

India's Blue Economy: Not in the Pink of Health

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Abstract : The purpose of this study is to examine the potential of the blue economy in India and find ways to promote the same through youth empowerment, resolving legal disputes and framing policy objectives. The study has adopted a desktop research view to analyze the different aspects of the challenges of the blue economy and has tried to provide suggestions and measures on the same. India has a young population. With this advantage, the government should frame their policies to equip youth to become decision makers and problem solvers. There is a need to address issues in the maritime area and create a consciousness in the country. The study argues that that a suitable and realistic policy framework should provide ample amount of opportunities targeting the youth for a sustainable blue growth. The study recommends more blue enterprises to be initiated through empowering the youth by providing skill development and education pertaining to marine subjects, which would improve the growth potential and increase the importance of the blue economy in India.

IndexTerms–Blue Economy, Policy, Skill development, Youth

I. INTRODUCTION

Economics is all about utilization of resources in the best possible way. The blue economy is an extension of the same - to achieve long-term prosperity and ensure the well-being of the citizens by using the resources in the oceans in the best possible manner. The concept of the blue economy is relatively new to the world in general and to India in particular. The meaning of the same has at times been left open ended and vague to the citizens. There is a need to conceptualize the Blue Economy and the terms associated with it like blue-biotechnology, maritime technology, desalination plants, underwater tourism, ocean energy and marine mining. Moreover, environmental degradation has posed a fundamental threat to the planet, causing widespread diseases and deaths. As citizens, the need to ensure a healthier, green and blue planet by not polluting and preserving all our natural resources is sine qua non. Also, the youth of the country need to work for their future generations to sustain the environment. The blue economy would provide them with opportunities of engaging in pro-social and community-enhancement activities and in this way, the benefits of the blue economy can be harnessed.

II. OBJECTIVES OF THE STUDY

This study is guided by two objectives:

1. To establish a need for government initiatives for promoting youth empowerment and education in India
2. To determine the legal changes that need to be made to encourage entrepreneurship in the Blue Economy.

III. UNEARTHING THE BLUE ECONOMY

The United Nations' Sustainable Development Goals 14' (SDG's) reaffirmed its support for active participation in "life under water". This statement can be substantiated by a deeper understanding of the same. India is a part of the UN Agenda 2030 but, adequate efforts towards to understand the blue economy in its totality and make efforts to protect the life under water has not been made in India. This has created a lot of confusion and controversies also because the SDG's has left the Blue Economy as a broad topic rather than narrowing it down to specificities. The United Nations Convention of the Law Of the Sea (UNCLOS) has provided a legal framework for ocean resource management like fisheries, vegetation and planktons under the direction of the World Trade Organization (WTO), but it seems to be favoring the developed countries rather than and developing countries, thereby making it difficult for the latter to adopt.

In India too, there is no specific definition of the blue economy. Appropriate policy recommendations can be framed for the present and the future generations if this is corrected. The Blue Economy is well beyond an object to be used for "economic growth". In the name of trying to increase growth and profits, many private and public companies exploit the rich maritime and ocean resources. They engage in oil drilling, fisheries, tourism and other activities to tackle other disasters like unemployment and food shortage. Like the Green Economy, the Blue Economy should serve the purpose of ensuring the well-being of the citizens through sustainability and political agendas. The government should make use of the coastal areas and try to extract the possible resources, but not at the expense of damaging the same.

A large number of countries have not yet realized the true potential of the coastal areas or even the Blue Economy. The governments could benefit from undertaking operations of desalination plants and carbon sequestration to tackle the devastating effects of climate change and also to protect the livelihoods of the poor families who spend their lives on the sea. The Indian government is currently focused on maritime infrastructure, to excavate and harness the ocean resources. Caution needs to be exercised to save the environment, especially considering that India has water bodies on three sides. If these exercises are undertaken effectively, much more than only just the creation of maritime infrastructure can be achieved.

IV. RESEARCH METHODOLOGY

This paper is purely theoretical in nature. The study has used a desktop research view and has used secondary data sources to analyze the current scenario vis-a-vis the Blue Economy in India. The rationale for using a desktop research view is to gather the facts and information available to aid the responses to the objectives. For this purpose, a number of UN journals on the blue economy were reviewed, the blueprint for the ocean sustainability in Paris, related studies and policies on the NYP, reports from the Indian Ocean Rim Association and other articles about the potential of the blue economy in different countries were also reviewed. Suggestions and measures that the government can take to correct the same have also been made.

V. OPPORTUNITIES FOR INDIA IN THE BLUE ECONOMY

India, which has the Arabian Sea, Bay of Bengal and the magnanimous Indian Ocean, has a lot of potential to increase the impact the Blue Economy manifold. The Indian Ocean has always had a geopolitical significance to the world. It is a vital sea link from the eastern part to the western part of the world and 80 percent of the oil trade occurs through this sea route.

The Indian Ocean; which is the ocean that bears the name of our country, signifies India's geographical importance. Safety of the Indian Ocean becomes an important responsibility for India. China's presence in the ocean has only created more harm to India as they have been expanding their military maritime footprint in the Indian Ocean Region (IOR). The ocean is also used by other countries like Japan, USA and Australia who are developing submarine projects and surface ships to improve relations with Non Aligned Movement countries. This could be a huge threat to India, as India also has two islands that lie in the ocean and it could be a passageway for other countries to destroy India's position vis-a-vis the Indian Ocean.

There is a need to formulate policies that are bilateral/ multilateral in nature with the other countries. Additionally, the policies must ensure sustainable operations and improve the well-being of the countries and the ocean. India is already in talks with Mauritius and Seychelles to strengthen economic and strategic policies in order to influence the dynamics of the Indian Ocean. Just as for overcoming issues related to global warming, the world needs to come together and matters relating to the Blue Economy too, require joint efforts. India needs to create more initiatives to make the Indian Ocean as its base, for India should consider making security grids with other countries so that it can prevent any militarization of the Indian Ocean. The government can also involve the Indian Navy to protect the oceans, not just for security purposes, but also for taking up roles that contribute to the protection of the Blue Economy.

Efforts toward preserving a Blue Economy would go a long way as the world ocean economy is valued at USD 1.5 trillion per year. Aquaculture is the fastest growing food sector with 50% of sea food being used for human consumption. To maintain the quality of the sea food, there needs to be proper maintenance, processing and preservation of the sea. Proper care and processing can also lead to positive increases in the GDP.

The deploying of factory ships or fish processing vessels, which can accommodate large amounts of fishes and other small animals, fishing equipment, medical emergency equipment, communication vessels, storage supplies and fishing supplies can help increase the catch as well as reduce harm to the waters and life under water. The advantage that such vessels possess is that they are mobile on land as well as on sea and can easily move to seasonal fishing grounds. It is a very flexible method to catch and preserve the fishes, and can be channelized into making profits. Unfortunately, India does not have enough fish processing vessels. There are many illegal fishing vessels from other countries on the Indian waters; which affects not just the exchequer but also the domestic fishermen. Under the Department of Fisheries, the Indian fishing firms can hire foreign vessels. But, the law has been misused many times wherein foreigners have hired them through Indians. The Government of India could provide incentives to Indian companies to buy fishing vessels and encourage Indian fisher folk to utilize them, thereby increasing Indian labour participation in the blue sector. This will enable the economy to flourish and at the same time prohibit illegal activities.

India should also focus on empowering its youth to take part in maritime services and contribute to the environment. By 2020, India would become the youngest country in the world, with an average age of 29 years. According to the UN, the definition of youth is 15-24 years. However, the National Youth Policy (NYP, 2014) defined the youth as 15 to 29 years. Youth empowerment should enable rights for the youth employment in the blue economy and encourage more youth to consider career pathways and flagship projects on the same. As a result of this, the blue economy would excel in an evidence-based marine scientific research combined with innovation and sustainability. The youth is one of the biggest assets for India and the government should suggest policies to fast-track the growth of the blue economy through the participation of the youth.

Financing renewable energy from the oceans still continues to be a major strain for India. There is a huge scope in producing renewable energy because it can create sizable returns to capital. These resources can be exploited, albeit in a sustainable manner. There are many types of ocean renewable energy resources like tidal energy, offshore thermal energy, energy from marine biomass and ocean current energy to name a few. India has announced a policy that has exempted excise duty to components that manufacture the wind energy generators. The government has also proposed a zero tax initiative for services like installing vessels and oceanographic studies. India has a coastline of around 7,500km and enhancing ocean renewable resources is the best way to increase India's energy mix. The cumulative investment in this sector is around USD 10 billion as against to China's investment which is USD 110 billion. India should work towards making its own fishing vessels, encourage labour demand and develop geopolitical ties.

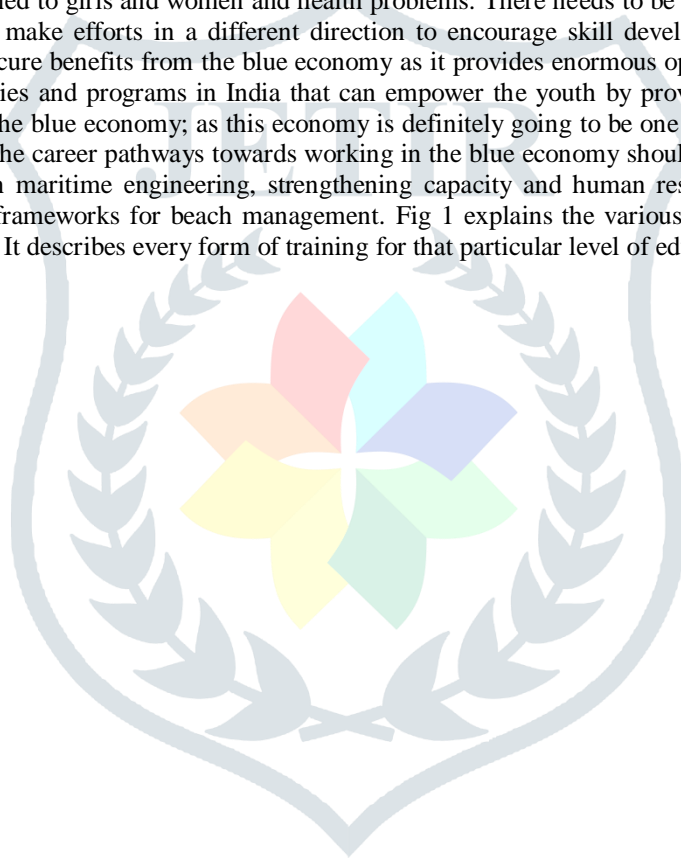
As mentioned above, the Government is encouraging private investors to put in money for starting these programmes. This sector has immense potential, but full-scale progress has not been taking place due to environmental concerns. Foreign Direct Investments (FDI) can also be used as a tool to encourage more production and enhance the economy. By attracting FDI it can ease the burden on the financial constraints. An inward FDI into the Blue Economy also has huge the potential for job creation considering that India is one of the largest exporters of marine products.

VI. CHALLENGES FOR INDIA IN THE BLUE ECONOMY

On one hand there is a lot of potential associated with the Blue Economy, but there are also some challenges that India faces and these could also persist in the future. Unsustainable extraction from marine resources along with poorly maintained fishing vessels can destroy the deep water corals and ruin the underwater plants. The fish stocks are further exploited by illegal, unreported fishing by foreign vessels and fishermen. Misusing the Blue Economy could also bring physical alterations between the citizens in the coastal areas and habitats because of overlapping the uses of marine areas, marginalization of the poor families and other externalities that affects the coastal areas through pollution. Climate change is a serious issue to tackle, especially in the coastal areas. There can be a lot of turbulences like rise in the sea-level and weather changes. A lot of hardships have been suffered by the fishermen in India as they have always depended on the weather and the sea-level for deciding the best time to go fishing. As this problem still persists, India should consciously try to implement the regulations that reduce the severities of climate change. Along with this, there is also a need to address the problems of the youth unproductivity and the legal measures by the government in India. These issues have been discussed below in brief.

6.1 STRATEGIES AND POLICIES TO EMPOWER THE YOUTH

To say that the youth in India are underutilized would not be an understatement. Of the 1.25 billion population of the country, 60% of the youth can still not read, despite the fact that the enrollment in schools and colleges are 96% as of 2014. The dropout rates of children from school continue to plague the Indian education system. Almost 57% of girl students dropped out in class IX itself, indicating that education is being taken a back seat among the youth. The reasons for dropping out vary; from financial problems to social stigmas attached to girls and women and health problems. There needs to be more provision for education and skill and the government could make efforts in a different direction to encourage skill development for the youth. This time around the efforts could be to secure benefits from the blue economy as it provides enormous opportunities for employment. The government could propose policies and programs in India that can empower the youth by providing skill sets that would make them employable in harnessing the blue economy; as this economy is definitely going to be one of the most important economies in the future for sustainability. The career pathways towards working in the blue economy should also increase with colleges and institutions providing courses in maritime engineering, strengthening capacity and human resource building like fish energy, seafaring, mining and building frameworks for beach management. Fig 1 explains the various opportunities of careers that the youth can partake themselves in. It describes every form of training for that particular level of education.



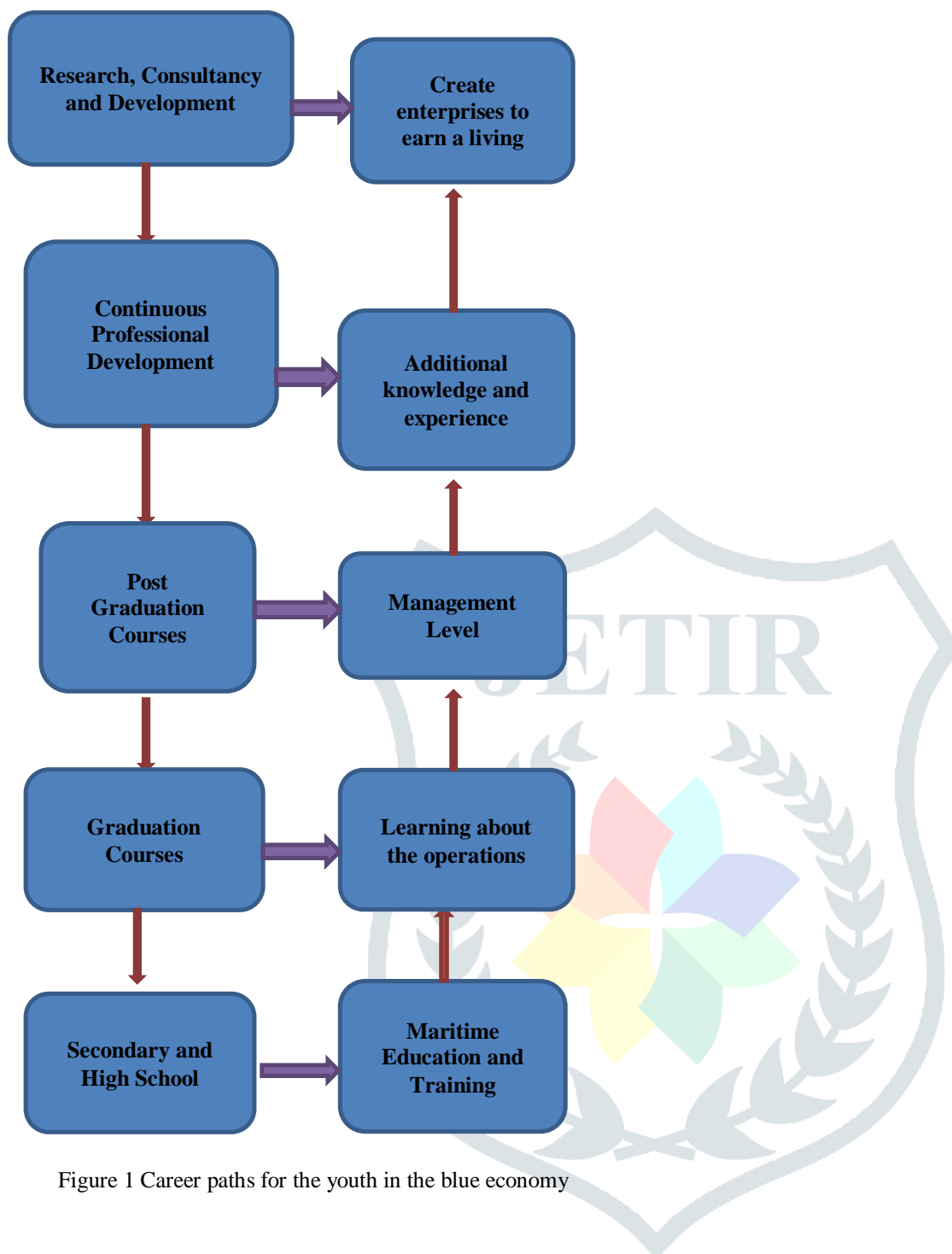


Figure 1 Career paths for the youth in the blue economy

6.2 POLICY FRAMEWORK AND LEGAL ISSUES TO BE TACKLED FOR ENCOURAGING ENTREPRENEURSHIP

The Exclusive Economic Zones (EEZ) is a concept adopted by the Third United Nations Conference on the Law of the Sea (1982) whereby “a Coastal State assumes jurisdiction over the exploration and exploitation of marine resources in its adjacent section of the continental shelf, taken to be a band extending 200 miles from the shore.” The EEZ in India is around 370km seaward from the coast. India has many Acts to protect coastal and marine trade. The level of effectiveness of the Acts is questionable because as a major Asian country, India has had many maritime disputes with other countries like Sri Lanka, Bangladesh, Myanmar and the USA. In recent times, there has been a dispute among the countries to determine the extent of India’s continental shelf. There should be a consensus reached among the nations for the sake of present and the future generations, so that there can a prolonged sustainable living. The US have been conducting operations on the Indian waters, without the notice of India, thus creating more strained relations with the US. India needs to identify its territorial waters, EEZ, maritime zones and the continental shelf to prevent other countries from using India’s resources and ensure efficient utilization of the resources for its citizens and its youth. Along with this, India should also dwell deeper into areas like marine insurance, financing and mortgage of ships, registration and dismantling of ships. There is a need to focus more on prohibiting intruders to take charge of the seas by creating a good base for our stockholders for improving the productivity of the sector. Partnerships can be a way to increase capacity building. This can also improve social issues such as regarding the socio-economic well-being of the citizens living along the coastlines. This is usually a less common scenario in emerging and new sectors, so this can be used as an opportunity to build more tie-ups to make the whole process more efficient.

On account of the strategic nature of India's territorial areas in relation to the blue economy, the leading policies and objectives should be promising, credible and ambitious. In the past, the data provided by statistical organizations have not been the same, leading to unreliable results. There is also very little statistics on the ocean resource management and its contributions towards India's GDP. The existing shipping and marine laws in India are vague and complicated, where particular ministries are responsible for certain developments without any proper coordination with other inter-linked departments. For instance, the Wildlife Protection Act (1972) (WLPA), emphasizes the need to protect the wild and endangered plants, birds and animals and ensure the environmental and ecological security of the country. Here, the term "wildlife" includes "any animal, aquatic or land vegetation which form part of any habitat." (WLPA, 1972). On the other hand, the National Fisheries Development Board (NFDB) is the department that ensures that there is no exploitation of the coastal fisheries and to adopt new technologies and diversify the aquaculture and fisheries to provide good quality fishes to the consumers at low prices. In this case, WLPA ensures protection of the habitat, while NFDB ensures to provide fish produce without exploiting the coastal areas. There is lack of harmonization among the two government led institutions that needs to be addressed and reach suitable objectives that will not result in any confusion. Each authority should have a specific role towards harnessing the blue economy at different levels; namely the central, state and the local levels. This will ensure more organization and better implementation of the policy framed. Efforts in the above direction can encourage entrepreneurship in the blue economy.

VII. CONCLUSION

The Blue Economy in India holds a large unrealized potential but needs a lot of governance and policy changes. The government, along with the EEZ, Indian Navy and other private organizations aimed at sustainable development should formulate credible policies and strategies to implement the same. As mentioned above, targeting youth empowerment is essential as India's has a very young population and this can be used effectively to increase sustainability and empowerment at the same time. Moreover, better results can be achieved through building committees that promote human resource management, education and skill development in the blue economy. The study argues that although there are many shipping, maritime and wildlife laws, there is no strict regulation on the maintenance of the environment or the vessels and ships which are used to trade and export materials and goods from India. The constant problems at the Alang Port in Gujarat are a prominent example which proves the inefficiency of the laws pertaining to the blue economy. The unsustainable extraction from marine resources along with poorly maintained fishing vessels can destroy the deep water corals and ruin the underwater plants. There should be some credible methodology for estimating the economic and the environmental value of the oceans and the marine lands. India should consciously try to implement the regulations that reduce the severities of climate change so as to minimize losses to fisher folk. The study recommends encouraging blue enterprises in the future by involving the youth through education and skill development to tackle the aforementioned problems and provide impact analysis on the potential of the Indian waters; thus providing a better leverage for India's blue economy. It also recommends a thorough overcalling of the legal system and policy framework with respect to the maritime arena. The scope for business opportunities and protecting the environment are massive, but the challenges to the same are huge too.

In a nutshell, it can be said that the Blue Economy in India is still not in its pink of health; some major improvements have to be made to survive the present and the future. Hopefully, in times to come, the water does not wash us away.

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