

## Community Perception of West Coastal District towards Marine Sector Development (Fisheries and Tourism): Process Hierarchy Analysis (AHP)

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### Abstract

*Pesisir Barat Regency is designated as one of the underdeveloped areas through PP 63 of 2020, based on this, it is necessary to conduct research related to regional development strategies, the West Coast Regency which has a coastline of 210 KM makes this a potential of the region as development capital. Development also requires the role of the community so that these development goals can be achieved, this study looks at how the community's perception of the development of the marine sector (fishery and tourism) is, this study uses the Hierarchical Process Analysis (AHP) method to see how the community's perception is based on the results of research in several main sectors. Based on the community's perception is marine tourism, coastal marine tourism, marine capture fisheries, and marine aquaculture.*

### Keywords

development; marine; fisheries; tourism; community



## I. Introduction

According to the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration, there are 2 types of regions, namely disadvantaged areas and areas that are not left behind or developing, underdeveloped areas are districts that are relatively less developed than other regions on a national scale, and have relatively underdeveloped populations (Bappenas, 2006).

Presidential Regulation Number 63 of 2020 concerning the Determination of Disadvantaged Regions for 2020-2024 states, underdeveloped areas are districts whose territories and communities are less developed than other regions on a national scale.

According to the presidential regulation, the determination of underdeveloped regions by the government is carried out every five years nationally based on criteria, indicators, and sub-indicators of lagging regions. President Joko Widodo (Jokowi) has determined that the Pesisir Barat Regency is the only underdeveloped area in Lampung Province. President Jokowi has signed Presidential Regulation (Perpres) No. 63 of 2020 concerning the determination of the Disadvantaged Regions for 2020-2024. From Presidential Regulation (Perpres) No. 63 of 2020, apart from the Pesisir Barat Regency, there are 62 regions that are also designated as underdeveloped areas in Indonesia. Pesisir Barat Regency is a regency that was only established in 2012, this regency is a fraction of West Lampung Regency, Pesisir Barat Regency has a mainland coastline of 210 Km. The very long coastline certainly has great potential to be developed.



**Figure 1.** Pesisir Barat Regency Administration Map

Source: Pesisir Barat Regency Regional Regulation No. 8 of 2017

The West Coast Regency has a lot of potential to advance its regional economy, such as tourism, agriculture, fisheries and forestry. The following shows the economic structure of the Pesisir Barat Regency through GRDP data.

**Table 1.** Gross Regional Domestic Product (GRDP) at Constant Prices (ADHK) 2010 Series by West Coast Business Field 2016-2020 (Billion Rupiah)

| NO      | Sector                                 | Tahun          |                |                |             |                |
|---------|--|----------------|----------------|----------------|-------------|----------------|
|         |  | 2016           | 2017           | 2018           | 2019        | 2020           |
| A       | Agriculture, Forestry and Fisheries    | 1399,12        | 1443,17        | 1486,37        | 1507,06     | 1507,16        |
| B       | Mining and excavation                  | 136,17         | 149,74         | 161,22         | 170,48      | 166,24         |
| C       | Processing industry                    | 141,81         | 144,94         | 147,17         | 145,23      | 126,99         |
| D       | Procurement of Electricity, Gas        | 0,29           | 0,37           | 0,44           | 0,55        | 0,58           |
| E       | Water Supply                           | 1,33           | 1,33           | 1,41           | 1,44        | 1,51           |
| F       | Construction                           | 135,58         | 155,14         | 176,62         | 226,95      | 222,35         |
| G       | Wholesale Trade and Vehicle Repair     | 313,63         | 335,63         | 362,01         | 396,09      | 380,44         |
| H       | Transportation and Warehousing         | 26,73          | 28,54          | 30,38          | 32,66       | 31,12          |
| I       | Information and Communication          | 38,51          | 42,37          | 46,53          | 51,33       | 48,97          |
| J       | Provision of Accommodation and Drinks  | 56,7           | 63,39          | 68,87          | 72,82       | 79,14          |
| K       | Financial Services                     | 39,4           | 40,94          | 41,86          | 43,11       | 43,23          |
| L       | Real Estate                            | 101,08         | 108,39         | 115,06         | 122,25      | 117,61         |
| M,N     | Company Services                       | 3,56           | 3,81           | 3,96           | 4,29        | 4,22           |
| O       | Government Administration and Others   | 117,59         | 125,7          | 136,8          | 148,47      | 150,46         |
| P       | Education Services                     | 89,54          | 94,2           | 102,62         | 111,35      | 115,9          |
| Q       | Health Services and Social Activities  | 28,24          | 29,88          | 32,33          | 35,11       | 38,45          |
| R,S,T,U | Other services                         | 25,27          | 28,42          | 31,25          | 33,81       | 32,29          |
|         | <b>GROSS REGIONAL DOMESTIC PRODUCT</b> | <b>2654,54</b> | <b>2795,95</b> | <b>2944,88</b> | <b>3103</b> | <b>3066,66</b> |

Source BPS Pesisir Barat Regency

Based on the existing potential, the researchers compiled a study to look at public perceptions of the development of the marine sector (Fisheries and Tourism) which according to the people of the West Coast Regency should be prioritized in the development process. In order to realize regional development goals, it is necessary to have cooperation and synergy between the governments, the community, and the private business world. Governments that have limited budgets need support from the public and private entrepreneurs. This condition applies at all levels of government, both central and regional, including the Pesisir Barat Regency Government.

## II. Review of Literature

Regional economic development is a process in which local governments and communities manage existing resources and form a partnership pattern between local governments and the private sector to create new jobs and stimulate the development of economic activity (economic growth) in the region. (Lincoln Arsyad, 1999).

In the modern era as it is today, community participation in regional development, especially in the economic sector can be done, either voluntarily or by making a system able to answer which sectors are desired to be developed, and are expected to be able to support people's lives and have an impact on welfare. In Santika Meilani's research entitled labor absorption analysis in the city of Magelang with the process hierarchy analysis (AHP) method (2014), it shows that the use of AHP can be applied to see strategies that can be used to solve unemployment problems. In this study, primary data is used as a policy formulation in the Process Hierarchy Analysis (AHP) obtained from key-persons, including determining criteria in order to achieve the goal of reducing unemployment, determining in the selection of alternative programs that can be taken to reduce unemployment.

Seow Eng Ong and Teck Ian Chew in their research entitled Singapore residential market an expert judgmental forecast incorporating the analytical hierarchy process using process hierarchy analysis to determine the strategy for determining the market. Linaria Marokkana Sihotang in a research entitled Analysis of the Planning Strategy for the Development of the Processing Industry Subsector in South Tangerang City shows that Based on the results of the AHP calculation, in the strategy of developing the processing industry subsector in South Tangerang City, things that must be considered and become the main focus are on the growth of the subsector, and science and technology sub-criteria are things that must be prioritized. For alternative industrial sub-sectors, the focus is on the food and beverage industry in South Tangerang City itself.

Punti Minesa, Hermanto Siregar, Manuwoto in a study entitled Application of Analytical Hierarchy Process (AHP) in Determining the Priority Scale of Road Implementation in Cibinong District, Bogor Regency, showed that in the analysis, there were 4 (four) strategies in carrying out road handling activities, namely: (1 ) Maintaining road conditions on priority roads; (2) Strategies to improve the quality of construction on priority roads; (3) Strategies for optimizing the width of the pavement on priority roads and (4) fixing the space belonging to the road (Rumija) on roads that do not meet the provisions.

Eyuda Angga Pradigda, 2016 conducted a research on Strategic Development Planning for Regional Superior Products, Study at the Industry and Trade Office of Blitar Regency. This study aims to determine the superior product that is prioritized or called the priority superior product in Blitar Regency, which is the location for its development. The analytical method used in this research is shift-share analysis and Analytical Hierarchy Process (AHP). The results of this study are, which includes the leading commodity of Blitar Regency is

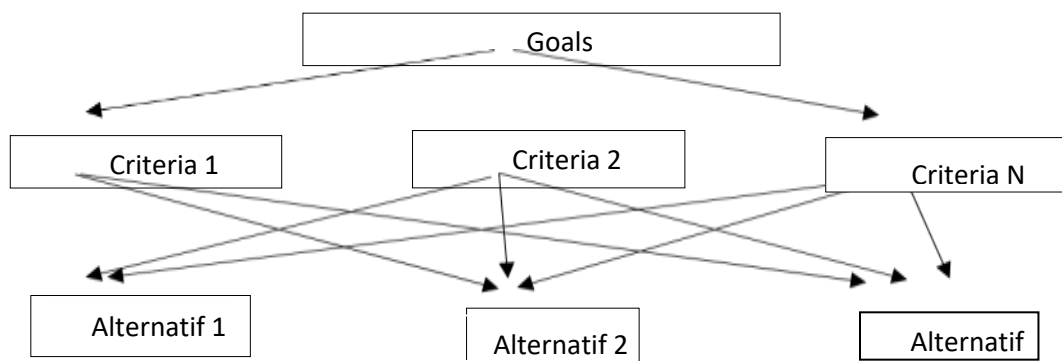
coconut shell craft, and the priority development strategy of coconut shell craft based on the SWOT matrix, namely the strategy Strength-Opportunity (SO).

(Erlin Agustin, 2020) analysis of development strategies for underdeveloped areas as an effort to accelerate economic development In the west coast district, this study uses a SWOT analysis tool, based on this research the main strength of Pesisir Barat Regency is an area with great potential as tourism, the main weakness of Pesisir Barat Regency shown by the strategic factor of community poverty, the factor that becomes the main opportunity for Pesisir Barat Regency is the rapid development of technology, which is the main threat from Pesisir Barat Regency is prone to natural disasters.

Based on previous research, this research was conducted to see how the perception of the people of the West Coast District regarding the Marine (Fisheries and Tourism) sector that will be developed in the West Coast District. Research conducted by Erlin Agustin in 2020, the strategy for developing the West Coast Regency area is carried out by improving the quality of infrastructure, and marketing potential, so this research will further refine the economic development strategy in the West Coast Regency. This study aims to see how the perception of the district community.

Based on previous research, this research was conducted to see how the perception of the people of the West Coast District regarding the Marine (Fisheries and Tourism) sector that will be developed in the West Coast District. Research conducted by Erlin Agustin in 2020, the strategy for developing the West Coast Regency area is carried out by improving the quality of infrastructure, and marketing potential, so this research will further refine the economic development strategy in the West Coast Regency. This study aims to see how the perception of the West Coast Regency community towards the development of the Marine (Fisheries and Tourism) sector is what they want to prioritize in the development process.

This research was carried out in the Pesisir Barat district, carried out in 2020. To answer the research objectives related to people's perceptions, this research used analytical tools, namely Process Hierarchy Analysis (AHP), Analytical Hierarchy Process (AHP) which was first developed by Thomas Lorie Saaty from Wharton Business School in the 1970s, which is used to find a ranking or priority order of various alternatives in solving a problem. The advantage of this AHP is its ability when faced with complex or framed situations where there is little statistical information about the problem at hand. Existing data are only qualitative in nature based on perception, experience or intuition. So, the problem can be felt and observed, but the completeness of the numerical data does not support it to be modeled quantitatively. (Suyono, Rudi S and Mukti, Elsa T 2009).



**Figure 2.** Structure of Process Hierarchy Analysis

In the Process Hierarchy Analysis there is a pairwise comparison against a specified criterion. The comparison is transformed in the form of a matrix known as a comparison matrix (pairwise comparison). For example, there are n objects denoted by (A1, A2, ..., An) which will be assessed based on their level of importance. This matrix is illustrated in the following table.

**Table 2.** Pairwise Comparison Matrix

| <b>C</b>  | <b>A1</b> | <b>A2</b> | <b>An</b> |
|-----------|-----------|-----------|-----------|
| <b>A1</b> | a11       | a12       | a1n       |
| <b>A2</b> | a21       | a22       | a2n       |
| <b>⋮</b>  | <b>⋮</b>  | <b>⋮</b>  | <b>⋮</b>  |
| <b>An</b> | am1       | am2       | amn       |

### III. Research Methods

AHP is a decision support model developed by Thimas L. Saaty. The characteristic of this analysis is to use a hierarchy that describes the problem in a single unit into simpler elements. The hierarchy in this analysis is divided into goals, scenarios, goals, and strategies. AHP is a mathematical decision-making technique by considering both qualitative and quantitative aspects.

AHP is a concept for multicriteria-based decision making. Several criteria are compared with each other (level of importance) is the main emphasis on this AHP concept (Nugeraha 2017:114).

In AHP, what is measured is the consistency ratio by looking at the consistency index. The expected consistency is near perfect in order to produce a decision that is close to valid. Thus, this study did not test the validity or reliability of the AHP questionnaire because AHP tolerates inconsistency. AHP is measured by the Consistency Index (CI) and Consistency Ratio (CR) with the following description:

Calculate the Consistency Index (CI) with the formula:

$$CI = (\lambda_{max} - n) / (n - 1) \dots \dots \dots (1)$$

Where :

n : number of elements

Calculating the Consistency Ratio (CR) with the formula:

$$CR = CI / IR \dots \dots \dots (2)$$

Where :

CR : Consistency ratio

CI : Consistency Index

IR : Index Random Consistency

The consistency ratio by looking at the consistency index is the thing that is measured in the hierarchical analysis of the process, the expected consistency is near perfect in order to produce a decision that is close to valid. AHP is measured by Consistency Index (CI) and Consistency Ratio (CR). The preparation of the process hierarchy analysis diagram is shown in the following figure.

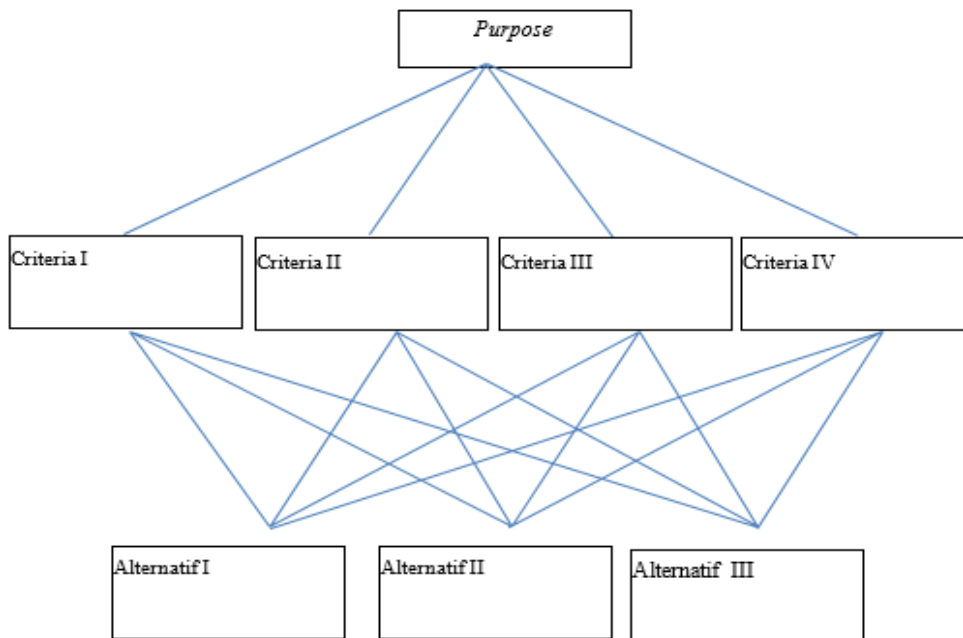
Decomposition At this stage, the problem to be studied is divided into a hierarchy. The goal is to define the problem from the general to the specific. The hierarchical structure serves to compare the objectives, criteria, and alternative levels. The top level of the hierarchy is the goal of solving a problem that has only one element. The next stage has several elements as criteria, each of which can be compared with one another and the differences are not too big. If the difference is too large, then a new level must be created. The form of the decomposition structure is:

First level: decision goal (Goal)

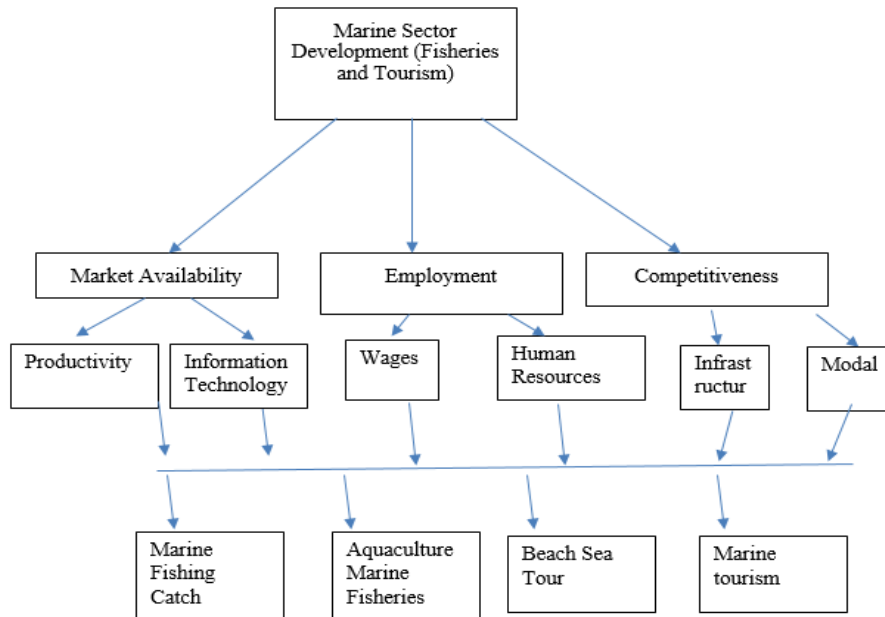
Second level: criteria

Third level: alternative

The consistency ratio by looking at the consistency index is the thing that is measured in the hierarchical analysis of the process, the expected consistency is near perfect in order to produce a decision that is close to valid. AHP is measured by Consistency Index (CI) and Consistency Ratio (CR). The preparation of the process hierarchy analysis diagram is shown in the following figure.



**Figure 3.** *Process Hierarchy Analysis Matrix*



**Figure 4.** Process Hierarchy Analysis Matrix

Comparative judgment is often also referred to as criteria or alternative assessment. At this stage, a pairwise comparison will be made of all the elements in the hierarchy, with the aim of generating a scale of importance for each element. The assessment carried out will produce a number which will later be compared to produce a priority. The number scale used is one to nine which is then compiled to obtain pairwise comparisons. The comparison scale used is:

**Table 3.** AHP Comparison Scale

| Scale   | Description  |
|---------|--|
| 1       | One goal with another is just as important                           |
| 3       | One goal is a little more important (somewhat strong) than the other |
| 5       | One goal is more important (stronger importance) than the other      |
| 7       | One goal is more important than the other goals                      |
| 9       | One extreme goal is more important than the other                    |
| 2,4,6,8 | The middle value between the two assessment scores above             |

#### IV. Discussion

The first level is to determine the level of importance between each criterion objective, based on the results of the analysis that has been carried out, the level of importance obtained is presented in the following table.

**Table 4.** Results of Weight Calculation Objectives of Process Hierarchy Analysis (AHP)

| No | Criteria            | Priority Vector | Weight (%) |
|----|---------------------|-----------------|------------|
| 1  | Market Availability | 0,316           | 31,6       |
| 2  | Employment          | 0,441           | 44,1       |
| 3  | Competitiveness     | 0,243           | 24,3       |

Consistency Ratio (CR) = 0, 0127

Source: Output AHP, 2021.

Table 4 shows the results of the calculation of the objective weights of the process hierarchy analysis (AHP). Based on the calculation results obtained the value of Consistency Ratio (CR) = 0.0127 which is less than 0.10. This shows that the pairwise comparison matrix between criteria is consistent. Then, to determine which sub-sectors will be prioritized, the most important objective criteria to use are market availability with a weighted value of 31.6%, then employment with a weighted value of 44.1% and the objective of capital criteria with a weighted value of 24.3%. This is in accordance with Santika Meilani's research entitled labor absorption analysis in the city of Magelang with the process hierarchy analysis (AHP) method (2014), showing that the use of AHP can be applied to see strategies that can be used to solve unemployment problems. In this study, primary data is used as a policy formulation in the Process Hierarchy Analysis (AHP) obtained from key-persons, including determining criteria in order to achieve the goal of reducing unemployment, determining in the selection of alternative programs that can be taken to reduce unemployment.

The next step is the Determination of Priority Subsector Determination with Criteria, based on the results of the analysis that has been carried out, the results obtained are shown in the following table:

**Table 5.** Results of the Calculation of Interest Weights Market Availability Criteria

| No | Criteria               | Priority Vector | Weight (%) |
|----|------------------------|-----------------|------------|
| 1  | Productivity           | 0,321           | 32,1       |
| 2  | Information Technology | 0,401*          | 40,1       |

Consistency Ratio (CR) = 0,00336

Source: Output AHP, 2021

The table above shows the results of the calculation of the weight of interest in the market availability criteria. The results of the calculation show that the Consistency Ratio (CR) = 0.00336 which is less than 0.10, this indicates that the pairwise comparison matrix between the sub-criteria for sub-sector growth is consistent. Then, the sub-criteria that has the largest priority vector is the Information Technology sub-criteria with a priority vector of 0.401 or if it is weighted by 40.1%, then Productivity with a priority vector of 0.321 or if it is weighted by 32.1%,

Labor absorption is the number of jobs that have been filled, which is reflected in the large number of working people. The working population is absorbed and scattered in various sectors of the economy. The absorption of the working population is caused by the demand for labor. In this study, the public's perception of the marine sector (Fisheries and Tourism) takes into account the criteria for employment with sub-criteria for production value, wages, and human resources.

**Table 6.** Calculation of Interest Weight Calculation of Labor Absorption Criteria

| No | Criteria        | Priority Vector | Weight (%) |
|----|-----------------|-----------------|------------|
| 1  | Human Resources | 0,56            | 56         |
| 2  | Wages           | 0,44            | 44         |

Consistency Ratio (CR) = 0,00097

Source: Output AHP, 2021

The table above shows the results of the calculation of the weighting of the criteria for labor absorption. The calculation results obtained the Consistency Ratio (CR) = 0.00097 which is less than 0.10, this indicates that the pairwise comparison matrix between the sub-criteria for employment is consistent. Then, the sub-criteria that has the largest priority vector



is the HR sub-criteria with a priority vector of 0.56 or if it is weighted by 56%, wages have a priority vector of 0.44 or if it is weighted by 44%.

**Table 7.** Calculation of Interest Weight Calculation Results Competitiveness Criteria

| No | Criteria       | Priority Vector | Weight (%) |
|----|----------------|-----------------|------------|
| 1  | Capital        | 0,717           | 71,7       |
| 2  | Infrastructure | 0,283           | 28,3       |

Consistency Ratio (CR) = 0,00766

Source: Output AHP, 2021

The table above shows the results of the calculation of the weight of the capital criteria. The calculation results obtained the Consistency Ratio (CR) = 0.00766 which is less than 0.10, this indicates that the pairwise comparison matrix between the sub-criteria for increasing competitiveness is consistent. Then, the sub-criteria that has the largest priority vector is the Capital sub-criteria of 0.717 or if it is weighted at 71.7%, then Infrastructure with the priority vector is 0.283 or if it is weighted by 28.3%.

After determining the weight of the criteria in determining the priority sub-sector with criteria, the next step is to use the weight of the criteria (Infrastructure, Capital, Human Resources, Wages, and Productivity, Information Technology) to determine alternative priorities for the development of the marine sector (Fisheries and Tourism) in Pesisir Barat Regency. These criteria will be used to select priority sub-sectors for marine sector development (fishery and tourism), Marine Marine Tourism, Coastal Marine Tourism, Aquaculture Marine Fisheries. Capture Marine Fisheries the results of the estimated data are shown in the following table:

**Table 8.** Results of the Calculation of Interests in the Productivity Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,260           | 16,0       | 3       |
| 2  | Aquaculture Marine Fisheries. | 0,160           | 5,0        | 4       |
| 3  | marine tourism,               | 0,280           | 8,0        | 2       |
| 4  | Beach Sea Tour                | 0,300           | 7,0        | 1       |

Consistency Ratio (CR) = 0,00822

Source: Output AHP, 2021

The table above shows the results of the calculation of the weight of the interests of the productivity subsector, from the calculation results, the CR value of the comparison between the criteria for raw materials and alternative subsectors is less than 0.1, which is 0.00822. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative is obtained for the Beach Sea Tourism criteria with a Priority Vector value of 0.300 or if it is weighted by 30%.

Information technology plays an important role in the market, in the digital era as it is today, the role of information technology is very vital, along with the importance of the information technology sub-sector.

**Table 9.** Results of the Calculation of Interests in the Information Technology Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,270           | 27         | 2       |
| 2  | Aquaculture Marine Fisheries. | 0,140           | 14         | 4       |
| 3  | marine tourism,               | 0,330           | 33         | 1       |
| 4  | Beach Sea Tour                | 0,2600          | 26         | 3       |

Consistency Ratio (CR) = 0,061  
 Source: Output AHP, 2021

The table above shows the results of the calculation of the weight of the interests of the sub-sector market availability of Information Technology Criteria. From the calculation results, the CR value of the comparison between the safety criteria is less than 0.1, which is 0.061. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative for Information Technology criteria is obtained, namely the marine tourism sub-sector with a Priority Vector value of 0.330 or 33.0% weighted.

**Table 10.** Calculation of Interest Weight of Wage Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,260           | 16,0       | 3       |
| 2  | Aquaculture Marine Fisheries. | 0,160           | 5,0        | 4       |
| 3  | marine tourism,               | 0,280           | 8,0        | 2       |
| 4  | Beach Sea Tour                | 0,300           | 7,0        | 1       |

Consistency Ratio (CR) = 0,06  
 Source: Output AHP, 2021

The table above shows the results of the calculation of the weight of interests in the sub-sector labor absorption criteria for wages. From the results of the AHP calculation, the CR value is less than 0.1, which is 0.06. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative for the wage criteria is obtained, namely the Coastal Sea Tourism sub-sector, with a Priority Vector value of 0.300 or if it is weighted by 27%.

**Table 11.** The Result of the Calculation of the Weight of the Interests of the Human Resources Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,190           | 19,0       | 3       |
| 2  | Aquaculture Marine Fisheries. | 0,200           | 20,0       | 4       |
| 3  | marine tourism,               | 0,330           | 33,0       | 1       |
| 4  | Beach Sea Tour                | 0,280           | 28,0       | 2       |

Consistency Ratio (CR) = 0,031  
 Source: Output AHP, 2021

The table shows the results of the calculation of the weighting of interests in the sub-sector of labor absorption criteria for human resources. From the results of the AHP calculation, the CR value of the comparison between the criteria for the production value of the alternative sub-sector is less than 0.1, which is 0.031. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative for the criteria for Human Resources is obtained, namely the Marine Marine Tourism sub-sector with a Priority Vector value of 0.330 or if it is weighted by 33%.

**Table 12.** The Result of the Calculation of the Weight of Interest in the Infrastructure Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,230           | 23,0       | 3       |
| 2  | Aquaculture Marine Fisheries. | 0,220           | 22,0       | 4       |
| 3  | marine tourism,               | 0,280           | 28,0       | 1       |
| 4  | Beach Sea Tour                | 0,270           | 27,0       | 2       |

Consistency Ratio (CR) = 0,0281

Source: Output AHP, 2021

The table shows the results of the calculation of the weighting of the interests of the competitiveness sub-sector of the infrastructure criteria. From the results of the AHP calculation, the CR value of the comparison between wage criteria and alternative sub-sectors is less than 0.1, which is 0.0281. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative for wage criteria is obtained, namely the marine tourism sub-sector with a Priority Vector value of 0.380 or if it is weighted by 28%.

**Table 13.** Calculation of the Weight of Interest in the Capital Subsector

| No | Alternative Subsector         | Priority Vector | Weight (%) | Ranking |
|----|-------------------------------|-----------------|------------|---------|
| 1  | Marine Fishing Catch          | 0,280           | 28,0       | 1       |
| 2  | Aquaculture Marine Fisheries. | 0,260           | 26,0       | 2       |
| 3  | marine tourism,               | 0,240           | 24,0       | 3       |
| 4  | Beach Sea Tour                | 0,220           | 22,0       | 4       |

Consistency Ratio (CR) = 0,0892

Source: Output AHP, 2021

The table shows the results of the calculation of the weight of interest in the competitiveness of the capital criteria sub-sector. From the results of the AHP calculation, the CR value of the comparison between the criteria for the investment value of the alternative sub-sector is less than 0.1, which is 0.0829. This shows that the pairwise comparison matrix between alternatives is consistent. Then the highest priority alternative for capital criteria is obtained, namely the Capture Marine Fisheries sub-sector with a Priority Vector value of 0.280 or if it is weighted 28%.

Based on the results of the analysis that has been carried out on public perceptions regarding the development of the marine sector (Fisheries and Tourism) the sectors that are considered the most important to be built are those that are able to absorb labor (calculation results in table 4), this is very in line with the theory of economic development, that Unemployment greatly affects welfare, with the absorption of labor, the population will have income, and be able to finance their lives.

The results of the analysis for market availability criteria, public perception states that Information Technology is the most prioritized sector to be developed (the results are calculated in Table 5), with market availability, the resulting products in the form of goods and services will be easily distributed, the current condition is highly influenced by information technology This will greatly facilitate the community in the process of selling the goods and services produced.

The results of the calculation of the criteria for labor absorption, human resources are the most prioritized sector to be developed (the results are calculated in Table 6), it is based on the results of an analysis of people's perceptions, it is in line with the theory of economic

development, that the availability of competent human resources (have ability) will be very helpful in the implementation of the builder.

In terms of competitiveness criteria, capital is the main factor needed by the community, this is in accordance with the results of the analysis that has been carried out (the results are calculated in Table 7), based on the public perception that capital is the main sector in the ability to compete.

Based on productivity, the main sector according to public perception is (Sea Tourism) Beach (Calculated results in table 8), this shows that the community feels the coastal tourism sector is the most productive sector in the marine sector (Fisheries and Tourism), so based on the perception This sector is desired to be prioritized in its development and development.

Based on the criteria of Information Technology, the main sector that wants to be developed is Marine Tourism, (the results are calculated in Table 9) this is in line with the potential for marine tourism in the west coast district which is already well known to the world, namely Surfing, with technology information then this product can be marketed more widely. The tourism sector is believed to have the ability to increase economic growth (Maciej Debski in Nasution 2021). Moreover, the tourism sector is positively encouraged to be able to replace the oil and gas sector which has been the main capital in the country's foreign exchange earnings (Siswanto in Sinulingga, 2021). The development of tourism has an impact on social and economic conditions for local communities through tourism activities, such as the activity of selling goods and services through hotels, restaurants, transportation services, selling handicrafts, selling tickets for tourist attractions, and so on (Hakim, 2021).

Based on the wage criteria, public perception shows that beach tourism is the priority (calculated results in table 10), wages are the most important thing in the process of developing an economy, with wages earned, the wheels of the economy can be moved.

Based on the human resource criteria, the calculation results in table 11 show that the marine tourism sector is a sector that you want to prioritize based on people's perceptions, quality resources will facilitate the implementation of activities based on human resource management theory.

In the competitiveness sector in the infrastructure criteria, the marine tourism sector is the main sector to be developed based on public perception, while in the capital criteria, the capture fisheries sector is the main sector to be developed based on public perception.

## V. Conclusion

This section briefly concludes the results and discussion of the research. This section also explains the implications of the results, limitations of the study and recommendations for the development of future research.

Based on research that has been carried out, the main sectors that want to be developed based on public perception are 1) Marine Tourism Sector, 2) Beach Tourism Sector, 3) Capture Fisheries Sector, 4) Aquaculture Sector, Tourism Becomes the main sector that is expected by the community to be built and developed Some policies that can be carried out by the government are by providing capital assistance in accordance with the results of this research, then developing human resources for both fishermen and tourism service providers (Based on the results of the research), then providing infrastructure and information technology (Based on the results of the research) so that the sector maritime affairs (Prikanan and Tourism) as a potential sector owned by the Pesisir Barat district. With the help of capital, business actors, both fisheries and tourism, can expand their area and scope of business, so that the sector will absorb more workers the sector can be further developed.

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