



SEA VIEWS

MIMA'S ONLINE COMMENTARY ON MARITIME ISSUES

No. 9/2016

17 June 2016

SEA VIEWS is an online platform for MIMA researchers to articulate their views on issues and developments in the maritime sector and does not represent the official stand of the institute on the matters discussed. Readers are welcome to reproduce the contents with appropriate attribution to author(s). Kindly contact the Editor of SEA VIEWS, Mohd Arshad Atta Mohamad at tel.: 603-21612960, fax: 603-21617045 or e-mail: arshad@mima.gov.my

Towards a Blue Economy Initiative: Assessment and way forward for Malaysia on the environment and resources management aspects

Cheryl Rita Kaur
Senior Researcher/ Head
Centre for Coastal and Marine Environment

The author reviews the present understanding, issues, and challenges in moving towards a blue economy for achieving sustainable development objectives. Besides elaborating on environmental and resources management aspects, this article looks at progressing Blue Economy and Sustainable Growth initiatives in line with MIMA's World Oceans Day celebrations this year.

Introduction: Defining the term

There is no single definition of blue economy. An Economist Intelligence Unit briefing paper for the World Ocean Summit 2015 described it as a sustainable ocean economy which emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy. At the regional level, the Changwon Declaration adopted in Korea in 2012 at the East Asian Seas (EAS) Congress describes it as a practical ocean-based economic model using green infrastructure and technologies, innovative financing mechanisms, and proactive institutional arrangements for meeting the twin goals of protecting the oceans and coasts whilst enhancing their potential contributions to sustainable development, including improving human well-being, and reducing environmental risks and ecological scarcities. At the national level, recent work involving some preliminary national blue economy assessment was carried out by MIMA under the Partnerships in Environmental Management for

the Seas of East Asia (PEMSEA) initiative in 2015, with specific emphasis on accounting environmental-related industries and resources values as well as potential investment opportunities in related ocean sectors. Despite the above, a general understanding and awareness of what constitutes a blue economy is presently lacking not only in Malaysia but in most of the countries in the Southeast Asian region.

The blue economy concept has essentially evolved from the broader green movements and in a growing awareness of the threats imposed on ocean ecosystems by human activities such as overfishing, habitats destruction, pollution, and the impact of climate change. It is increasingly gaining importance as governments adopt and implement a more sustainable balance between economic growth and maintaining ocean health. In a broader sense, the concept should be able to show the critical role and contribution of ocean economic activities and coastal and marine ecosystems to the national economies, provide evidence base for a region-wide ocean policy and decision-making on related areas, and examines the benefits, costs and impacts at the international and local levels. These have brought about opportunities for industries to transit to more environmentally sustainable practices, or for new and innovative investments are focused into promoting and restoring ocean health and balance.

This article takes stock of the blue economy concept and identifies strategies and impediments in advancing the idea of a sustainable ocean economy and potential investment opportunities from a growing ocean economy in the context of environmental considerations and sustainable resources management.

Current status, major issues and challenges in developing a sustainable blue economy

Overall work on improving understanding and developing a blue economy has only just begun in many regions globally, including in the Southeast Asia. As such, a number of aspects need to be put together as enabling factors and promote implementing conditions e.g., managerial, legal, institutional, governance, investments, and financing aspects and arrangements.

The significant economic contributions of the oceans have been largely undervalued. With population growth and changes in associated consumption patterns, demand is being placed increasingly on new sources of food, energy and minerals leading to the creation of large scale developments in ocean spaces in many parts of the world. In many instances, the prevalent decline in ocean health due mainly to human activities is also a cause of concern. A sustainable and strategic approach on the development of ocean resources will be an important driver and enabler of blue economy, whilst fuelling national policies and strategic changes to accommodate the growing ocean-related industries. The need for balanced approach to the governance of ocean spaces and industries through a well-developed regulatory framework and institutional support and capacity to fuel the nation's sustainable growth is ever more impressive now than ever.

Better economic data and science are essential elements in assessing and progressing on blue economy by recognising, demonstrating, and capturing the values of oceans sectors for use in planning and management. In many instances however, current approaches to valuing the ocean economy could mean that we are either underestimating its contribution, particularly the value of

non-market goods and services, or are lacking in these information in the first place. There have however been recent improvements in methodologies and approaches at the international level that could be used as benchmarks and guidance tools.

For instance, the UN Statistical Commission's System of Environmental and Economic Accounting (SEEA) in 2012 provides a framework for integrating ecosystems and the environment in national income accounts. The SEEA includes accounting for natural assets from which many natural resource-based goods are produced. Further, the World Bank's Wealth Accounting and Valuation of Ecosystem Services (WAVES), which adopts the SEEA framework, as well as UNEP's Economics of Ecosystems and Biodiversity (TEEB) project focuses on mainstreaming the values of biodiversity and ecosystem services into decision-making. The development of current accounts for activities based on fishery and coastal resources have generated significant information on improving related policies and regulatory frameworks at the international level, in support for a sustainable blue economy. One other area that requires attention is innovative financing approaches which would also be necessary in order to direct investments into economic activities that can enhance returns and care for the ocean health simultaneously.

Sectoral importance within the overall context of blue economy

The fisheries sector is the most important living resource especially in ensuring food security as well as a source of income, and hence the importance for its long-term sustainable utilisation and protection for the benefit of the people and nation is irrefutable. The need to utilise marine living resources to achieve economic growth, human resource development, capacity building within fisheries and mariculture branches, employment creation and sound ecological balance which is consistent with the development objectives of the national government are as such of ultimate importance.

There are however numerous challenges in preserving and maintaining the economic, social and environmental benefits of the oceans includes overfishing and destructive fishing, loss of biodiversity including the depletion of certain fish, ocean acidification, ocean warming, coral reef destruction, watershed-based and marine-based pollution, accidental oil spills, as well as invasive species introduction. Emerging issues identified include marine genetic resources, coral reefs management, marine debris, nutrient over-enrichment and eutrophication, geo-engineering, ocean noise, renewable energy and environmental data exchange.

It is envisaged that the demand for fish will continue to increase, making the task of managing the fisheries resources on a sustainable basis increasingly complex. The threats of over-exploitation and the decrease in recruitment due to degradation and destruction of aquatic habitats are factors of concern. For instance, some mangrove forests, which provide important breeding, nursery and feeding grounds for fish, prawns and a variety of invertebrates, have been cleared for development or decimated by pollution. Coastal areas are increasingly being threatened by erosion along extensive parts of the coastline. Continued economic growth and industrialisation are further wielding considerable pressure on the coastal ecosystems. Effluents from industrial and domestic discharges, land reclamation as well as illegal dumping and

accidental spills contribute to the degradation of the water quality in the coastal areas. Additionally, the utilisation of coastal resources has drastically increased with technological advancements and growing resource needs of the populations. This comes in the form of large-scale extractions of natural resources and intensive exploitation of fisheries, causing conflicts of interests that further endanger the resources.

More opportunities could be gained from venturing into mariculture (marine culture) activities to support food security. There is huge potential for the provision of food and livelihoods from aquaculture through improvements through efficiencies in related areas. Aquaculture under the blue economy will largely incorporate the value of the natural capital in its development, respecting ecological parameters throughout the cycle of production, creating sustainable, decent employment and offering high value commodities for export.

Prioritizing efforts and moving forward

The ocean sector is crucial to Malaysia's economy through its resources and other ecosystem services that support its trade and industries and require proper management and conservation strategies to achieve maximum economic, environmental, and social outcomes. Such a process will involve participation by relevant stakeholders and the need to assess the resources required in terms of physical and human assets, investment in research, science, and technology, collaboration, and review and formulation of policies.

Among the recommendations are:

- (i) Developing a blue economy profile and conducting pilot studies of the ocean to help define and refine Malaysia's conception of a blue economy. This will assist in making applicable assessments of economic growth, ecological sustainability and environmental impacts.
- (ii) Promoting the use of ocean economy data in marine planning at the national level to facilitate further engagement by Malaysia with the other countries in the region on related areas.
- (iii) Identifying relevant stakeholders and encouraging their involvement through discussions and consultations for mapping exercises to rationalise better governance efforts, identify interests that need to be safeguarded, and explore further opportunities.
- (iv) Identifying platforms or mechanisms that have underutilised funding resources as well as emphasising developing related projects which will benefit the nation.

MIMA will be focusing on encouraging a better understanding of the above issues and promoting progress for a sustainable blue economy through various initiatives planned under the framework of its *Blue Economy and Sustainable Growth*.