

## **Policy Brief**

INTEGRATED SPATIAL PLANNING AND MANAGEMENT FOR COASTAL AND MARINE SUSTAINABILITY IN VIETNAM



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This publication has been made by funding from Norad, Sida and DANIDA.

Published by: IUCN, Gland, Switzerland and Hanoi, Vietnam

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Citation: Nguyen Chu Hoi and Bui Thi Thu Hien (2014). Intergrated Spatial Planning and Management for Marine and Coastal Sustainability in Viet Nam. Gland, Switzerland: IUCN, 13pp.

Cover photo: Bui Thi Thu Hien, IUCN Viet Nam

Layout and printing by: Compass Co,.SJC

Produced by: IUCN Viet Nam

Edited by: Nguyen Chu Hoi (HUS, VNU), Bui Thi Thu Hien (IUCN Viet Nam), Nguyen Thuy Anh (IUCN Viet Nam), Katie Jacob (IUCN Viet Nam), Charles N. Ehler (Senior Consultant - Intergovernmental Oceanographic Commission).

**Available from:** Mangroves for the Future (MFF)

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## **Policy Brief:**

# INTEGRATED SPATIAL PLANNING AND MANAGEMENT FOR COASTAL AND MARINE SUSTAINABILITY IN VIETNAM

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## **FOREWORD**

Integrated coastal management (ICM) has attracted attention in Vietnam since the Summit of Environment and Development held in Rio de Janeiro (Brazil) in 1992 (Rio-92) and was first analyzed in the national project on "Research on development of ICM plan in Vietnam to ensure ecological security and to protect the environment" (1996-2000). And marine spatial planning (MSP) is a new concept that promotes sustainable coastal and marine management and assists in the integration of economic, environmental and social concerns in strategic planning and long-term investments. MSP can improve coastal resilience in Vietnam that are vulnerable to the impacts of climate change and sea level rise. This document informed policy-makers about ICM, MSP and the difference between these measures. Additionally, it outlines ICM and MSP application, recent projects, programs and recommendation for ICM and MSP implementation in Vietnam.

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#### I. TERMINOLOGIES

#### 1. The coastal area

The coastal area/zone is a transitional space between land and sea. The coastal area is influenced by the interactive activities between land (mainly river) and marine (mainly wave, current and tide), and geodynamic (tectonic movement) processes, as well as human activities.



Figure 1: Coastal area in Binh Dinh Province © IUCN Viet Nam

Four natural spheres are interacted in the coastal area: biosphere (flora, fauna and humans), atmosphere (air), hydrosphere (water) and lithosphere (soil, rock). The coastal area is rich in natural resources, biodiversity values and has the highest biological productivity on the Earth. However, it is also very sensitive and highly vulnerable to natural and anthropogenic stresses, especially to climate change and sea level rise.

## 2. Sustainability of coastal areas

In the two decades since (Rio-92), the term "sustainable development" has become familiar among scientists and policy-makers, as well as a number of people in Vietnam. With the support of international organizations and overseas, coastal management in Vietnam has begun to embrace sustainable development (SD), but the sustainable development is only a "socially expectative goal".



Figure 2: Local people harvesting marine resources in Nhon Ly Commune, Quy Nhon City, Binh Dinh Province © IUCN Viet Nam

Sustainability is the measure of the sustainable development degree achieved in a coastal area and its coastal systems (natural, economic and human systems) to ensure the long-term coastal health and equality between economic, social and environmental concerns.

## 3. What is integrated coastal management?

Chapter 17 of Agenda 21 (1992) recommended that all coastal and island states shall develop and implement the integrated coastal management (ICM) through two key principles: interdependence of coastal systems and integration of institutions and policies (inter-sectors, inter-agencies and inter-regions) in process of coastal management.

The ICM is a dynamic and continuous process that results in sound decision-



Figure 3: Local livelihoods are closely linked with conservation values in Quang Ninh Province © IUCN Viet Nam

making for the coastal resources use and development and environmental protection. The key element of ICM is establishment of an institutional arrangement and policy mechanism to regulate coastal development opptions which has been approved by the sectors and users (B. Cicin-Sain, 1998)

The ICM links the interests and concerns of governments, local communities, scientists and managers, of line sectors and levels in collaboration to prepare and implement a comprehensive plan for coastal resources development and environmental protection, as well as coastal ecosystem conservation (GESAMP, 1996).

#### Notes:

The overall objective of the ICM is to: address sectoral management limitations (traditional management); mitigate the benefit conflicts in multi-use for coastal resources; improve livelihoods of the coastal communities who dependent on marine and coastal resources; and maintain coastal biodiversity, as well as ecosystem health and services.

However, the ICM does not replace the sectoral management, it plays only an important role in linking and regulating the development behaviors of the sectors and problems arose among the sectors (inter-sector problem).



Figure 4: Reef fishes in Ran Trao Marine Nature Reserve, Van Ninh District, Khanh Hoa Province © MCD

## 4. What is marine spatial planning?

Marine spatial planning (MSP) is a public process of analyzing and allocating the spatial and temporal distribution of human activities in coastal and marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process (IOC-UNESCO, 2009).

MSP can be used to identify the most appropriate area for different uses to reduce or mitigate environmental impacts and facilitate marine resources reasonable utilization, as well as increase socio-economical efficiency and ecological security (NOAA, 2009).

#### Notes:

MSP is a comprehensive, integrated, transparent, adaptive spatial planning process. It applies the ecosystem-based and science-based approaches to analyze existing conditions and predicts the future use of oceanic, marine and coastal spaces.

In many ways, MSP is similar to the ICM, which both are integrated, strategic, and participatory and aim to maximize compatibilities among human activities and mitigate benefit and spatial use conflicts among users and between human uses and nature. However, the boundaries of coastal management have been limited in most countries to a narrow strip of coastlines within a kilometer or more from the shoreline. Only rarely have the inland boundaries of coastal management included coastal watersheds or catchment areas. Even more rarely does coastal management extend into the territorial sea and beyond to exclusive economic zone (IOC-UNESCO, 2009).

While ICM is only limited within the coastal boundaries, MSP is a broader concept that includes the oceanic level. MSP can be considered as a tool to achieve ICM's target in coastal areas. The overall objective of MSP is to reduce conflicts and promote cooperation in the spatial use of a marine area for a balance of socio-economic development and environment protection.

MSP focuses on the human use of *marine* spaces and places while *marine* is the missing piece in ICM that can lead to truly integrated planning from coastal watersheds to marine ecosystems.

Similar to ICM, the MSP does not replace single-sector planning; it aims to provide guidance for range of decision-makers responsible for particular sector, activities or concerns. Therefore, combing ICM and MSP will assist in effectively implementing the integrated coastal management and spatial use management in Vietnam.

## II. WHY DOES VIETNAM NEED MSP AND ICM?

Coastal areas in Vietnam play a critical role in economic development and national security maintenance. They are rich in natural resources and become a dynamic economic zone of the country. Therefore, the coastal areas create a special attention of a number of ministries, sectors and coastal local communities. A number of human development activities of the country are highly concentrated in the coastal areas where become the multi-use subjects with different conflicts.

The exploitation and use of coastal areas in Vietnam are being implemented in the context of a developing country with the limited investments. So, the economic growth, industrialization and modernization are high priorities for the Vietnamese Government. The implementation of these priorities often triggers benefit and spatial use conflicts among the coastal users and sectors. However, in fact, the coastal areas are being only managed in ineffective sectoral management and have been impacted yearly from natural and man-made disasters, including coastal environmental consequences. These problems have caused negative impacts not only for the coastal areas, but also beyond, including the trans-boundary issues with immediate and long-term affects for the inter-provincial coastal areas.

In order to overcome the above mentioned problems, Vietnam is implementing new mechanisms, policies and tools in coastal management towards blue economy. Among them, the ICM and MSP have been considered as the priority measures with integrated and ecosystem-based approaches in coastal sustainable management in Vietnam following international recommendations and guidance.

## III. ICM AND MSP IN VIET NAM

After Rio-92, there was a national entitled: "Research project development of ICM plan in Vietnam to ensure ecological security and to protect the environment" (Code KH06-07) which was conducted in the framework of the national program on marine science and technology in period of 1996-2000. The project achievements contributed to change the awareness of Vietnamese scientists, managers and investors in coastal development and management. A coastal atlas and an ICM plan for Vietnam's coastal areas with two case-studies: coastal areas of Ha Long bay and Da Nang city have been developed.



Figure 5: Tour boat in Ha Long Bay, Quang Ninh Province
© IUCN Viet Nam

In the years 2001-2006, a number of projects were implemented in coastal provinces: Nghe An, Quang Binh, Nam Dinh, Thua Thien-Hue, Ba Ria-Vung Tau, Quang Ninh, Hai Phong, Da Nang, Binh Đinh, Quang Tri, Quang Nam, Quang Ngai with international, regional and national supports (Sweden, the Netherlands, USA, PEMSEA, World Fish Center, Germany, India, IUCN, ADB,...). It is a period of building capacity for Viet Nam and applying some demonstration sites on ICM in Vietnam.

Since 2007, it seems that a period of implementing and scaling up ICM and MSP in Vietnam with some key landmarks: (i) An collaborative agreement to carry out ICM in Quang Ninh - Hai Phong area under technical support of the U.S. National Oceanic and Atmospheric Administration (NOAA) and IUCN was signed in March 2007 by leaders of Hai Phong city and Quang Ninh province; (ii) The

strategy and plan for ICM in Da Nang were approved by the city's Governor; (iii) The ICM program for north central region and central coastal provinces until 2010 and orientations until 2020 has been approved by the Prime Minister in Decision No.158/2007/QĐ-TTg dated 9<sup>th</sup> October 2007; and (iv) The Decree No.25/2009/NĐ-CP on integrated resources management and environmental protection in marine and island areas of Vietnam has been enacted by the Government in 6<sup>th</sup> March 2009.

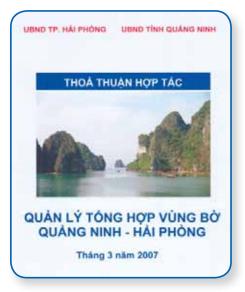


Figure 6: Cover of ICM Agreement between Quang Ninh and Hai Phong provinces

Implementation of Decision No.158/2007/QĐ-TTg in 14 coastal provinces and cities in central Vietnam was and being very different. Đa Nang and Thua Thien-Hue approved and implemented the ICM strategy and plan. The following provinces have endorsed the strategy and are in the process of formulating an action plan: Nghe An, Khanh Hoa, Binh Thuan, Quang Nam and Quang Ngai. The remaining includes: Thanh Hoa, Ha Tinh, Quang Binh, Quang Tri, Binh Dinh, Phu Yen, Ninh Thuan



Figure 7: A coastal area of Binh Dinh Province © IUCN Viet Nam

Although the Hai Phong-Quang Ninh ICM Framework with nine priority managerial actions signed, but only one implemented action is "Coastal spatial use zoning and management planning for QN-HP area". This has been implemented under technical support from NOAA and corresponding funds from Vietnam's Government through Ministry of Science and Technology. There is not an inter-sector institutional arrangement to carry out the approved ICM actions.

Although MSP is considered as an effective tool for coastal and marine use management which has been successfully applied in the world in the past 15 years, it is a new concept in Viet Nam. In 2010, UNDP provided funds to translate the "Guidelines for MSP: a step-by-step toward ecosystem-based management" of IOC/MAB-UNESCO (2009) into Vietnamese language. In years 2010-2013, Vietnam has participated in a regional project on coastal spatial planning funded by Sida-UNEP-COBSEA. This project improved MSP capacity for Vietnam



Figure 8: Boats of local fishermen in Ha Long Bay © IUCN Viet Nam

through: (i) Training for some key staff of Vietnam Administration of Seas and Islands (VASI) of the Ministry of Natural Resources and Environment (MONRE), Institute of Strategy and Development of the Ministry of Planning and Investment (MPI) and Hai Phong City People's Committee; (ii) Published the national resource document on coastal and marine spatial planning (CMSP) and the training manual on CMSP for Vietnam; and (iii) Organizing a training course on CMSP for coastal planners, managers at local and central levels, mainly from Quang Ninh and Hai Phong.

#### Notes:

Vietnam has previously applied MSP approach for the functional zoning of several marine protected areas (MPA) such as: Nha Trang bay MPA, Bai Tu Long marine park, and Cu Lao Cham MPA, as well as coastal use zoning for ICM in Da Nang, Ha Long, and recently in Thua Thien-Hue.

MSP was first conducted in Quang Ninh-Hai Phong coastal area (2010-2013) which produced 18 thematic maps (6 maps at the scale of 1:250.000 for the whole coastal areas of two provinces, 6 maps at the scale of 1:100.000 for a case-study in Cat Ba-Hai Phong port and 6 maps at the scale of 1:100.000 for the other case-study in Mong Cai-Ha Coi) and 3 maps of coastal spatial use zoning at the scale of 1:250.000 and 1:100.000 as the above mentioned. Based on such coastal atlas, a coastal spatial management plan in Quang Ninh-Hai Phong area has been developed.

Until now, definition of the MSP has not yet been incorporate in legal document and law related to sea and island management in Viet Nam. However, the coastal and marine economic development planning is to be mentioned in the Law of Vietnam Seas approved in 2012 with some regulations. Specially, Article 44 of the law stipulates that in planning process have to conduct coastal and marine use zoning for socio-economic and security purposes, in the same time to require the development of a coastal and marine use plan which to be submitted to the National Assembly for review and final approval.

Decree No.25/2009/NĐ-CP is the first marine policy in Vietnam that mentions ICM, although it just focuses on marine resources and environmental protection of seas and islands.

The Decree stipulates that the planning of marine resources use and environmental protection have to ensure the principles, including: consistency, systematic and suitability with characteristics, geographic location, natural conditions of the coastal, island and marine areas; decreasing negative impacts while protecting and improving environmental quality to ensure the sustainable use of marine resources and the economic development of seas and islands.

The planning have to be developed for timeframe of ten year and oriented twenty year. The plan will be reviewed and revised every five years to accommodate changes in the planning context. Those who wish to exploit marine and island resources have to get a license from public authority according to legal stipulation. Issuing the license should comply with the marine use planning and environmental protection plan endorsed by the public authority.

## IV. CHALLENGES IN APPLYING ICM AND MSP IN VIET NAM

Although ICM and MSP are both modern measures and tools in coastal and marine management, but application of them in Vietnam is facing the following challenges:

- There is limited and different understanding of ICM in 15 past years, which leads to confusion in its operation.
- Lack of institutional arrangement and inter-sectoral coordination at both central and local levels. Although several ICM project offices were established in coastal provinces (Nam Dinh, Ba Ria-Vung Tau, Da Nang, Thu Thien-Hue, Quang Nam), but they were "interim" institutions that could not be sustained after project ending.



Figure 9: Local secondary students participating in beach cleanup in Nhon Ly Commune, Quy Nhon City, Binh Dinh Province
© IUCN Viet Nam

Although the Government committed to provide funds for undertaking ICM following the Decision 158 toward 2010 and 2020 (some 600 billion VND) in both national level and 14 coastal provinces of central Vietnam, but its implementation progress was late compared with approved requirements due to un-collaboration and financing mechanism.

- There is no sustainable financing for ICM implementation and all relies on financial support from the government and international donors. Financial support should be sought from the private sector and coastal and marine spatial users.
- Inadequate ICM materials and guidelines lead to a lack of training for key staff that cannot scale up or expand ICM models in other provinces,
- MSP is still new not only for managers and planners, but also for the scientists in Vietnam. It is applying in the country since 2010, thus lack of the MSP's officially name in currently national planning and policy mechanism of Vietnam to apply the MSP widely and regularly.

### V. RECOMMENDATIONS TO OVERCOME CHALLENGES

The ICM and MSP needs to be properly facilitated throughout the country through the followings:

- (i) Establish a National Steering Board of ICM and MSP, an ICM office and a technical teamwork to coordinate successfully application of the MSP and ICM in Vietnam.
- (ii) Establish a legal position and corridor for the ICM and MSP for widely application in Viet Nam.
- (iii) Define the name and level of the planning: in mainland there is a land-use planning, so marine management needs a *sea-use planning* that its nature is MSP. In the same time, the MSP should be undertaken at 3 levels: national, regional and provincial.



Figure 10: Fishing in Quang Nam Province © IUCN Viet Nam

To date, the international literature review of international acknowledges nine diffrent names of the plannings that relate to MSP. In Vietnam, it is neccessary to differentiate among three prevailing names: *marine spatial zoning*, *marine spatial planning*, and *sea-use-planning*. In China, functional marine zoning is used to reflect MSP. Meanwhile, America and European countries assume that marine spatial zoning is only one tool of the MSP and there is a closed link between them.

(iv) Develop the road-maps for the ICM and MSP application.

On May 12<sup>th</sup>, 1997, The Socialist Republic of Vietnam issued a declaration on its territorial sea, contiguous zone, exclusive economic zone, and continental shelf. In 1982, Vietnam declared the baseline to calculate the breadth of a 12 nautical mile territorial sea. Based on these declarations, Vietnam's territorial sea has a breadth of 12 nautical miles measured from the baseline. Thus, a marine spatial scheme with 5 the legal waters of Vietnam was identified in accordance with UNCLOS 1982. In these legal waters, Vietnam has the full rights and obligations to conduct marine use zoning and MSP over these spaces in order to protect the marine environment and promote sustainable development. At the first stage, Vietnam can apply MSP in its internal waters and territorial sea, then gradually expand the model.

- (v) Establish a sustainable financing mechanism for ICM and MSP that focuses on the contribution of enterprises and the private sector, as well as coastal users.
- (vi) Continue to develop human resources for ICM and MSP, as well as to expand international cooperation.

Along with the completion of institution and policies on MSP, more efforts should be taken to train about managerial skills and techniques for Vietnam to deliver ICM and MSP. In addition, we should continue to extend international cooperation to invest in staff trainings.

### VI. CONTACTS FOR MORE INFORMATION

For more information and support related to ICM and MSP for the coastal sustainability, please contact following address:

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Mangroves for the Future (MFF) is a partnership-based initiative promoting investments in coastal ecosystems that support sustainable development. MFF provides a collaborative platform for the many countries, sectors and agencies tackling the challenges to coastal ecosystem conservation and livelihood sustainability and is helping them to work towards a common goal.

MFF builds on a history of coastal management efforts before and after the 2004 Indian Ocean tsunami, especially the call to sustain the momentum and partnerships generated by the immediate post-tsunami response. After focusing initially on the countries worstaffected by the tsunami – India, Indonesia, Maldives, Seychelles, Sri Lanka and Thailand – MFF has now expanded to include Pakistan and Viet Nam. MFF will also continue to reach out to other countries in the region facing similar challenges, with the overall aim of promoting an integrated, ocean-wide approach to coastal area management.

MFF seeks to achieve demonstrable results through regional cooperation, national programme support, private sector engagement and community action. This is being realized through concerted actions and projects to generate and share knowledge more effectively, empower institutions and communities, and enhance the governance of coastal ecosystems.

Although MFF has chosen mangroves as its flagship ecosystem, the initiative embraces all coastal ecosystems, including coral reefs, estuaries, lagoons, wetlands, beaches and seagrass beds. Its management strategy is based on specific national and regional needs for long-term sustainable management of coastal ecosystems. These priorities, as well as newly emerging issues, are reviewed regularly by the MFF Regional Steering Committee to ensure that MFF continues to be a highly relevant and responsive initiative.

Learn more at: www.mangrovesforthefuture.org











































