

## *Harnessing the Blue Economy*

Vijay Sakhujā\*

The oceans cover nearly 70 per cent of earth surface and possess enormous potential to support human activity. Nearly 90 per cent of trade by volume, and 70 per cent by value is transported over the seas. The oceans are rich in living and non-living resources: about 30 per cent of the supply of hydrocarbons sourced from the oceans and seas can generate wind, wave, tidal, thermal and biomass energy. Besides, it is also a major supply of food and an avenue of livelihoods: a number of industries such as fishery, tourism, ports, shipping, and ship building are dependent on it. At another level, nearly 60 per cent of the global population lives within 100 kilometres of the coast, and oceans contribute through resources and augment the services sector. The above indicators are a good example of the economic value of the seas whose potential has, in recent times, come to be labelled as the Blue Economy.

Gunter Pauli was the first to propound the idea of a Blue Economy in 2010, and published a book<sup>1</sup> wherein he argued that the focus should shift from identifying the problems to finding solutions. In 2012, during the United Nations Conference on Sustainable Development (UNCSD) in Rio de Janeiro (also called as 'Rio +20'), the participating countries agreed to advance the concept of the Green Economy for 'sustainable development and poverty eradication'. However, the island states questioned the relevance and applicability of the Green Economy, which led them to argue that 'the world's Oceans and Seas require more in depth attention and coordinated action'.<sup>2</sup> Further, the UNDESA expert group meeting on Oceans, Seas and Sustainable Development, the work of the Global Ocean Commission, the Global Partnership for Oceans, and the UN five-year Action Agenda 2012–2016 had provided requisite prominence to the oceans and the seas.<sup>3</sup> Meanwhile, the UN has expanded the mandate of the UNCLOS and begun to address sea spaces beyond national jurisdiction, and has also called for an 'intergovernmental conference aimed at drafting a legally binding treaty to conserve marine life and govern the mostly lawless high seas beyond national jurisdiction'.<sup>4</sup>

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\***The Author** is Director, National Maritime Foundation, New Delhi.

The concept of the Blue Economy is currently resonating among a number of countries across the world, and also finding reference in the national agenda for the post-2015 Development Agenda, in actions plans for the sustainable development of resources, climate change and environment discourses, and in plans for enhancing wellbeing, and poverty alleviation among the people through job creation. Several countries have announced national initiatives and action plans to promote the Blue Economy.

In 2012, the European Union announced its 'Blue Growth' strategy for sustainable development of marine and maritime sectors to contribute to the Europe 2020 strategy for smart, sustainable and inclusive growth.<sup>5</sup> A number of multilateral institutions such as the APEC, East Asia Summit (EAS), the South Asian Association for Regional Cooperation (SAARC), and the Indian Ocean Rim Association (IORA) have highlighted the Blue Economy, as well as encouraged multilateral approaches, identified and developed cooperative strategies and actions plans, and moved towards sustainable development of marine resources.<sup>6</sup> However, China can be credited to be the forerunner in this, and has established Five-Year Development Plan for National Marine Economy which monitors the progress of various marine sectors. Significantly, China's State Council has published a White Paper on the subject.<sup>7</sup>

At the core of the Blue Economy lies the idea of 'optimization of natural marine resources within ecological limits', and the 'de-coupling of socio-economic development from environmental degradation'.<sup>8</sup> The Blue Economy involves a number of interdependent sectors, which harness the wealth of the seas for economic growth through sustainable development.

In this context, this essay makes a broad survey of the understanding and initiatives taken by the South Asian countries to promote the Blue Economy. The paper also argues that the Blue Economy should not be limited to national boundaries or regional demarcations, but should transcend to neighbouring countries in contiguous regions, and provide the necessary impetus to harness the full potential of the oceans and seas through the sustainable development of marine resources.

### **South Asia**

There are five maritime states in South Asia: Bangladesh, India, Pakistan, including two island states – that is, Maldives and Sri Lanka. Bhutan, Nepal and Afghanistan are land locked countries but access the seas through their neighbours India and Pakistan, and engage in maritime activity. Further, these states are classified as least developed countries (LDCs).

## **Bangladesh**

Among the South Asian countries, Bangladesh is perhaps most vocal about the Blue Economy. In September 2014, it hosted a major conference in Dhaka, and proposed the ‘Bay of Bengal Partnership for a Blue Economy’ for the sustainable development of sea based resources.<sup>9</sup> The foreign minister argued that the ‘Blue Economy must be inclusive and people-centric,’ and made a strong pitch for the idea calling on the Bay of Bengal littoral states to ‘move together and ahead with a “Bay of Bengal partnership for Blue Economy” to secure sustainable development among the coastal or littoral States’.<sup>10</sup>

Bangladesh has argued that the Blue Economy be positioned high on respective national economic agendas, and states should harness the seas in a sustainable manner to ensure ‘an inclusive and people-centric blue economy’.<sup>11</sup> Besides urging the littoral states, it has, at the global level, approached Food and Agriculture Organisation (FAO) under the United Nations to give boost to the ‘Blue Economy Initiative’ across the globe. Bangladesh’s initiative also caught the attention of the European Union, and its ambassador in Dhaka stated that the ‘EU could be a partner with Bangladesh to make these potentials translate into realities... We are open to discussion with the government, private sector, NGOs and with all stakeholders who work on expansion of the blue economies.’<sup>12</sup>

It is pertinent to mention that nearly 30 million people in Bangladesh are ‘dependent on the sea for livelihood, and are engaged in fishing and commercial transportation’.<sup>13</sup> Bangladesh is in the early stages of embracing the Blue Economy, and confronts a number of technological and financial constraints to make the dream come true. It has instituted several measures, including setting up a ‘National Oceanographic Research Institute for the marine scientific community, teaching oceanography at the Dhaka and the Chittagong Universities, and training human resource to develop skills for the sustainable development of resources, and working towards protecting the marine environment and preserving the bio-diversity of the seas’.<sup>14</sup> It has established scientific collaboration with Norway through the Nansen-Bangladesh International Centre for Coastal, Ocean and Climate Studies (NABIC) located at Dhaka.

## **India**

India is the largest among the South Asian countries, and endowed with 7,500 kilometres long coastline, and 2.019 million square kilometres of Exclusive Economic Zone (EEZ), which is a repository of huge wealth of living and

non-living resources. The sea is also an important source of livelihood and employment, and contributes to the national economy. Marine and ocean studies have been a priority area, and India has made significant scientific and technological advances in this domain. It has established a number of research and development laboratories and institutions for technological advancement in studying and exploiting sea based resources in sustainable ways. The National Institute of Ocean Technology (NIOT) offers technical services and solutions for the management of ocean resources and environment. India operates Sagar Kanya, an ocean survey vessel equipped with sophisticated laboratories, and conducts scientific research operations to study physical and chemical oceanography, marine biology, marine geology, and marine geophysics. It also carries out research on monsoons winds and has a sophisticated network of modern remote sensing capabilities and meteorological prediction systems.

The Indian government has endorsed the Blue Economy, and the focus is on the enhancement of existing capacity to harness the seas through fishing, the exploitation of non-living resources, the modernisation of maritime infrastructure such as ports, as well as ship building and the ancillary industry through private sector and other sources. India and Bangladesh are working closely to support the idea of the Blue Economy. Likewise, it has extended cooperation to Seychelles: President James Michel has observed that 'India and Seychelles are partners in the Indian Ocean and, in the context of the security in our ocean, we are ready to work together to take ownership of our ocean, of our security, and also to develop and protect and reap from the potential that exists in our oceans in the context of the Blue Economy'.<sup>15</sup>

### **Maldives**

Maldives, an island state, is highly dependent on the seas for its economic vitality, and is a strong supporter of the Blue Economy. At the 'Rio +20' Summit, its representative observed that there is a 'unique relationship of the island people with the ocean; much as the forests are considered lungs of the world'.<sup>16</sup> In 2013, it presented its national report at the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) Regional Preparatory Meeting for the Third International Conference on Small Island Developing States (SIDS) in Seychelles. The report focused on the achievements, and noted that the country had pledged a number of initiatives: carbon neutrality by 2020; establishment of a UNESCO biosphere reserve and new protected areas; and increase in human life expectancy.<sup>17</sup> These are noteworthy accomplishments and support its drive for Blue Economy.

## **Pakistan**

Pakistan has limited sea frontage of about 1,050 kilometres along the Makaran coast, and claims over 240,000 square kilometres as Exclusive Economic Zone (EEZ). It has also announced a continental shelf of about 50,000 square kilometres. These maritime spaces offer prospects for Pakistan to exploit ocean-based living and non-living resources, provide much needed economic opportunities, and generate employment for the wellbeing of the people. However, the marine sector remains neglected due to a number of organisational, operational, and technological constraints. It constitutes a very small percentage of the Gross Domestic Product (GDP), and the marine sector is valued at US\$ 240 million, which corresponds to nearly one per cent of the GDP.<sup>18</sup>

The Blue Economy is slowly finding reference in the national maritime thinking, and a recent article titled ‘Pakistan’s “Blue Economy” Potential and Prospects’ has observed that the seas offer a number of opportunities for economic development, that the government should focus on this ‘untapped maritime potential’ of the country, and ‘turn from a brown economy to Blue Economy’. The article also states that Pakistan should proactively pursue key areas such as (a) port infrastructure, including the associated rail and road systems; (b) the fisheries sector and best practices for sustainable development; (c) stringent regulations to control marine pollution and check illegal fishing; and (d) quality human resource for seafaring duties on international shipping. The paper makes a strong pitch for a comprehensive maritime policy and strategy through maritime ‘awareness and knowledge’ among policy makers and the public, and encourage public-private partnerships to engage the industry.

The paper also lists a few challenges that confront Pakistan while building upon its Blue Economy potential. These range from maritime infrastructure, technology for offshore resource development, a weak fishery industry, and poorly developed marine leisure sector. Pakistan requires financial and technological support for building, operating, and making economically profitable industries. In particular, the fishery sector is constrained by the maritime boundary dispute with India in the Sir Creek area which is rich in marine living resources, and is also known to contain potential gas deposits.

## **Sri Lanka**

The Sri Lankan government has endorsed the Blue Economy, and the political leadership has consistently projected Sri Lanka’s intention to promote the

concept at multilateral forums. In 2011, at the Galle Dialogue 2011 Maritime Conference, Professor G.L. Peiris, Sri Lanka's External Affairs Minister, highlighted the Blue Economy, and noted that the 'the vast economic resources of the ocean and methods for exploiting this potential for the benefit of humankind without inflicting grave damage on the environment, has been an integral part of the current international discourse'.<sup>19</sup> This was also a recurring theme in his address at the Blue Economy Summit in Abu Dhabi, United Arab Emirates, where he said that Sri Lanka was committed to 'advance a variety of objectives forming an integral part of the global agenda to integrate the Blue Economy into post-2015 development objectives.' He also emphasised that

The development of the Blue Economy on the lines envisaged by the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012, is necessarily dependent on order and stability in the regime of the oceans, and continuing terrorist activity would have posed a formidable challenge to the accomplishment of these objectives.

Sri Lanka has identified a number of key areas which are being given high priority. These include fisheries for food security and sustainable livelihoods, tourism to support jobs, renewable energy from wind and biomass sources for energy security, and shipping and ports for the growth of the economy and the wellbeing of the people of the country. The Sri Lankan government has set up the Centre of Excellence on Ocean Sciences as well as Environment for the Indian Ocean Rim countries to promote the Blue Economy among the Indian Ocean countries.

### **Blue Economy Partnerships in the Contiguous Regions**

South Asian countries have individually or collectively endorsed the Blue Economy, and are keen to harness the seas in a sustainable manner. There is a need to expand the above configuration to other counties and regions, given that oceans encompass large spaces and spill across the regions. It will be useful to examine some of the possible typologies.

### **India-Maldives-Sri Lanka-Seychelles-Mauritius**

This typology has its genesis in the 2012 India-Maldives-Sri Lanka trilateral dialogue on maritime security. In the 2014 trilateral meeting held in New Delhi, Seychelles and Mauritius were invited as observers, and the agenda for

the meeting was to build capacity to enhance Maritime Domain Awareness (MDA), Search and Rescue (SAR), oil pollution response through naval/maritime exercises, contingency plans, cooperation in legal engagements, and policy issues related to maritime security. The above arrangements have facilitated a successful dialogue among the partners on strategic and security issues. This can be expanded to the development of the Blue economy, with a small change: that is, instead of referring India, it could be addressed as Lakshadweep, the group of 36 islands (India), given that the other four of the partners are island states, and endorse the Blue Economy. Vice President Danny Faure of Seychelles stated that:

India and Seychelles share the same ocean and we have developed what is called the maritime security framework with India. A lot of joint work involves hydrographic surveys of the ocean. We have also been receiving help of Indian Navy specialists.<sup>20</sup>

Significantly, Seychelles and Mauritius are Small Island Developing States (SIDS), and are highly dependent on the seas for economic well-being. Their economies are closely linked to the African economies who themselves have endorsed the Blue Economy. Further, Seychelles and Mauritius have also established a partnership for the development of the Blue Economy with Australia.

### **India-Pakistan-Oman-Iran**

The rationale for this typology has its foundations in the Exclusive Economic Zones of India, Iran, Pakistan and Oman, resulting in maritime contiguity in the north Arabian Sea. The north Arabian Sea is rich in marine biodiversity, and resources such as fish, shellfish, reptiles, mammals, birds, coral reefs, aquatic plants and mangroves are aplenty. The region also has 'periodic high plankton production in the coastal waters, which is followed by high fish production'. A large population living in the coastal areas is dependent on the sea for their livelihood and food, which has strained the marine resources due to over-exploitation. Further, there is dense shipping activity, particularly of oil and gas tankers, that enter /exit the Gulf waters through the Straits of Hormuz. This is prone to accidents that can cause immense ecological damage to the sensitive marine biodiversity of the region. Perhaps, one of the more troubling issues is the boundary disputes between India and Pakistan that have precluded cooperation on developing a framework for joint/cooperative development of marine resources in a sustainable manner.

### **India-Bangladesh-Myanmar**

Perhaps, this typology is most conducive for developing cooperative partnership for Blue Economy among India-Bangladesh-Myanmar. These countries have resolved their boundary disputes and demarcated the territorial waters and EEZ. The Bay of Bengal is also an enclosed sea and the UN has designated it as a large marine eco-system (LME). As the author has argued elsewhere, ‘there is an opportunity for Bangladesh, India and Myanmar to develop partnership to advance Blue Economy in the Bay of Bengal. This would require the integration of each others’ coastal development frameworks into respective national sustainable development initiatives. Further, they would need to share with each other the scientific knowledge accumulated over the years, and help develop scientific institutions and human resource to study the seas’.<sup>21</sup> This framework has the potential to include other Bay of Bengal littorals such as Thailand, Malaysia, Indonesia and Sri Lanka. This idea of ‘Bay of Bengal partnership for Blue Economy’ has been advocated by Bangladesh and the foreign minister observed that “such collaboration among countries must take place based on certain universal principles of engagement-mutual trust, respect, mutual benefits and equitable sharing of benefits,”<sup>22</sup>

### **India-Sri Lanka-Indonesia**

This grouping emerges from a possible cooperation between India and Sri Lanka which can be expanded to Indonesia. In this case, it will be useful to address the Andaman and Nicobar Islands (a group of 556 islands) as India, given that the other two are island and archipelagic states. Significantly, Indonesia has endorsed the idea of the Blue Economy, and it figures prominently in the national agenda. Prime Minister Joko Widodo has set up a Coordinating Ministry for Maritime Affairs and the Environment for harnessing the seas to develop Indonesia’s maritime potential. Indonesia has vigorously promoted the Blue Economy at various multilateral forums such as the UN, ASEAN, the Indian Ocean Rim Association (IORA), and the Pacific Islands Forum (PIF), etc. Further, at the book launch *Our Blue Economy* at the APEC 2013 forum, the Minister of Marine Affairs and Fisheries of the Republic of Indonesia, Sharif C. Soetardjo, noted that, ‘We continue to promote the Blue Economy concept, understanding that today and in the future, the marine and fisheries sectors have strategic roles in strengthening food security and driving Indonesia’s economy.’

### **IORA-SAARC-BIMSTEC**

As noted earlier, the idea of the Blue Economy has gathered momentum at the multilateral level. The 2014 Perth Communiqué of the Indian Ocean Rim Association (IORA) of October 2014 notes the Indian Ocean countries are ‘strengthening the Blue Economy’ through sustainable development of fisheries, judicious exploitation of minerals, harnessing renewable energy, and encouraging coastal tourism to ‘stimulate growth and improve food and energy security’ as a ‘common source of growth, innovation and job creation’. There is a clear-cut pan-Indian Ocean initiative to address collectively the importance of the Blue Economy, and the concept is slowly percolating into other groupings, such as the South Asian Association for Regional Cooperation (SAARC), BIMSTEC, and ASEAN. For instance, at the Eighteenth Summit meeting held in Kathmandu, Nepal in November 2014, SAARC leaders agreed that, ‘They recognized the manifold contributions of ocean-based Blue Economy in the SAARC Region, and the need for collaboration and partnership in this area’.

### **Conclusion**

There are several compelling reasons for the South Asian states to endorse and internalise the concept of a Blue Economy in policy, bilateral relations as well as international transactions. The political leadership has endorsed the concept, and states are keen to harness the potential and engage in the sustainable development of living and non-living resources of the seas to advance economic growth and enhance human security. This can be supplemented by a successful regional seas program for ocean governance and management at the community level.

The Blue Economy can potentially result in a more holistic pan-South Asian approach, which in turn can result in a number of bilateral cooperation arrangements and multilateral understandings among the regional countries under SAARC. This can have a direct bearing on the development agenda of the South Asian countries.

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<sup>1</sup> Gunter Pauli, 2010, *Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs*, New Mexico: Paradigm Publications.

<sup>2</sup> “Blue Economy Concept Paper”, <https://sustainabledevelopment.un.org/content/documents/2978BEconcept.pdf> Accessed 07 February 2015.

- <sup>3</sup> Ibid.
- <sup>4</sup> “UN Mulls Treaty for Maritime Biodiversity”, <http://www.marinetechologynews.com/news/mulls-treaty-maritime-biodiversity-507644>. Accessed 7 February 2015.
- <sup>5</sup> For more details, see “Blue Growth”, [http://ec.europa.eu/maritimeaffairs/policy/blue\\_growth/index\\_en.htm](http://ec.europa.eu/maritimeaffairs/policy/blue_growth/index_en.htm) Accessed 07 February 2015.
- <sup>6</sup> “Blue Economy: Concept Gains Currency in Asian Multilateral Forums”, <http://www.maritimeindia.org/CommentaryView.aspx?NMFCID=3349>. Accessed 07 February 2015.
- <sup>7</sup> Jian Li and Ying Wang, “The Regional Emerging Strategic Marine Industries Evaluation: A case of Tianjin Binhai New Area”, <http://extras.springer.com/2013/978-3-642-33011-7/1990209.doc>. Accessed 07 February 2015.
- <sup>8</sup> “The Oceans Economy: Opportunities and Challenges for SIDS”, Division on International Trade Goods and Services and Commodities (DITC), United Nations, United Nations Conference on Trade and Development (UNCTAD), 2014, p. 2.
- <sup>9</sup> “Bangladesh seeks ‘Bay of Bengal partnership’ for blue economy”, <http://bdnews24.com/economy/2014/09/02/bangladesh-seeks-bay-of-bengal-partnership-for-blue-economy>. Accessed on 29 January 2015.
- <sup>10</sup> Ibid.
- <sup>11</sup> Ibid.
- <sup>12</sup> “EU Keen on Talks with Bangladesh on ‘Blue Economy’”, <http://bdnews24.com/economy/2014/12/10/eu-keen-on-talks-with-bangladesh-on-blue-economy>. Accessed on 29 January 2015.
- <sup>13</sup> Rupak Bhattacharjee, “Bangladesh to tap its blue economy”, <http://www.irgamag.com/topics1/economy-watch/item/11421-bangladesh-to-tap-its-blue-economy>. Accessed on 29 January 2015.
- <sup>14</sup> Vijay Sakhuj, “Bay of Bengal: Exploring Partnership for Blue Economy”, <http://www.maritimeindia.org/Archives/BAYOFBENGALEXPLOING.html> Accessed on 24 January 2015.
- <sup>15</sup> Lablache, J. and Uranie, S. “Seychelles: India Gifts Second Patrol Ship to Seychelles” <http://allafrica.com/stories/201411100910.html>. Accessed on 06 February 2015.
- <sup>16</sup> “AOSIS Calls for Rio+20 to Explicitly Address the Needs of SIDS”, [http://maldivesmission.com/index.php?option=com\\_content&view=article&id=113%3Aaosis-calls-for-rio20-to-explicitly-address-the-needs-of-sids&catid=3%3Anewsflash&Itemid=30](http://maldivesmission.com/index.php?option=com_content&view=article&id=113%3Aaosis-calls-for-rio20-to-explicitly-address-the-needs-of-sids&catid=3%3Anewsflash&Itemid=30). Accessed on 06 February 2014. “Summary of the Aims Regional Preparatory Meeting for the Third International Conference on Small Island Developing States”, 17-19 July 2013, <http://www.iisd.ca/vol08/enb0851e.html>. Accessed 6 February 2015
- <sup>17</sup> Summary of the Aims Regional Preparatory Meeting.... Ibid. .
- <sup>18</sup> For a discussion on Pakistan’s Blue economy read Asaf Humayun and Naghmana Zafar,

“Pakistan ‘Blue Economy’ Potential and Prospects”, *Policy Perspectives*, Vol. 11, Issue 1, 2014.

<sup>19</sup> ‘Newsletter’, Sri Lanka High Commission, New Delhi, November 2011, p. 2.

<sup>20</sup> “India, Seychelles Partners in ‘Blue Economy’ for Africa’s development”, *Business Standard*, 15 February 2015.

<sup>21</sup> Sakhuja, n. 9.

<sup>22</sup> “Bangladesh ready to work for blue growth: Minister”, *The Daily Star*, 03 September 2014.

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