

Blue economic in Maluku Province, Indonesia: where do we start ?

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Abstract. The main objective of this article is to shed light on how ocean economic sector increase output, income, reduce unemployment and reducing environmental risk and ecological scarcities through blue economic policy. This research method by Analitical Hierarchis Process (AHP). The analysis showed that the most effective policies to increase output and income is government expenditure to the leading sectors. while employment multiplier through regional development program policies, on the other hand the sustainability of resources can be achieved through effective governance. We present the blue economic policy approach as the main pillar in encouraging integrated archipelagic economic development in promoting sustainable economic growth.

1. Introduction

Economic development in the archipelago, especially in Maluku Province has typical problems in forms of distinctive geographical, social and economic characteristics including the level of vulnerability, economic structure, potential, and limited ability to achieve economies of scale [1]. These unique geographic features have their own advantages or disadvantages [2], with economic characteristics dominated by primary products and natural resources [3].

This condition is reflected in its fluctuating economic growth. During 2004-2016 the economic growth rate of Maluku Province appeared fluctuating from 4.43% in 2004, rising quite high to 7.81% in 2012 and falling again to 6.48% in 2016. The contribution given to each economic sector in Gross Regional Domestic Product (GRDP) of Maluku Province at Current Market Prices by Industry value still shows a striking imbalance in several sectors, especially ocean economic sector as a consequence of the geo-economic. Ocean economic sector have not become the leading sectors in Maluku Province[4-5-6]. This shows that there is still an imbalance in the process of economic activity that occurs. This inequality can be interpreted that ocean economic sectors do not experience significant development. Economically and politically, it is very logical if the ocean economic sector is used as a foundation in economic development [7].

On the other hand economic growth has not had a linear impact on macro indicators such as the Human Development Index (HDI) of 67.05 below the National level of 69.55 in 2016, for the Open Unemployment Rate (TPT) including high, which is 6, 98% above the national average TPT (5.5%),



along with a low level of income per capita so that worker productivity is also low, besides the poverty rate is also quite high at 19.18% while the national level is 10.86%. In addition, regionally there are still disparities between districts/cities [8] This shows that the rate of growth does not automatically describe the answers to various problems of welfare. In terms of environment, from 94 observation stations, 24 stations of the status of coral reefs were in the damaged category [9].

These facts certainly require an endogenous policy approach that is able to reflect the province as an archipelagic province that is driven through ocean economic sectors to achieve sustainable economic growth. Blue economy are a paradigm of economic development based on ecosystem principles and capable of producing economic growth [10]. Blue Economy is regarded as the decoupling of socio-economic activities and development from environmental degradation and optimizing the benefits which may be derived from marine resources [11]. As an archipelagic Maluku Province recognising that the oceans have a major role to play in humanity's future and that the Blue Economy offers an approach to sustainable development better suited to their circumstances, constraints and challenges.

As competition for use of the ocean increases, coastal managers must consider the economic impacts of competing marine sectors in decision-making processes [12]. The term "blue economy" has been used in different ways, it is understood here as comprising the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable. Blue economy concept in this paper seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while at the same time ensuring environmental sustainability of the oceans and coastal areas.

We suggest an approach to policy making that stems directly from the expert perspective. This paper describes an application of the Analytic Hierarchy Process (AHP) for selecting the priority strategy for promoting blue ocean economic.

2. Research Method

2.1. Material and Method

Research was conducted in Maluku Province using case study research method. Furthermore, in the framework of development decision making, primary data were taken through the interview with the experts.

2.2. Data Analysis

A strategy analysis is carried out using AHP method [13-14], with the help of expert choice 2000 tools analysis software. The hierarchical structure produced in this paper are the factors that encourage economic growth among them are strong driver institution, good governance and basic sector [1]. Ocean development goals which are aimed at output growth, increasing income, expanding employment opportunities and sustainable of environment. Alternative economic development policy strategies was : government expenditure, technology transfer, competition and structural change, export promotion and structural change, regional development and effective government. AHP was selected to determine the weight of each factor, in order to get a comprehensive ranking index of the public policy sections to prioritize enabling factors for strategic management of ocean economic growth. AHP work principles consist of hierarchical preparation (decomposition), evaluation of criteria and alternatives (comparative judgment), determination of priorities (synthesis of priority), and logical consistency.

3. Results and Discussion

3.1. Results

The results of the synthesis in policy analysis show that the clusters of factors that drive the acceleration of economic growth show that the most priority factor is strong driver institutions (0.584), and for development goal clusters, the main priority goal is to increase output (0.330). The best alternative for the strategy of accelerating economic growth in ocean economic sector is government expenditure (0.206). This is considered far better than effective government (0.187), regional development ranks

third priority (0.166), and is followed by technology transfer (0.165), competition and institutional change (0.138) and export promotion and industrial policy (0.138). The value of the AHP analysis can be accepted given the value of the consistency ratio of 0.02 or less than 0.1 (10%). The comparison matrix can be accepted if the value of the consistency ratio is <0.1 [13]. More detailed results in Figure 1.

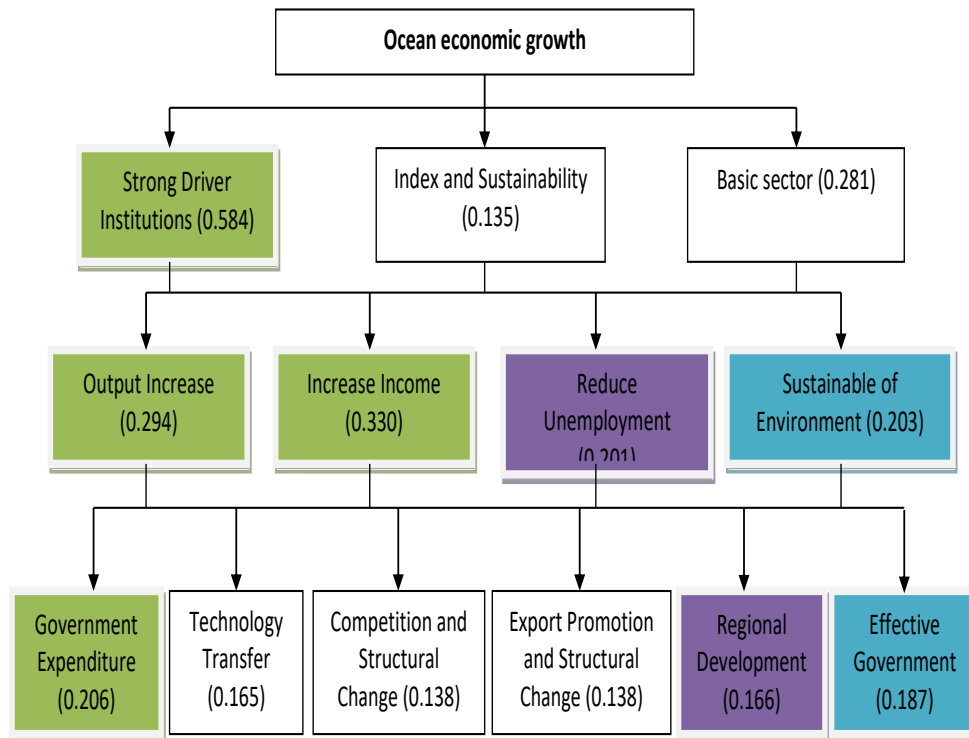


Figure 1. AHP Policy Scheme Model

In relation to the development goals in the form of economic growth, social equity and ecological sustainability, the policy in encouraging output and income is achieved through the most priority alternative in the form of government expenditure, and creating employment opportunities through regional development policy. In addition, environmental sustainability is simultaneously promoted through effective government policy.

3.2. Discussion

The goal of development is, in its broadest sense, to use the ocean economic sector to improve the well-being of people in Maluku Province. Since such objectives frequently conflict one with another, it should be noted that it is impossible to maximize more than one objective at one time. It will rarely be possible to pursue all its objectives simultaneously and some priority must be recognize. This will depend on many factors, the politics involved, the relative costs and benefits of each objective, the external aid received, the constraints to implementation, the cooperation government received from those outside its control whose agreement is essential [15].

The results of the policy analysis point out that in encouraging economic growth in Maluku, high level investment through government expenditure becomes an alternative strategy, of course if it is associated with the government's role through fiscal policy in the form of allocation functions, distribution functions and stabilization functions. These functions must be consistently outlined in the process of planning and budgeting for the development of the ocean economic sector in Maluku.

The fiscal policy as a critical instrument to provide immediate economic stimulus. But policy makers are also increasingly interested in how fiscal policy will impact growth and poverty over a longer run horizon, knowing that any quick responses to exogenous shocks also affect income generation and distribution.

The concept of blue growth also sometimes referred to as the blue economy, and is regarded as the decoupling of socio-economic activities and development from environmental degradation and optimizing the benefits which may be derived from marine resources [10-16]. In encouraging this concept, government policies should be able to be translated into economic development policies, especially starting with the aspects of planning and budgeting. In the planning aspects of determining the basis sector that will encourage economic growth, public welfare and still maintain environmental sustainability simultaneously. According to Law No, 32/2014 on Maritime Affairs states that in the utilization and exploitation of marine resources, the government establishes a marine economic policy, which aims to make marine a basis for economic development. Article 15 (2), the government is required to include the area of the sea as the basis for allocating the marine development budget. This context implies that planning and budgeting policies must be linear and consistent in encouraging economic growth in the ocean economic sectors.

The increased government expenditure may create a multiplier effect. If government expenditure causes the unemployed to gain jobs, then they will have more income to spend leading to a further increase in aggregate demand. The government expenditure may cause a bigger final increase in GDP than the initial injection. As a GDP component from the current domestic expenditure side, investment has an immediate impact on GDP. An increase of consumption rises GDP by the same amount, other things equal. Moreover, since income (GDP) is an important determinant of consumption, the increase of income will be followed by a rise in consumption: a positive feedback loop has been triggered (between consumption and income) by investment.

Economic policy in determining the leading sector is a priority in the case of limitations in the resources mentioned above. In general, ocean economic sectors in Maluku Province have an impact on increasing output, income and expanding employment. Fisheries sector, marine building sector and marine services sector are able to encourage the growth of upstream industry and its downstream industry so that it can drive the regional economy optimally in Maluku Province [1]. This according to policy by developing selected productive sectors in more detail is built through industries which in fact have interrelated relations between one sector and another sector, both related forward linkages and backward linkages [17], derive conditions under which a change in the composition of expenditure leads to a higher steady-state growth rate of the economy [18]. The conditions depend not just on the physical productivity of the different components of public expenditure but also on the initial shares

Government should direct its expenditure towards the basic sectors like fisheries as it would reduce the cost of doing business as well as raise the standard living of poor ones in Maluku Province. This condition is reflected in the still low allocation of government expenditure followed by the level of dependence on sources of funds from the center government. This condition is also followed by the ratio of regional expenditure, which is dominated by personnel expenditure over other expenditures, especially capital expenditure which actually functions to encourage economic growth through regional infrastructure.

Fluctuations of the economic cycle, apart from the impact they have on regional economy, have a distinct geographical dimension that has been a longstanding issue in regional analysis and policy literature. The upward 'tide' of economic activity generates benefits for the national economy that are spread geographically in a fairly unbalanced way [19]. Conversely, the downward trend of economic activity incurs costs that affect the economy of the regions across Maluku Province. The rising and lowering tide spreads benefits and incurs costs in different geographical areas of a given economy that are subject to theoretical and empirical interpretations from different theoretical standpoints and scientific disciplines [20-21-22-23].

The level of economic prosperity of the regions, which is proxied by the declared incomes of households (Income). Regional differences have significant implications for the economy and for the implementation of labour market policies at the Maluku province as an archipelagic. According to neoclassical regional growth theories, disparity across regions should not persist as convergence occurs naturally over time through the operation of free market forces. The movement of factors of production across regions in search of greater economic returns and absorption of new technologies from leading regions (by peripheral lagging regions) have been identified as the key factors leading to convergence [24]. The analysis shows that regional development is the priority in Maluku were established explicitly to enhance regional development, crafting a series of investment incentives

designed to boost investment attractiveness in particular regions. This programme have had a positive impact of the least-developed regions in Maluku.

There was an international commitment to work towards making any economic activities in the ocean more sustainable. To achieve that goal, it is fundamentally important for organisations to develop policy. In addition, environmental sustainability is simultaneously promoted through effective government policy (0.232). Every economic sector as well as human activity must produce low or no carbon emissions and waste. It is necessary then to improve the productivity and efficiency of economic sectors on a sustainable basis. Blue economy as the mainstream of national development and can integrate socio-economic development based on land and sea in a sustainable manner [25]. This is the starting point how planning and budgeting program must be in effective government. Effectiveness here involves the technique of sustainable use of resources, the technique of sustainable resource utilization will be obtained by a total economic value that is relatively greater than ineffective resource use [26]. However, the impact on the ecosystem damage is dependent upon the habitat, species, and harvest technique [27-28]. This blue economic policy is pursued through efficient budgeting in accordance with the results of program implementation such as allocation to the leading sector, strengthening of the upstream and downstream sectors and innovative programs in disadvantage sectors that have great potential but have not developed. The blue economy policy concept would be a first step on the right path. In every development process, planning and budgeting, is the key word on which to work on. Effective government is provide essential planning to integrated spatial planning for upland-coastal-ocean areas of any given region.

4. Conclusion

Blue economic policy in ocean economic sector in Maluku Province can be done through high level investment policies are directed at increasing output and increasing income, while regional development policies are directed at overcoming unemployment and effective governance policies aimed at environmental sustainability goals.

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