Life Below Water— An Economic interpretation

By Shashithanganee Weerawansa



This article first deals with the potential of the 'blue economy' or the sustainable use of ocean resources to satisfy the various needs of the growing population of the world. Thereafter it goes on to explain Sri Lanka's case in relation to the Indian Ocean. More specifically it describes

the potential of developing the country's ports as the gateway to the economies in the West and the East. In addition, it lists the resources that may be available in the Indian Ocean, and the challenges to be met in the development of the Sri Lankan economy. Lastly, it formulates

the strategies to be adopted in doing so, particularly in the area of investment in identified ocean related projects for production of goods and services along with the benefits to be derived for the resuscitation of the economy of the country.

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'As the world's land-based economies struggle with around 2% GDP growth, the global marine economy - often talked about as "the blue economy" is a bright light in the horizon'. Alistair Mcllgom - University of Wollongong

There is intense competition for limited resources by the ever increasing world population currently exceeding 7.5 billion. In order to feed this huge population which is expected to double by 2100, it is necessary that we explore new avenues towards food security by discovering new sources that have not been tapped yet. Hence, the concept of "Blue Economy" has become popular among countries which have direct access to the ocean.

According to the World Bank the blue economy is the sustainable use of ocean resources for economic growth, improved livelihood and jobs, and ocean eco-system and health. Billions of people across the globe depend on healthy oceans for their jobs and food protection. The Food and Agriculture Organization (FAO) has disclosed that the livelihoods of 10-12 percent of the world's population rely on fisheries and aquaculture. More than 90 percent of them are engaged in capture fisheries working in small-scale operations in developing countries.

When it comes to food production, healthy oceans, coasts and freshwater ecosystems play an important role towards economic growth and food production. Moreover, oceans help to mitigate climate change and its impacts.

Offshore activities will not only be confined to food production and transportation but also to some key areas such as power generation. According to IRENA (2016), Offshore wind capacity is predicted to rise to emerge as the leading power generation source by 2030.

At present 60% of the animal protein consumed comes from the sea, despite the fact that 95% of the underwater remains unexplored with 10 million unknown species. According to the World Bank (2013), two thirds of the fish for food consumption requirement by 2030 is expected to be farmed, much of it at sea.

With the green economy is fast becoming incapable of the huge demands being made from it due to the ever-expanding global population it is important that the world turns to the blue economy which encompasses many activates such as fisheries, renewable energy, maritime transport, tourism etc.

Oceans could make innumerable contributions in purifying the atmosphere and balancing the eco-system with 60% of the carbon being absorbed by the ocean. Oceans-related economic activities are developing against a backdrop of soaring global population, growing consumption, and the ever growing need for new sources of food, energy, and minerals.

The objective of this article, therefore, is to explore the avenues that Sri Lanka could explore to make the best use of all these advantages, by turning the sea around the country into a money spinner.

Present position

The Sri Lankan economy is in an unsatisfactory state. Its growth had declined to 4.4 per cent in 2016 in real terms. The balance of payments problem remains unresolved. The persistent trade deficit has led to a mounting foreign debt amounting to 80% of GDP. This has led to increased reliance on foreign aid to meet the country's import requirements (See the details in the annex). As per the 2016 CBSL report Sri Lanka has, therefore, to focus on long-term strategic and structural development challenges as it strives to transition to an upper middle-income country. One course of action is the development of the potential of its strategic location, and the yet fully untapped resources of the Indian Ocean.

Strategic Location

Sri Lanka is known to be the pearl of the Indian Ocean wherein she is an integral part of the ocean which is enriched with multiple resources. It is startling to discover the dearth of knowledge we have of what is lying under the Indian Ocean. Sri Lanka is surrounded by an ocean, which is the third largest in the world. It extends to an area of more than 73,556,000 square kilometers that accounts for 20% of the water surface of the planet.

Sri Lanka possesses a territorial sea area of 21,500 km2 and an Exclusive Economic Zone (EEZ) of up to 200 nautical miles (370 km) from the coastal line; an extent of 517,000 km2. It has the rights to the resources in the water column, seabed and subsurface in the EEZ (Ocean University Chairman Prof. Senarathne). The EEZ is said to be a pollution prevention zone around the country.

Sri Lanka is situated in a strategic location on the international sea route between the West and the East, and hence, it has become the center of attraction of many countries for commercial and military interests. Sri Lanka's ports, especially the newly-built Magampura Port in Hambantota, has a strategic importance of serving as a gateway to East Asia, the Middle East as well as Europe; it could, therefore, be the entry point to the rapidly developing South Asia.

What the Indian Ocean could offer Sri Lanka

A sound maritime strategy based on national interests should pave the way for Sri Lanka to achieve development goals. It would also ensure the country making high gains through other aspects such as maritime security and governance.

Sri Lanka's population is growing faster than the country's GDP and leads to depletion of many renewable and non-renewable resources. Exploring alternatives are, therefore, a must. In this scenario, the ocean could emerge as the best substitute source.

Where Sri Lanka is concerned the blue economy could have diverse components, including established traditional ocean industries such as fisheries, tourism, and maritime transport, but also new and emerging activities, such as offshore renewable energy, aquaculture, seabed extraction, marine biotechnology and bioprospecting. A number of services provided by the ocean ecosystems, for which markets do not exist, also could contribute significantly to economic and other human activity such as carbon sequestration, coastal protection, waste disposal and the existence of biodiversity. (WB)

Warm water ocean around the country is a blessing, and provides ideal atmosphere for tourists unlike most other seas in the world. Hence, Sri Lanka could make the best use of the sea around the country, and promote oceanic recreational opportunities such as surfing, whale and dolphin watching, deep sea diving, sea entertainment and sea sports. Over two million tourists had visited Sri Lanka last year, an increase of 14% compared to the previous year.

More importantly, the tourist sector was recorded as the third highest source of foreign exchange next to foreign remittances and textiles and garments. Tourism has been firmly established in the coastal districts of Sri Lanka and is emerging as the fastest growing industry.

Sandy beaches, blue water, isolated pockets, mangrove forests etc. are some of the key attractions that would woo high-end tourists. Sri Lanka, with a coastal belt of over 1300 kilometers, could make the best use of these resources to nourish maritime tourism, which has been in demand since of late. These rich resources would undoubtedly give Sri Lanka a distinct advantage in attracting tourists. In order to achieve that goal, and make



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the maximum use of the ocean around the country Sri Lanka should further develop the necessary infrastructure, while obtaining the services of the experts.

Oceans serve as highways for seaborne international trade. With 4/5 volume of world trade carried by sea, international shipping and ports provide crucial linkages in the global supply chains. According to ITF (2015), seaborne trade is expected to quadruple by 2050.

With Sri Lanka's strategic location as the confluence of main sea roots from Asia pacific to Europe and Americas, the country could provide an ideal platform for international trade as a transshipment hub. Further, Sri Lanka could make value addition to goods transported to and from the West.

In addition to the country's strategic importance, its usage as a major shipment hubs, and its tourist industry, the sea across Sri Lanka is blessed with a wide range of mineral and other resources. It is widely believed that Sri Lanka's maritime area in the North-West has crude oil resources; oil exploration work has already begun with the hope of exploiting them. Sri Lanka could explore the possibility of turning these sediments lying at the bottom of the Indian Ocean into valuable products in demand to earn the much needed foreign exchange.

Since the ocean across the island is around eight times larger than the land mass, it has an enormous potential to feed its people than the land. The Pedro Bank and the Wadge Bank in the North of the country have also been reported to be rich in various types of marine resources.

Thus the ocean could render enormous benefits in the form of transportation, tourism, recreation, water sports, energy, use of other mineral resources and food production. Taken

as a whole these factors are capable of making a substantial contribution towards enhancing the Gross Domestic Production of the country (GDP).

Challenges

The ocean is a global common. Hence, the ocean is vulnerable to the tragedy of the commons. The tragedy of the commons is an economic problem in which every individual tries to reap the greatest benefit from a given resource. As the demand for the resource overwhelms the supply, every individual who consumes an additional unit directly harms the rest who can no longer enjoy the benefits. The solution to the problem involves management and regulation of resources with the goal of maintaining sustainability.

Since oceanic resources are limited and vulnerable due to unethical human activities a sustainable mechanism to look after resources in a sustainable manner is a must. Unmanageable fishing, unsustainable extractions of marine resources, destruction of marine and coastal habitats and landscape, carbon dioxide emissions to nutrient chemical, plastics pollution and the spread of invasive species are immediate challenges that should be looked into. If not, greater environmental, social, and economic costs are inevitable.

Simultaneously, the risks to coastal populations from rising sea levels and storm would deepen as a result of climate change. This would pave way to search for defensive infrastructure development

Despite the strategic location and the above mentioned opportunities presented by way of the availability of the immense resources of the Indian Ocean, Sri Lanka has done little to develop the potential. Few intensive surveys of the potential have been undertaken. Only the port of Colombo has been developed to some extent, but falls short of the level reached by the port of Singapore.

Most fishery harbours lack the adequate facilities like signal lights to guide incoming fishermen, refrigeration rooms, repair and processing equipment. The fisher folk are still small time operators of traditional methods with very little investment by way of well -equipped trawlers. Trained personnel are inadequate. The latest available technologies for instance for detecting shoals of fish have not been obtained (Vincent Fernando, Problems Facing the Deep Sea Fishing Industry in Sri Lanka, 1978). It is the foreign fishermen with better facilities who have illegally obtained the best benefits.

Strategies

It is high time that Sri Lanka should seriously reap all benefits bestowed from the ocean for a faster growth and development of the country.

It is important to develop partnerships with appropriate universities and research institutions for maritime and oceanic related work such as Surveys and Research and Development (R & D). On the basis of resource and demand surveys, feasible ocean and tourism related projects have to be identified,

Large scale investments have to be made to develop the necessary infrastructure and feasible projects in these areas, especially for the enhancement of the strategic location of the country in the Indian Ocean. FDI have to be attracted not only to obtain the required large scale capital but also the latest technologies, trained staff and global market access for ocean related products and services. Small scale fishermen could be organized to form co-operatives and companies with state support, in order to undertake large scale investments as alternative to FDI. The state should also find a solution to the illegal exploitation of Sri Lankan ocean resources by foreign operators.



If these areas are well managed and monitored, they could eventually be important contributors to the economic development of the country, as these would, for certain, create employment opportunities and enhance incomes especially in the form of foreign exchange.

Conclusion

The world has finally noticed that the ocean is a finite resource hub. All living and non-living resources of the ocean should be managed cautiously. Development of proper infrastructure is necessary to make full use of the resources in the ocean. Maintaining a pollution free ocean is the real challenge. In this scenario all nations must take meaningful steps to contribute to a pollution free ocean.

Since the land and the ocean have a symbiotic relationship to achieve a high growth potential, better understanding of the ocean and its dynamics is essential. It has been said that proper management of fisheries, investment in sustainable aquaculture and protection of key habitats could restore the productivity of the ocean, and return benefits to billions of people in the developing countries, while ensuring future growth, food security and jobs for coastal communities. This is especially so in the case of Sri Lanka, where the potential of the strategic location of the country and the enormous Indian Ocean resources are not fully tapped.

Current Economy of Sri Lanka (Weaknesses)

Sri Lanka is an island consisting of a population of 21million with a per capita income of US\$3,800. The following table is an overview of the current and the forecasted economic indicators.

	Actual	Q3/17	Q4/17	Q1/18	Q2/18	2020	
GDP Growth Rate %	3.80	4.50	4.10	4.00	5.30	5.20	[+]
Unemployment Rate %	4.10	4.80	4.60	4.30	5.00	4.60	[+]
Inflation Rate %	6.10	6.20	6.50	5.70	5.50	6.18	[+]
Interest Rate %	7.25	7.25	7.25	7.00	7.00	6.00	[+]
Balance of Trade (USD Million)	-886.00	-848.00	-824.00	-853	-853.00	-650.00	[+]
Government Debt to GDP %	79.30	78.00	78.00	74.00	74.00	69.00	[+]

Trade Performance of Sri Lanka

The following table is an overview of the trade data.

	Actual	Q3/17	Q4/17	Q1/18	Q2/18	2020	
Balance of Trade (USD Million)	-886.00	-848.00	-824.00	-853.00	-853.00	-650.00	[+]
Exports (USD Million)	841.00	855.00	866.00	870.00	869.00	869.00	[+]
Imports (USD Million)	1727.00	1682.00	1700.00	1709.00	1708.00	1706.00	[+]
Current Account (USD Million)	-708.00	-542.00	-717.00	-553.00	-681.00	-614.00	[+]
Current Account to GDP %	-2.40	-2.60	-2.60	-2.20	-2.20	-3.50	[+]
External Debt (USD Million)	46514.00	47821.00	48374.00	48898.00	49435.00	54871.00	[+]
Terms of Trade – Index points	88.84	104.00	104.00	104.00	104.00	104.00	[+]
Tourist Arrivals Numbers	123351.00	7.00	158502.00	162764.00	161435.00	161757.00	[+]
Gold Reserves Tons	22.24	22.28	22.28	22.29	22.28	22.28	[+]
Foreign Direct Investment (USD Million)	76.00	214.00	218.00	218.00	218.00	218.00	[+]
Remittances (USD Million)	568.70	599.00	689.00	598.00	598.00	748.00	[+]
Terrorism Index	3.49	3.81	3.64	3.80	3.95	6.01	[+]
Tourism Revenues (USD Million)	322.70	333.00	352.00	341.00	345.00	344.00	[+]