## **Unlocking the Blue Economy:** Financing a Sustainable Ocean Future



The world's oceans are integral to the livelihoods, food security, and economic well-being of billions of people around the world. More than three billion people, roughly 40% of the global population, reside in coastal areas and rely on the ocean as a fundamental source of their livelihoods [1]. Meanwhile, industries such as tourism, fisheries, marine transportation and petroleum-related to the ocean economy play a key role in global economic expansion and climate action [2], [3]. Despite the immense value of the ocean, marine ecosystems face many threats, including climate change with rising sea levels and ocean acidification, pollution from natural and anthropogenic sources, unsustainable fishing practices depleting fish stocks, and coastal development [4], [5]. For example, in the Sri Lankan context, the X-Press Pearl ship accident has caused enduring damage to the local coastal and marine ecosystem. The contamination of these ecosystems with hazardous materials and plastic pellets has led to a sustained decline in fish stocks, adversely impacting the fishing industry. The Sri Lankan eco-tourism has also experienced long-term declines in tourism revenue. The lasting health risks associated with pollutants threaten both marine life and communities dependent on the ocean [2].

The "blue economy" which is defined by the World Bank as the "sustainable use of ocean resources for economic growth while preserving the health of marine ecosystems" con-

sists of a variety of economic sectors and policies aimed at ensuring the sustainable use of oceanic resources, is rapidly gaining prominence [6]. This economic concept has four main pillars (Figure 1) which are combining sustainable practices, robust regulatory frameworks, and international cooperation to overcome the above-mentioned threats to the ocean. The estimated value of the blue economy's "natural capital" is approximately \$25 trillion, with an annual production value of around \$2.5 trillion. However, there is a substantial annual funding gap of \$149.02 billion for achieving the United Nations Sustainable Development Goal (SDG) 14, "Life below water" [7]. This gap can be attributed to various factors, including insufficient fiscal policies, limited private sector investments, and the high external debt burden of certain countries [7]. To address these challenges, a unified approach of "blue finance" (Figure 2) has the potential to bridge the gap between the financial sector and the real economy, thereby contributing to economic growth, improving livelihoods, and preserving marine ecosystems [8]. Blue finance, an emerging field within Climate Finance, is gaining increased attention from investors, financial institutions, and other stakeholders worldwide. However, SDG 14 has received comparatively

less funding compared to other SDGs. To rectify this, financial instruments like blue bonds, blue sustainability-linked loans, and markets for blue carbon provide opportunities for support. Building financial sector capacity and understanding the ocean economy and its associated risks are essential for a smooth transition from green to blue initiatives [7]. Xpress pearl disaster shows that Sri Lanka is country which is not yet ready for such disasters [8] or transition to blue initiatives. Therefore, Sri Lanka needs more research and awareness related to blue economy and blue finance. Financial markets and institutions play a vital role in building financial sector capacity in blue economy. However, as an emerging area, this area is still developing. This urges the investigation of the role of financial markets and institutions in ensuring sustainable blue financing, with a particular focus on non-bankable blue economy projects. To answer that initially, we need to understand the factors and motivators that drive the transformation of the blue economy in Sri Lanka. Secondly, it needs to assess whether the involvement of the financial sector leads to a corresponding transformation in sectors that collaborate with financial institutions. In addition, further analysis needs to identify the impact of different

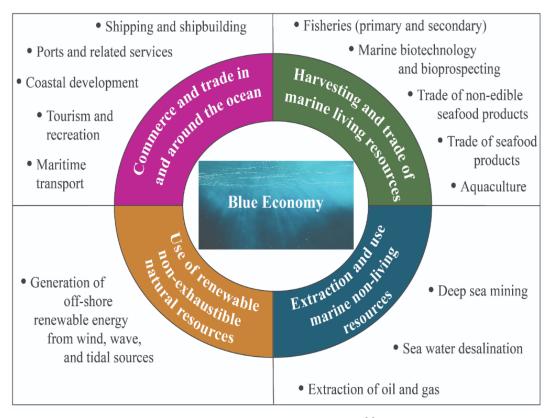


Figure 1: Main pillars of the blue economy [1]

The Blue Economy's promise for sustainable ocean utilization hinges on vital financial support, technology, and policy innovations to ensure a thriving future for coastal communities and marine ecosystems, particularly crucial in Sri Lanka's context.

financial system models (e.g., bank-based vs. capital market-based) on blue behavior and sustainability in financing. Furthermore, these studies need to define the roles of various stakeholders, including governments, the enterprise sector, and Non-Governmental Organizations (NGOs), and examine how they contribute to sustainable blue financing.

Limited stakeholder engagement and limited access to reach them create a challenging atmosphere for data gathering. However, we can achieve the research objectives by gathering the data from secondary data sources such as reports issued by different organizations such as the United Nations and certain existing financial institutions who are

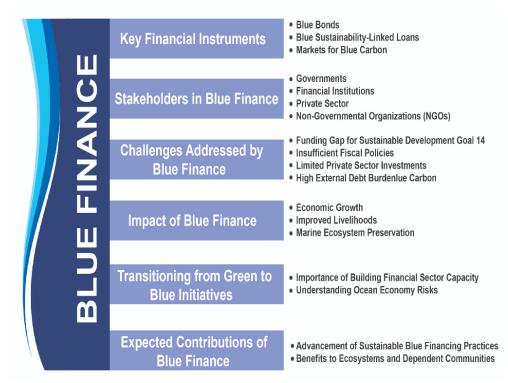


Figure 2: The main components of blue finance [9]

engaged in the process. Moreover, we employ both descriptive and inferential data analysis to analyze the collected data.

By employing these data collection and analysis methods, a research team from the Department of Industrial Management, Faculty of Business, University of Moratuwa aims to provide valuable insights into the intricate dynamics of blue financing and the roles played by financial markets and institutions in ensuring sustainability, especially for Sri Lanka who is trying to become a maritime hub. It will also consider the influence of different financial system models and the involvement of various stakeholders in the process. In conclusion, the Blue

Economy contributes to sustainable ocean resource utilization. Financial systems and investments play an essential role in supporting this transition, influencing energy efficiency, trade flows, and environmental impact. Ultimately, this research seeks to contribute to the advancement of sustainable blue financing practices that will benefit technological innovations, policy and regulatory frameworks, climate resilience and adaptation, social and economic equity and innovative financing mechanisms related to the ocean's ecosystems and people who depend on them, especially in Sri Lankan context.

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