides a framework for cooperation through partnership contract arrangements.⁴⁰² These arrangements are voluntarily, they are an offer from the federal to state levels. It is up to the State to accept this contract or not. However, there are incentives to this offer: first the CZMA provides federal funds to the State to manage their coastal areas in accordance with a set of federal guidelines.⁴⁰³ Another incentive lies in the consistency provision which allow the State to have a voice in activities that are outside of the state territory but may affect the State's coastal zone.⁴⁰⁴ As the result in, 1999 29 States and five territories entered into this contractual partnership agreement on coastal management program which together cover more than 99 percent of the nation's coast line.⁴⁰⁵ The greatest achievement of this CZMA is the high level of participation of the States. To date, the participation of States has increased to 34 which are all creating coastal laws and regulations to improve the condition of and protect the wetlands, and address public access and coastal hazards.⁴⁰⁶

In Vietnam, the approach to ICZM is by establishing a powerful Governmental organization to coordinate cross-sectoral activities in the sea and islands.⁴⁰⁷ It is very similar to the Indonesian, the approach who appoints an institution as the lead agency to

Similarities	<ul style="list-style-type: none"> • Recognition of Integrated Coastal Zone Management (ICZM) approach • Recognition and application of ecosystem based approach • Recognition and acceptance of MPA (Marine Protected Areas as tools to ensure sustainable use of ocean and coastal resources 		

4.7 Lesson learned for Indonesia

After examining approaches in the European Union, the United States, and Vietnam, there are lessons that can be learned from their approaches in management of marine and coastal resources. It is not necessarily that these approaches from are all applicable to other regions, one size does not fit all. One best practice in other region can not simply applicable to another region. There are differences in culture, economics, politics and the system of governance.

One aspect that can learn from other approaches is the application of ecosystem-based

Convention on Biological Diversity (CBD) ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.⁴¹⁴ However, the most notable improvement is on the law on the protection and management of the environment (No 32/2009). This law is recognized the eco-region based approach which is more concerned with the ecosystem considerations and socio-economic rather ones than political boundaries or jurisdiction. Note that with the decentralization there is a trend of political boundaries and jurisdiction over the management of marine and coastal resources. This has limited the conservation of marine and coastal resource is due to boundaries or jurisdiction issues, while the trend

conservation. In addition, the confusion begins when the local Government also wants to manage this conservation area in their areas which are already managed by the central Government. Thus, the United States model of establ

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Government has the authority to enact law which is may or may not be coherent with the central legislation. Thus, there should be a mechanism to resolve these overlapping and conflicting legislative issues. For example, the provincial level can revoke the municipal legislation that is not coherent with central and provincial legislation.

Secondly, strengthening collaborate on and partnerships between the central Government and local Government in the management of conservation of marine and coastal resources. To some extent, the devolution of conservation authority to local Government is halfhearted in its implementation. The central Government still manages conservation area located in local jurisdiction. In addition, lack of capacity and funds of local Governments to implement this mandate has negative impacts on the conservation efforts. The US model of a voluntary collaborative approach with incentives (funds and technical assistance) is a good example of how consy1.96262(o)-5.396(t)0.441715(h)-3 [(y1.960 Td [(

and to advance their livelihood. In addition, in environment governance civil society has the right to access natural resources and participate in decision-making. Thus, the policy makers should bear in mind the interest of the local communities and local fisherman in making policy. In addition, the Government should also taken into consideration traditional knowledge in making decision regarding management of marine and coastal resources. Traditional knowledge is usually rich with sustainable practices and can beneficial as supplement to scientific information, to help monitor the resources and to improve overall management.⁴¹⁶

n regard to conservation, the current legislative framework provides somewhat a framework for the conservation efforts of the central Government and the local Governments. However, weaknesses include a lack of a clear basis for the implementation of ecosystem based-approach. Based on the experience in the United States, the European Union, and Vietnam ecosystem based-approaches are tools that can be used to manage MPAs effectively. In addition, the current legislation does not accommodate community based coastal management which, in fact, has significantly increased at the community level. These initiatives absolutely need the recognition in the legislative framework and support of the Government, in terms of both funding and technical assistance. This is because the community based coastal management will result in increasing the ownership of local people of their coastal areas and also benefit local people.

The conservation on marine and coastal resources is basically regulated under several legislations namely the law no 5/1990, the law no

- To establish clear detailed mechanisms for community involvement in decision making processes.
- To improve coordination and cooperation between Government institutions at the central, provincial and local levels.

Finally, in regard to institutional arrangements, the good will of the Government to create a coordination office and appoint a Ministry of Mar

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