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Sustainable Development Building With The Analytical Approach of Blue Economic And Food Security

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Abstract: The blue economy refers to economic activities focused on advanced sustainable management and conservation of marine and coastal resources and sustainable development to promote economic growth. The challenge of meeting the food needs of a growing global population requires sustainable food supply chains anchored in coastal communities and sustainable food production. In addition, marine resources are critical to ensuring food security, accounting for two-thirds of total global fish production, 80% of global aquaculture production, and the per capita supply of fish is 65% higher than the world average. As the world's population grows, the amount of food needed in the future will depend on intrinsic factors and human choices. This chapter examines the current state of marine resources and proposes several steps forward based on the opportunities and challenges that exist through the use of secondary data to accelerate the sustainable use of marine resources and a partial analysis of the human actions that shape to the sustainable future, simulate, supply chain, and food waste

Keyword: Sustainable Development, Blue Economic, Food Secrurity

INTRODUCTION

The Blue Economy fights for the sustainable development of the maritime space (Voyer et al. 2020). Although the term "blue economy" is new, it is growing in popularity. The guiding principle, which first emerged at the 20th United Nations Conference in Rio in 2012, is the United Nations Convention on Sustainable Development. The model of sustainable development is a "blue economy" and poverty to create new economic opportunities, aid, stable food sources and long-

term jobs. The "blue economy" is seen as a tool to advance various Sustainable Development Goals (SDGs) (Lee, Noh, and Khim 2020). Developing countries (SIDS) and some least developed countries (LDCs) are early adopters of a blue economy as they seek to unlock new economic potential for their vast ocean basin (Voyer, Quirk, et al. 2018; Voyer, Schofield, et al. 2018.; Keen, Schwarz, andWini-Simeon 2018 dan Purvis 2015).

Blue economy initiatives have sprung up in the seas and coastal areas, seeking to bring a green economy to the new world. The blue economy is often defined as a global policy agenda. Blue economy discourse and practice aims to generate "blue growth" by linking poverty alleviation, social justice, and ocean conservation.While global and national policies have focused on coastal resource management for decades, the broader discourse and practice of the blue economy appears at first blush to promote economic growth strategies for ocean conservation (Satizábal et al. 2020).

Public-private partnerships have gradually replaced government coastal and maritime administration over the past three decades. They use bilateral and private sector investment to fund ocean management initiatives around the world (Abbott et al. 2014;Brent, Barbesgaard, and Pedersen 2018). These actors and networks form partnerships with donors (multilateral and bilateral, including banking institutions), government organisations, civil society groups and private sector organizations (for example in the "blue economy", which refers to philanthropic organizations and speculative investors, the political agenda becomes created and influenced nationally and internationally (Barbesgaard 2018). These partnerships appear to be green and to thrive because of the way they combine and showcase the human, financial and material resources available to create environmentally friendly solutions. This ultimately promotes sustainable economic growth in coastal and marine areas (Abrahamsen 2004).

The Indian Ocean is critical to the economy, security and livelihood of the coastal states. One third of the world's population lives in countries with different political structures, social conditions and development goals and relies heavily on endangered marine resources for survival (Roy 2019). Thus, the issue of economy and sustainability becomes very difficult. Pollution, habitat destruction and depletion are under pressure. However, promoting the blue economy through the sustainable management and use of regional marine resources must be a priority if the Sustainable Development Goals and food security, livelihoods and ocean economy are to be achieved (Roy 2019). The blue economy refers to economic activities aimed at the advanced sustainable management and conservation of marine and coastal resources and sustainable development to promote economic growth. The challenge of meeting the food needs of a growing global population requires sustainable food supply chains rooted in coastal communities and sustainable food production (Olatidoye 2022).

The issue of food security has long been a major focus of work in several countries around the world facing food insecurity due to underdeveloped agricultural systems and exacerbated by high global food prices, particularly in Africa. Groceries are now a significant part of the family budget of rural and urban poor families (Olatidoye 2022). Furthermore, Olatidoye (2022); The Food and Agriculture Organization of the United Nations (FAO) has stated in several forums that because the world food situation is in dire straits or predicament, several countries may face a food crisis.

It is a well-known fact that food remains of paramount importance due to its central importance to human existence; Consequently, high food expenditure changed human history, leading to wars, migrations and a slowing of the growth rate of nations.The recent intentional or planned increase in food prices has led to an increase in violence that requires awareness on the

part of different actors. Political instability has become a major concern for world leaders, leading to growing concerns about the ability of the world's nations to feed more than 6.5 billion people. (FAO, 2007; Olatidoye 2022).

Aquaculture is believed to play an important role in providing nutritious food for the growing human population (Miller, Nichols, and Carter 2008; Troell et al. 2003), which is expected to exceed 9 billion by 2050. To meet the growing global demand for seafood and omega-3 fatty acids (particularly eicosatetraenoic acid (EPA) and docosahexaenoic acid (DHA) (Salem and Eggersdorfer 2015; Tocher et al. 2019), quaculture, which currently contributes 47% of world production of seafood production (171 MT pada 2016; FAO 2018), this practice is expected to intensify (Klinger and Naylor 2012; Diana et al. 2013; Blanchard et al. 2017; Stevens et al. 2018). This raises major concerns about limited resources (e.g. water, space, feed) and environmental impacts (e.g. wastewater, solid waste) which can lead to higher stocking densities and feed additions (Arvanitoyannis and Kassaveti 2008; Klinger and Naylor 2012).

The broad acceptance and support of the blue economy by public and private actors can be seen as a positive step towards a sustainable transition to the marine and coastal environment. While particular attention should be paid to the potential risks arising from the perspective of the economic benefits of ocean exploitation, substantial public support is also needed to build a sustainable society (Germond-Duret and Germond 2022). The blue economy can be defined as the pursuit of sustainable economic activities resulting from the exploitation of coastal and marine resources. While its broad acceptance and support by public and private actors can be seen as a positive step towards a sustainable transition of the coastal and marine environment, concerns have been raised about the highly sustainable dimension of the blue economy (Stevens et al. 2018).

Seafood production in required quantities is under increasing pressure due to reasons such as population increase, increased demand, overfishing, bycatch, changes in biodiversity due to climate change, extinction of the species and others. At the same time, the industrial production of value-added fishery products generates significant quantities of nutrient-rich wastewater, as well as large quantities of process wastewater. This waste, bycatch and waste is a rich source of nutrients, important industrial materials and also bioenergy. Developments in marine biotechnology provide new green and environmentally friendly processes for biorefinery of discarded fish parts (Venugopal 2022;Tocher et al. 2019;Voyer et al. 2020)

This article discusses the potential of green processing to increase seafood waste and process waste towards zero waste. This can improve the sustainable seafood supply chain. In eco-friendly processes, waste is typically bio-altered to release components bound to the food matrix, which are then extracted using appropriate downstream processing methods. Commercial processing of fish waste offers great potential for algal biotechnology and biorefinery methods. The isolated products may be useful in medicine, therapy and other industries due to their functional properties.Green processing can support waste-free seafood processing, environmental protection, the blue economy, and perhaps even the achievement of sustainable development goals (SDGs).

This study is a literature study analyzing the blue economy, food security and sustainability development of different countries. How much food will be needed in the future with a growing world population depends on natural factors and human decisions.The aim of this literature review is to promote the sustainable use of marine natural resources and to investigate some social actions that can influence the long-term sustainability of the food chain. This is done by looking at the current state of marine resources and outlining different possible future paths based on opportunities and challenges.

METHOD

The method of writing scholarly articles is to use qualitative methods and bibliographic (library) research. Examine the theory and relationship or influence between book and journal variables, both offline in the library and online, related to Mendeley, Google Scholar, and other online media.Up to six scientific literatures were reviewed in this study, which were then used for further studies.

In qualitative research, desk research should be conducted in accordance with methodological assumptions. This means that it should be used inductively so as not to direct the questions posed by the researcher. One of the main reasons for conducting qualitative research is that it is exploratory in nature.

RESULTS AND DISCUSSION

This article analyzes and discusses the variables of human resource management (HR), including: blue economy, food security and sustainable development. Where the blue economy and food security influence sustainable development. Previous research and articles relevant to this article include:

Blue Economy influence on Food Security

The impact of the blue economy on food security is supported by research by Olatidoye (2022). The blue economy refers to economic activities aimed at the advanced sustainable management and conservation of marine and coastal resources and sustainable development to promote economic growth. The challenge of meeting the food needs of a growing global population requires sustainable food supply chains rooted in coastal communities and sustainable food production. In addition, marine resources are critical to ensuring food security, accounting for two-thirds of total global fish production, 80% of global aquaculture production, and the per capita supply of fish is 65% higher than the world average.

As the world's population grows, the amount of food needed in the future will depend on intrinsic factors and human choices. This study examines the current state of marine resources and proposes different avenues for the future based on existing opportunities and challenges by using secondary data to accelerate the sustainable use of marine resources and by performing a partial analysis of human actions that change can have an impact on sustainable development. future of the food supply chain, food waste (Roy 2019).

Blue Economy influence on Sustainabel Development

The blue economy refers to economic activities that rely on modern and sustainable management. Conservation of marine and coastal resources is also important, as is sustainable development (Voyer et al. 2020; Klinger and Naylor 2012; Olatidoye 2022). Through management, the blue economy has a major impact on the sustainable development and use of marine resources (Roy 2019). The blue economy is a key factor in building a sustainable economy in coastal and marine areas (United Nations 2022; World Bank 2017).

Food Security influence on Sustainable Development

Ensuring food security requires multidimensional action, including: improving the governance of the food system; inclusive and responsible investment in agriculture and rural areas, health and education; empower small producers; and strengthening social safeguards to mitigate

risks that will ultimately impact sustainable development (Morton et al. 2017; Stevens et al. 2018; United Nations 2022; Venugopal 2022).

Food security is linked to all of the United Nations Sustainable Development Goals (SDGs). Better governance of food security, based on healthy, equitable and sustainable food systems, benefiting from modern information and sustainable and equitable agricultural technologies, is crucial for countries to achieve the SDGs (Barbesgaard 2018; Bennett et al. 2021 Klinger et al Naylor 2012 Lee et al 2020 Olatidoye 2022 Satizábal et al 2020 Stevens et al. 2018; Toucher et al., 2019; United Nations 2022; Voyer, Quirk et al. 2018; Voyer et al. 2020; World Bank 2017).

Conceptual Framework

Based on the formulation of the problem, theoretical studies, relevant previous research and discussion of the influence between variables, the framework of thinking in this article is as follows.
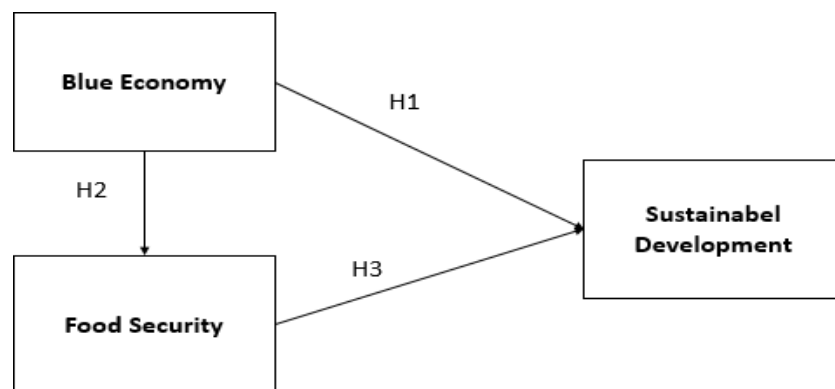

Figure 1. Conceptual Framework
Sources: Processed by Researchers (2023)

Based on the conceptual framework description above, the Blue Economy (X1) and food security (Z) have an effect on sustainable development (Y). In addition to the three exogenous variables that influence Organizational Structure (Y), there are many other variables that influence it, including those that have not been included or analyzed in this literature review.

CONCLUSION

Based on the wording of the article and the discussion, a hypothesis can be formulated for further research:
1. Blue Economy positively influence on Food Security
2. Blue Economy significantly influence on Sustainabel Development
3. Food Security positively influence on Sustainable Development

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