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ARTICLE

Determination of Leading Subsectors for Inclusive and Sustainable Economic Development Using the Promethee Method

Case Study on the Prospective New Autonomous Region of North Sukabumi Regency

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Abstract: Inclusive and sustainable economic development is a very important and relevant approach to be applied in various regions in Indonesia, including in areas that are in the process of becoming new autonomous regions, namely North Sukabumi Regency. This approach aims to create economic growth that not only encourages increased income but also ensures that the benefits are felt by all levels of society, including marginalized groups, while maintaining ecosystem balance and creating a better future generation. This study analyzes potential economic leading sectors to promote inclusive and sustainable economic development. The selection of leading sectors was carried out using the Promethee method, which is an outranking-based multi-criteria analysis (MCA) method based on a preference index. A total of 12 criteria were used, and data were obtained through questionnaires from several experts. The results of this study indicate that the development of the Food Crops, Horticulture, and Food and Beverage Industries subsectors is a potential sector recommended for promoting inclusive and sustainable economic development.

Keywords: New Autonomous Region; Economic Cluster; Potential Sectors.

1. Introduction

The development of an inclusive and sustainable economy is one of the main challenges faced by many regions in Indonesia, including the prospective New Autonomous Region of North Sukabumi Regency (Nababan et al., 2014; Rustiadi, 2001). Philosophically, a development process can be defined as "a systemic and continuous effort to create a situation that can provide various legitimate choices for the achievement of the most humanistic aspirations of every citizen" (Rustiadi et al., 2018, 2021). According to the National Development Planning Agency (Bappenas, 2020), Inclusive Economic Development is economic development that creates broad access and opportunities for all levels of society in an equitable manner, improves welfare, and reduces disparities between groups and regions.

According to A. Fauzi (2019), sustainability is defined as the continuous pursuit of strategies for a harmonious relationship between humans and nature. Development that ignores the interaction of the two has proven to be costly, with implications for the decline of human welfare. In terms of benefits, development that establishes the principles of sustainability not only benefits the present but also guarantees the long-term availability of sustainable resources (Duran et al., 2015; Emma Pravitasari et al., 2018; Rahma et al., 2019).

Inclusive and sustainable economic development is an approach that aims to create economic growth that not only encourages increased income but also ensures that the benefits are felt by all levels of society, including marginalized groups. This includes the creation of decent jobs, equal access to education, health, and other basic services, as well as the active participation of the community in the decision-making process. The combination of inclusive economic and sustainable aspects is expected to produce a development model that not only minimizes social inequality but also maintains ecosystem balance and creates a better future for future generations (Zahrah & Rahayu, 2024).

The development of an inclusive and sustainable economy is closely related to the leading subsectors in an economy (Campos Arce, 2019; Nalle et al., 2022). Leading subsectors, such as agriculture, tourism, manufacturing, or information technology, play an important role in promoting equitable and sustainable economic growth (Maulana & Maulana, 2023; Tanjung et al., 2021). Some sectors play an important role in grouping economic activities in an area, because the characteristics and advantages of each sector can influence the pattern of resource utilization, industrial development, and the competitiveness of the local economy in facing market challenges.

According to Rahma (2012), grouping economic activities in an area can be a very effective method to encourage business development and local economic growth. This can be achieved if the selected cluster is appropriate and relevant to local conditions and can act as a trigger to increase economic growth, create jobs, and improve community income (Rubķinskaitļ & Kasnauskienļ, 2017). This grouping can include leading sectors, subsectors, or commodities that are considered strategic and have great potential for further development (Antara & Sumarniasih, 2021).

With a focus on sustainability, leading subsectors not only contribute to economic growth but also maintain ecosystems and encourage the responsible use of resources, ensuring that the benefits of development can be enjoyed by current and future generations (Clarkson et al., 1992; Klarin, 2018; Spijkers, 2018). Therefore, the development of leading subsectors oriented towards an inclusive economy and sustainability is key to creating a just and prosperous society that is capable of facing global challenges.

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Research on the determination of superior subsectors is important for inclusive and sustainable economic development, especially in the context of prospective new autonomous regions. Through this research, the government and stakeholders can understand in more depth the potential and characteristics of the economy of the region concerned. The identification of the right leading subsectors will be a driver for equitable economic growth, where the benefits can be felt by all levels of society (Mold et al., 2009). With determinations based on accurate data and analysis, the development of leading subsectors can be directed to create sustainable employment, strengthen local competitiveness, and increase community income.

Sukabumi Regency is one region with quite diverse economic potential, which is reflected in the Gross Regional Domestic Product (GRDP) originating from various sectors. GRDP is an indicator that describes the performance of regional economic development, which shows the ability to create gross added value from all goods and services produced by various categories of economic activity in Sukabumi Regency. According to data from the Sukabumi Regency Central Statistics Agency (BPS-Statistics of Sukabumi Regency, 2024), the GRDP Constant Market Prices of Sukabumi Regency based on the business sector in 2023 can be seen in Figure 1. Based on Figure 1, the business sector with the highest GRDP value in 2023 is the agriculture, forestry, and fishing sector; the wholesale and retail trade, repair of motor vehicles and motorcycles sector; and the manufacturing sector. This is interesting enough to be researched, so that it can provide a clear picture of the leading subsectors that can be developed in the Prospective New Autonomous Region of North Sukabumi Regency in the context of inclusive and sustainable economic development.
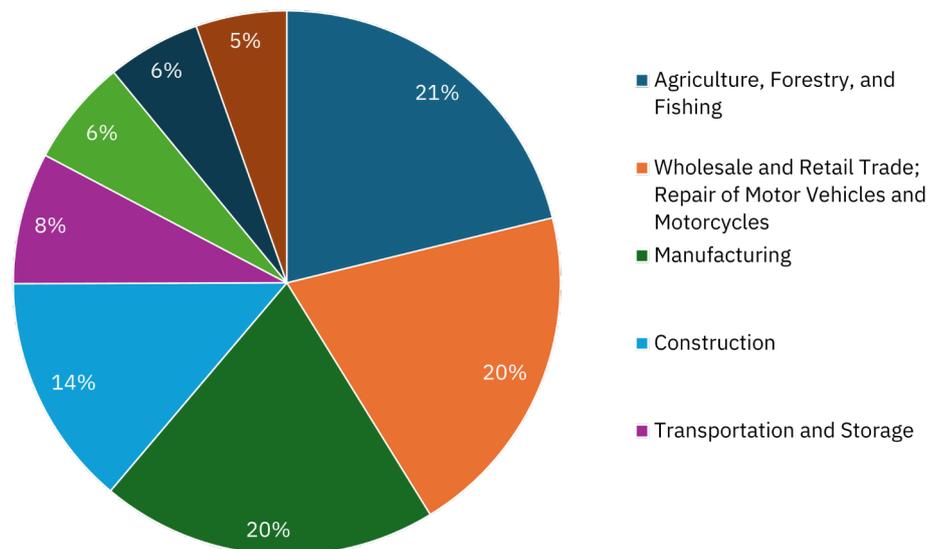

Figure 1. Gross Regional Domestic Product Percentage at Current Market Prices by Industry in the Eight Largest Sectors in Sukabumi Regency, 2023

Source: BPS-Statistics of Sukabumi Regency (2024)

In formulating an economic development strategy, it is important to determine the leading subsectors that can be optimized (A. R. Fauzi & Indahsari, 2022; Hajeri et al., 2015; Manaraja et al., 2023). Excellent subsectors are economic sectors that have high potential to contribute to economic growth and job creation (Bhorat & Oosthuizen, 2020; Bhorat & Tarp, 2016).

In the context of potential new autonomous regions, there is a challenge to create economic growth that is not only rapid but also environmentally and socially friendly (Sari et al., 2024). Therefore, by conducting in-depth research on leading subsectors,

it is hoped that a development strategy that integrates economic, social, and environmental aspects can be formulated. This approach allows potential new autonomous regions to undergo a more holistic and sustainable development process, in which community welfare and environmental preservation can go hand in hand. Thus, research on determining leading subsectors is an important foundation in designing a better future for the Prospective New Autonomous Region of North Sukabumi Regency.

Based on the above description, this study aims to analyze sub-sectors that can become leading sectors to promote inclusive and sustainable economic development in the prospective new autonomous region of North Sukabumi Regency. This study is expected to serve as a reference for local governments and other stakeholders in formulating appropriate policies for inclusive and sustainable economic development in the prospective new autonomous region of North Sukabumi Regency.

2. Methods

This study adopts a quantitative research approach, which is considered appropriate for objectively evaluating various subsector alternatives using measurable indicators. The aim of the research is to identify leading subsectors that can drive inclusive and sustainable economic development in the prospective New Autonomous Region (DOB) of North Sukabumi Regency. The quantitative approach enables systematic comparisons based on various economic, social, and environmental criteria.

To support this approach, the PROMETHEE (Preference Ranking Organization Method for Enrichment Evaluation) method is employed as the primary analytical tool. This method is one of the Multi-Criteria Decision Making (MCDM) techniques that is highly suitable for the nature of the research problem, for the following reasons:

a. Handles multiple criteria effectively: Identifying leading subsectors requires evaluation across diverse performance indicators (e.g., employment absorption, contribution to regional income, environmental impact, etc.), which PROMETHEE manages efficiently.

b. Provides clear rankings: PROMETHEE performs pairwise comparisons among alternatives and produces a comprehensive priority ranking of subsectors.

c. Integrates expert judgment with quantitative data: The method allows expert assessments via Likert scales and objective weighting of criteria (e.g., using the ROC method), which is particularly useful in regions with limited or qualitative datasets.

d. Supports both benefit and cost-type indicators: PROMETHEE accommodates indicators that require maximization or minimization, supporting a balance between growth objectives and sustainability concerns (e.g., maximizing income while minimizing environmental harm).

e. Transparent and interpretable: PROMETHEE provides visual outputs such as preference flows and GAIA plots, making it easier to communicate results to stakeholders and decision-makers.

The method used in this study is the PROMETHEE (Preference Ranking Organization Method for Enrichment Evaluations). This method was chosen because of its ability to handle multi-criteria decision-making problems, which is very relevant for determining leading subsectors in the context of inclusive and

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sustainable economic development (A. Fauzi, 2019). PROMETHEE allows for the assessment of various alternatives by considering a number of different criteria, thus providing a more comprehensive picture of the best options for the prospective new autonomous region of North Sukabumi Regency.

In the dominant sector in the Prospective New Autonomous Region of North Sukabumi Regency, the following alternative leading subsectors were identified: Food Crop Agriculture Sub-Sector; Plantation Sub-Sector; Horticulture Sub-Sector; Animal Husbandry Sub-Sector; Fisheries Sub-Sector; Food and Beverage Industry Sub-Sector; Textile and Apparel Industry Sub-Sector; Metal Goods, Non-Machinery and Equipment Industry Sub-Sector; Furniture Industry Sub-Sector; and Non-Metallic Excavation Goods Industry Sub-Sector.

The initial process in applying the PROMETHEE method is to identify relevant criteria for evaluating the sub-sector. In the context of inclusive and sustainable economic development, the criteria used represent economic, social, and environmental dimensions (Campos Arce, 2019; Duran et al., 2015; Mold et al., 2009; Rahma et al., 2019; Rustiadi, 2001) which include:

a. Potential to increase community income in the local area (economic dimension).
b. Potential to create high added value to the products or services produced (economic dimension).
c. Potential to absorb labor from the local community (economic dimension).
d. Potential to increase Regional Original Income (PAD) (economic dimension).
e. Potential to access local and international markets for the products produced (economic dimension).
f. Potential access to funding sources from financial institutions to support operations and development (economic dimension).
g. Potential to provide equal employment opportunities for men and women (social dimension).
h. Potential in utilizing and preserving local wisdom and regional characteristics (social dimension).
i. Potential availability of reliable and skilled human resources (social dimension).
j. Potential to have a negative impact on the environment (environmental dimension).
k. Potential to adopt and apply innovation and technology in the production process or service delivery (environmental dimension).
l. Potential to operate in a sustainable manner, ensuring that natural and cultural resources are not overexploited (environmental dimension).

After the criteria have been determined, the next step is to weight the criteria. This weighting is important to assess how much influence each criterion has on the final decision. This weighting is determined through qualitative and quantitative analysis techniques, including surveys of local stakeholders and analysis of secondary data from various sources. Criteria are weighted using the direct ranking method, relying on expert judgment (Rahma & Fauzi, 2024) and calculated using the Rank Order Centroid (ROC) technique: $Wj = \frac{1}{k}\sum_{i=j}^{k}\frac{1}{i}$, where Wj is the weight of the j indicator, k is the number of indicators, and i is the rank for the k indicator.

The primary data used is expert assessments collected using questionnaires from October to December 2024. The choice of answers uses a Likert scale with a score of 1 as the lowest score and a score of 5 as the highest score. The experts who were the respondents were academics from universities, as well as policy makers in the Sukabumi Regency Government, including the Economic Section of the Regional Secretariat; the Economic Sector at the Regional Development Planning and Research Agency (Bappelitbangda); the Research and Development Sector at the Regional Development Planning and Research Agency (Bappelitbangda); the Environment Office; the Livestock Office; the Trade and Industry Office; the Agriculture Office; and the Head of Sub-District.

After the indicators are determined, the weights are obtained from data processing using the Rank Order Centroid (ROC) technique, and the nature of the indicators is determined, one of which is a negative or minimum indicator, as presented in Table 1. The next step is to perform calculations based on the PROMETHEE method. This process includes calculating the preference values for each sub-sector alternative for each criterion that has been determined. The difference in evaluation values from the two subsectors is then translated into a preference index π(a,b) with the following equation:

$$(a, b) = \sum_{j=1}^{k} WjPj(a, b)$$

where *Wj* = weight of criterion *j* and *Pj(a,b)* = preference function of subsector *a* over *b* for criterion *j*. This preference function has a value between 0, which means there is no difference between *a* and *b*, up to 1, which indicates a clear difference between subsector *a* and subsector *b*. The determination of the leading subsector is calculated based on the value *φ+(a)* which is called outgoing flow and *φ-(a)* or incoming flow. The difference between *φ+(a)* and φ-(a) is then calculated as net flow: *φ(a) = φ+(a)-φ-(a)*. Next, the preference values are aggregated to produce an overall ranking of the evaluated subsectors. The ranking results will provide an overview of which subsectors are most suitable for development in the context of an inclusive and sustainable economy in the prospective New Autonomous Region of North Sukabumi Regency.

Table 1. Dimensions, Indicators, Indicator Weights, and the Nature of Each Indicator

Dimensions	Indicators	Weight	Nature
Economy	Potential to increase community income in the local area (Eco1).	0,23	Max
	Potential in creating high added value to the products or services produced (Eco2).	0,12	Max
	Potential in absorbing labor from the local community (Eco3).	0,15	Max
	Potential to increase Regional Original Income (PAD) (Eco4).	0,06	Max
	Potential to access local and international markets for the products produced (Eco5).	0,08	Max
	Potential access to funding sources from financial institutions to support operations and development (Eco6).	0,05	Max
Social	Potential to provide equal employment opportunities for men and women (Soc1).	0,07	Max
	Potential in utilizing and preserving local wisdom and regional characteristics (Soc2).	0,05	Max
	Potential availability of reliable and skilled human resources (Soc3).	0,05	Max
Environment	Potential to have a negative impact on the environment (Env1).	0,07	Min
	Potential to adopt and apply innovation and technology in the production process or service delivery (Env2).	0,05	Max
	Potential to operate in a sustainable manner, ensuring that natural and cultural resources are not overexploited (Env3).	0,03	Max

Source: Data Processed by Researchers 2024

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3. Results and Discussion

Determining the leading subsectors for inclusive and sustainable economic development in the prospective new autonomous region of North Sukabumi Regency is a strategic step that requires in-depth and systematic analysis. The analysis results using the Promethee method can be seen in Figures 2 to 4. Figure 2, the Promethee method comprehensively assesses the ten existing subsectors, measured based on the net flow value obtained. Based on the values from this analysis, the Promethee method can provide clear recommendations regarding which subsectors are feasible and have the potential for further development. This is very relevant to be applied in the Prospective New Autonomous Region of North Sukabumi Regency, to support inclusive and sustainable economic development. It is hoped that the recommendations provided will serve as an effective guide in formulating economic development strategies in the region.

Actions		Net Flow	Optimal	Compare
		Total: 1,8625	1,8625	1,8625
Food Crop Agri...		0,7349	yes	yes
Plantation		0,1441	yes	yes
Horticulture		0,4796	yes	yes
Animal Husban...		0,1221	yes	yes
Fisheries		0,1221	yes	yes
Food and Beve...		0,1848	yes	yes
Textile and Ap...		0,0748	yes	yes
Metal Goods In...		-0,6920	no	no
Furniture Indu...		-0,3773	no	no
Non-Metallic E...		-0,7932	no	no

Figure 2. Promethee's Recommendation in Determining Leading Subsectors

Source: Research finding

Based on the information shown in Figure 2, there are seven subsectors that are recommended for development, namely Food Crop Agriculture, Plantation, Horticulture, Animal Husbandry, Fisheries, the Food and Beverage Industry, and the Textile and Apparel Industry. These seven subsectors show a positive net flow (Phi) value and obtain a 'yes' status marked in green, indicating that these subsectors are worthy of development focus. On the other hand, three subsectorsended as leading subsectors, namely the No: thetal Goods and Equipment Industry, the Furniture Industry, and the Non-Metallic Excavation Goods Industry. These three subsectors have a negative net flow (Phi) value with a 'no' status marked in red, indicating that these subsectors are not recommended as priorities in the development strategy. Thus, this analysis provides a clear picture of which subsectors have positive potential and which ones should be avoided in the context of sustainable economic development.

Furthermore, Figure 3 shows the positive flow (Phi+), negative flow (Phi-), and net flow (Phi) values for each analyzed subsector. The larger and more positive the net flow value of a subsector, the higher the ranking of that subsector in the leading category. Thus, the analysis in Figure 3 shows that the leading subsector at the top of the ranking is the Food Crop Agriculture subsector. This ranking is followed by the Horticulture subsector in second place, and the Food and Beverage Industry subsector in third place. This shows that the three subsectors have significant potential to be used as leading subsectors to support inclusive and sustainable economic development.

Bappenas (2002) states that to develop an economic cluster, which in this study is known as a leading subsector, it takes a minimum of three years for the subsector to function as a major driver of the economy. Thus, the emphasis on the top three subsectors is expected to create greater opportunities for them to successfully contribute significantly to the broader economic development process. This emphasizes the importance of a focused and planned strategy in developing subsectors that have high potential to increase overall economic competitiveness.

Rank	action		Phi	Phi+	Phi-
1	Food Crop Agriculture	🟩	0,7349	0,7349	0,0000
2	Horticulture	🟩	0,4796	0,5358	0,0561
3	Food and Beverage	🟨	0,1848	0,3179	0,1331
4	Plantation	🟩	0,1441	0,2904	0,1463
5	Animal Husbandry	🟩	0,1221	0,2794	0,1573
5	Fisheries	🟩	0,1221	0,2794	0,1573
7	Textile and Apparel	🟨	0,0748	0,2519	0,1771
8	Furniture Industry	🟨	-0,3773	0,0880	0,4653
9	Metal Goods Industry	🟨	-0,6920	0,0132	0,7052
10	Non-Metallic Excavation	🟨	-0,7932	0,0000	0,7932

Figure 3. Phi+, Phi-, and Phi Values for Each Main Sub-sector of the Prospective New Autonomous Region of North Sukabumi District

Source: Research finding

The results of the ranking displayed in the Promethee Ranking can be seen in Figure 4. From this figure, it is clear that the highest-ranking subsector marked with a green bar is the Food Crop Agriculture subsector. After that, the subsector that follows with a good ranking is the Horticulture subsector, followed by the Food and Beverage Industry subsector. Meanwhile, there are three other subsectors, namely the Non-Machine Metal Goods and Equipment Industry, the Furniture Industry, and the Non-Metallic Excavation Goods Industry, which are marked with red bars. This shows that the three subsectors have a preference index that indicates a negative value. Thus, this ranking provides a clear picture of the position of each subsector in the context of the preferences measured.
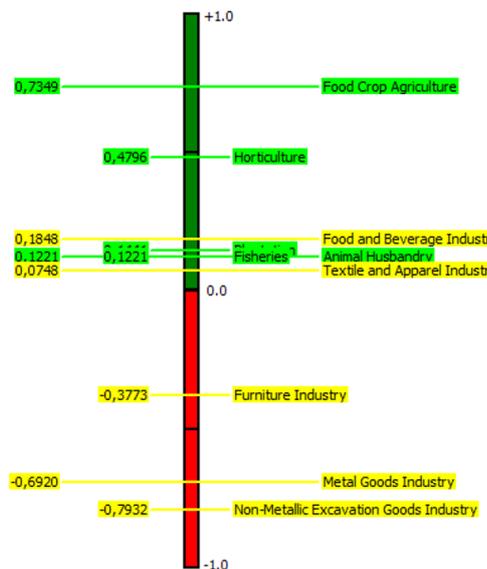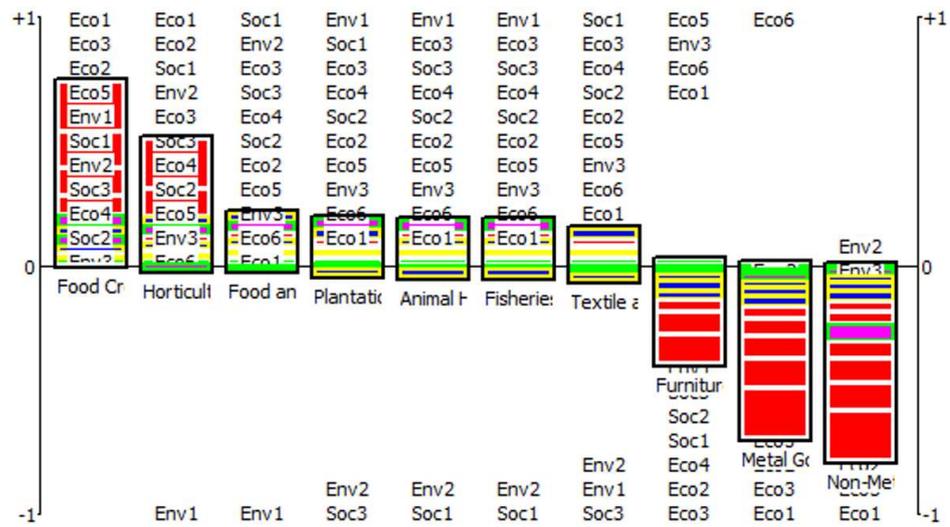

Figure 4. Ranking of Leading Subsectors in the Prospective New Autonomous Region of North Sukabumi District

Source: Research finding

The strengths and weaknesses of each subsector can be analyzed and understood through the PROMETHEE rainbow visualization shown in Figure 5. In this representation, each slice seen in the PROMETHEE rainbow serves as a representation of a specific indicator. The thickness of each slice reflects how much each indicator contributes to the overall evaluation. The indicator that reflects the strength of each subsector will be located at the top of the horizontal line, which indicates a value of zero, while the criterion that indicates weakness will be at the bottom of the line. In this way, we can clearly identify which aspects are strength and which need improvement in the context of each subsector.

Figure 5. PROMETHEE Rainbow Subsector of the Prospective New Autonomous Region of North Sukabumi District

Source: Research finding

As shown in Figure 5, each block illustrates the criteria with labels in order based on the Phi+ and Phi- of each subsector. The Food Crop Agriculture subsector is ranked at the top because it has positive values for all criteria, including: Potential to increase community income in the local area (Eco1); Potential to create high added value to the products or services produced (Eco 2); Potential to absorb labor from the local community (Eco 3); Potential to increase Regional Original Income (PAD) (Eco4); Potential to access local and international markets for the products produced (Eco5); Potential access to funding sources from financial institutions to support business operations and development (Eco6); Potential to provide equal employment opportunities for men and women (Soc1); Potential to utilize and preserve local wisdom and regional characteristics (Soc2); Potential availability of reliable and skilled human resources (Soc3); Potential to have a negative impact on the environment (Env1); Potential to adopt and apply innovation and technology in the production process or service delivery (Env2); and Potential to operate in a sustainable manner, ensuring that natural and cultural resources are not overexploited (Env3).

The Horticulture subsector, followed by the Food and Beverage Industry subsector, ranked second and third. Both subsectors scored positively on almost all criteria, except for the potential to have a negative impact on the environment (Env1). This shows that although these two subsectors make a significant contribution to the economy, they must also consider the sustainability and environmental impact of their activities.

To ensure the stability of the ranking results above, a sensitivity test was conducted through changes in indicator weights. This test aims to determine changes in the weight of the criteria dimensions based on the net flow value. The results of subsector ranking are said to have good resilience if the change in weight does not affect the change in subsector ranking results. The results of the sensitivity analysis of changes in the ranking of leading sub-sectors for twelve indicators are shown in Figures 6 to 17. It can be seen that none of the indicators change the ranking of leading sub-sectors. However, the food crop agriculture subsector remains at the top when sensitivity analysis is conducted for all indicators.
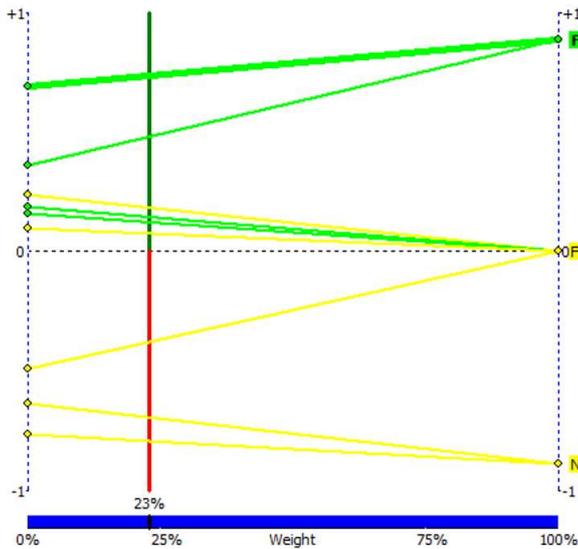
Figure 6. Sensitivity Analysis for Eco 1 Indicator
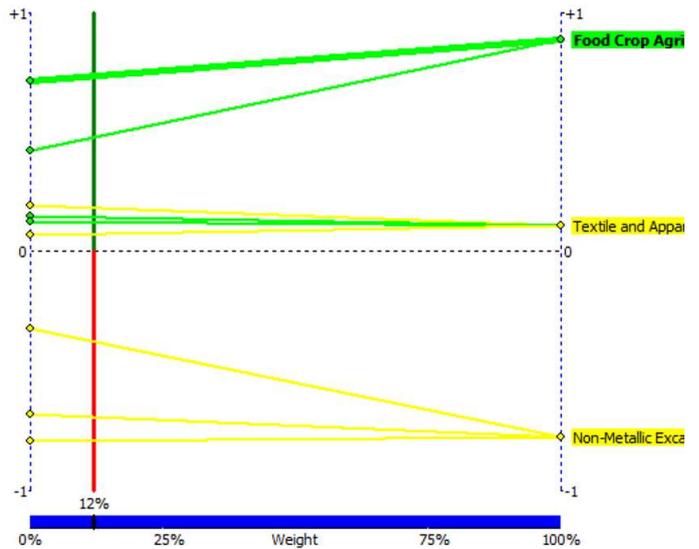
Figure 7. Sensitivity Analysis for Eco 2 Indicator
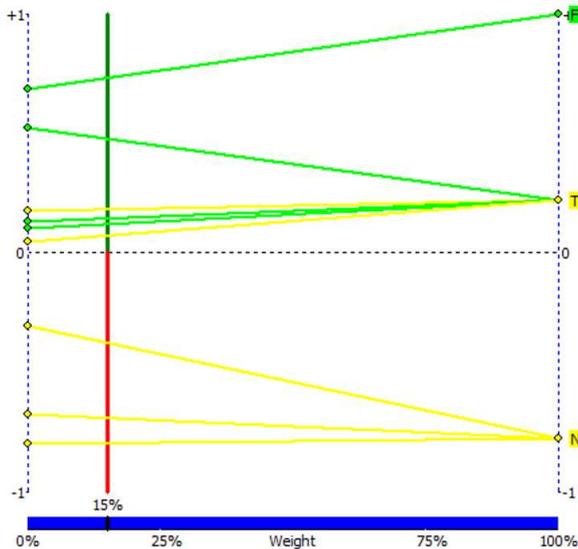
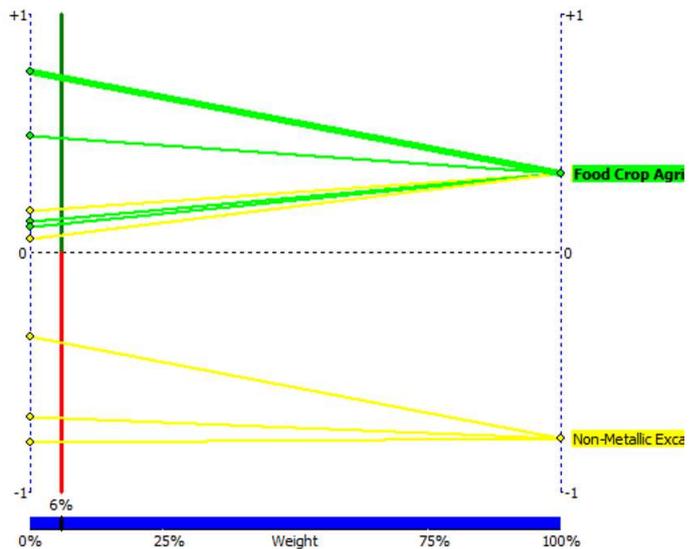**Figure 8.** Sensitivity Analysis for Eco 3 Indicator

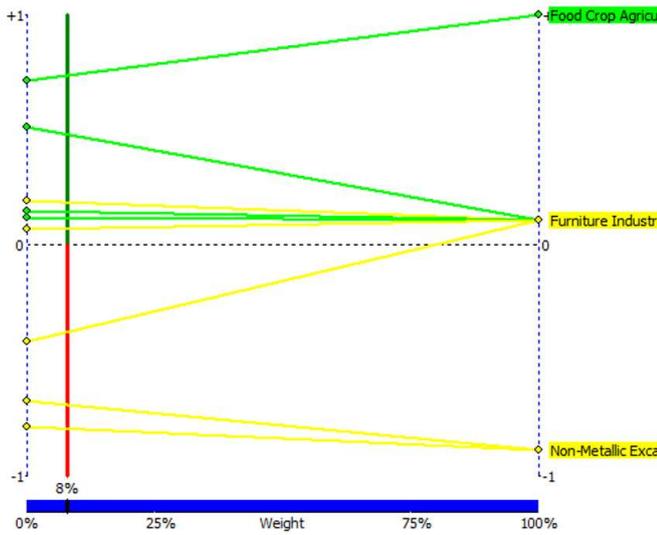**Figure 9.** Sensitivity Analysis for Eco 4 Indicator

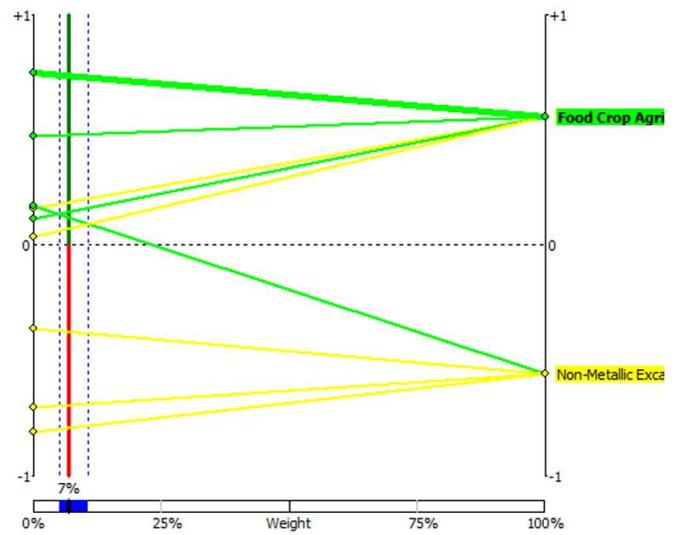**Figure 10.** Sensitivity Analysis for Eco 5 Indicator

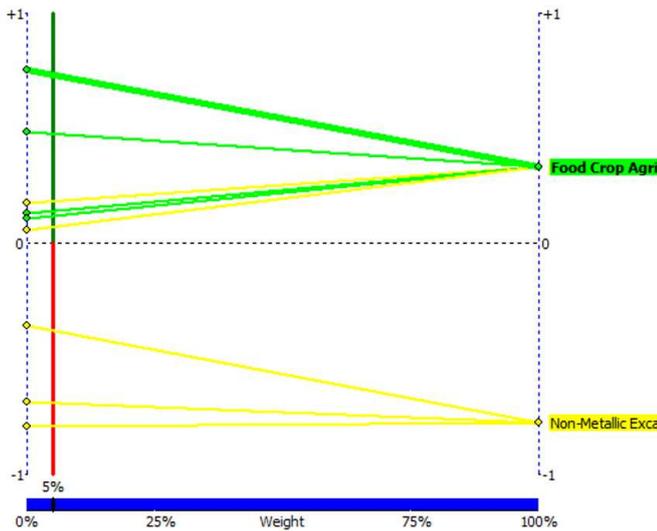**Figure 11.** Sensitivity Analysis for Soc 1 Indicator

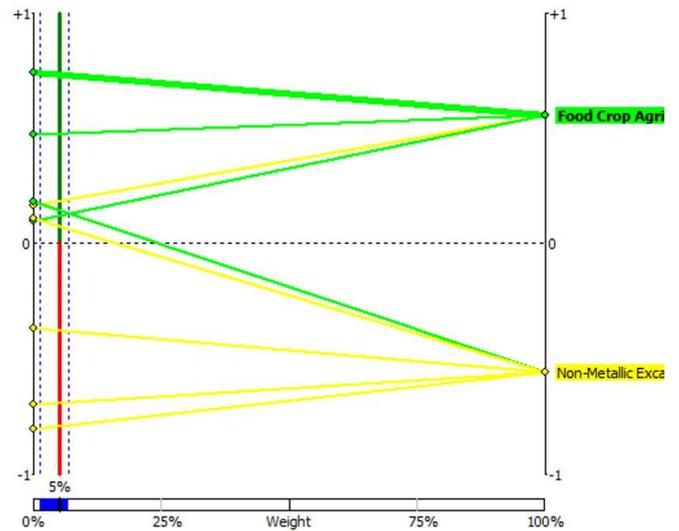**Figure 12.** Sensitivity Analysis for Soc 2 Indicator
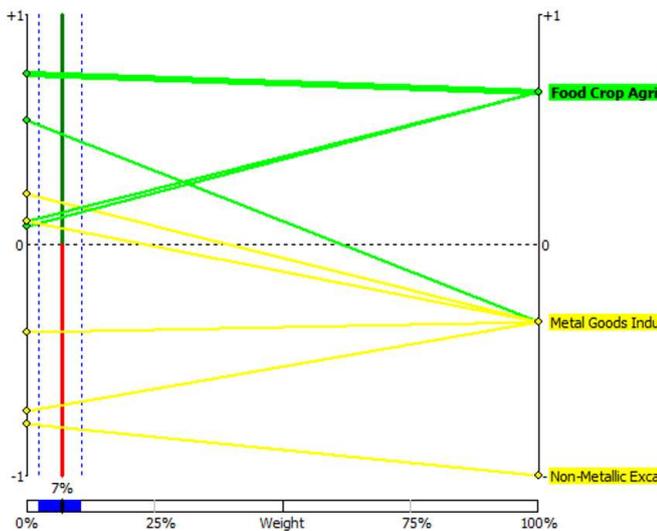

Figure 13. Sensitivity Analysis for Soc 3 Indicator

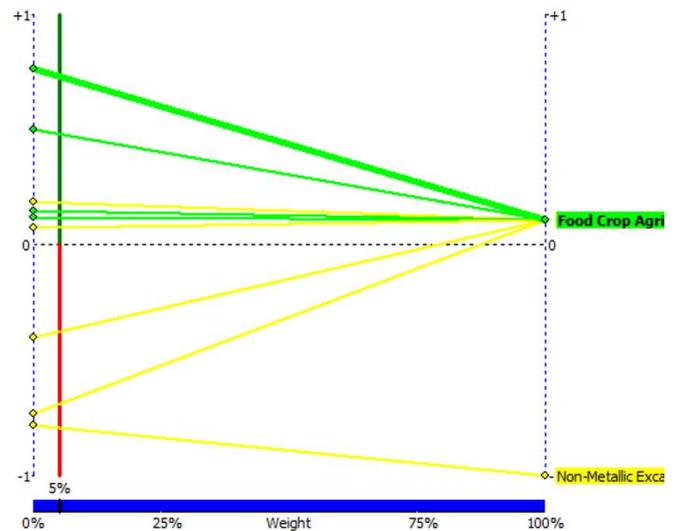**Figure 14.** Sensitivity Analysis for Env 1 Indicator

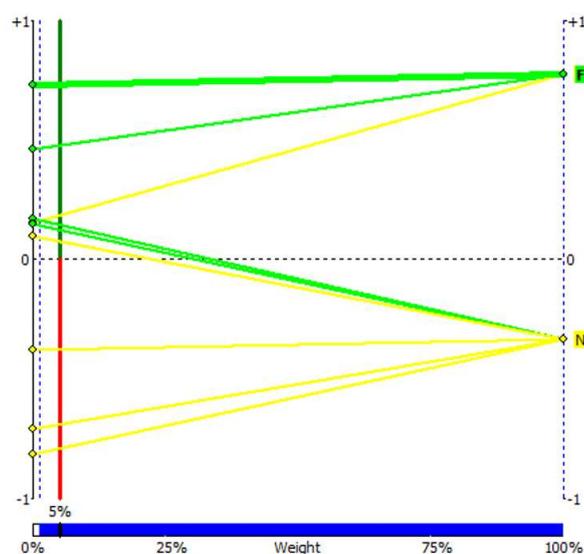**Figure 15.** Sensitivity Analysis for Eco 6 Indicator

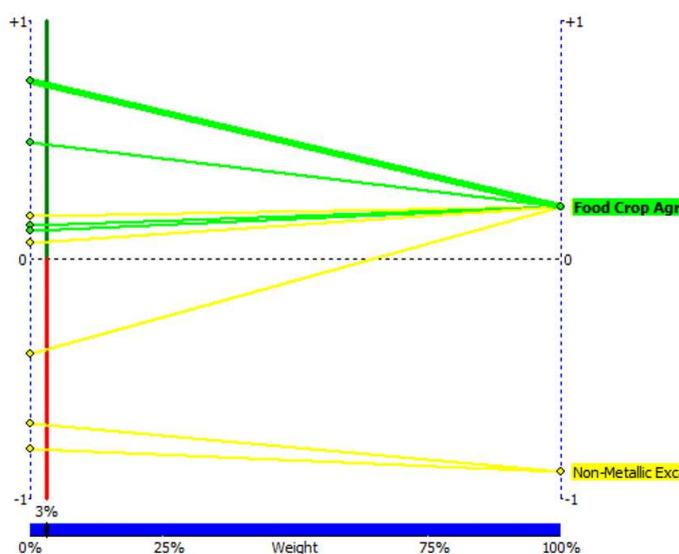**Figure 16.** Sensitivity Analysis for Env 2 Indicator

Figure 17. Sensitivity Analysis for Env 3 Indicator

3.1. Discussion

After reviewing the results of the Promethee analysis above, which identifies three priority subsectors—Agricultural Crops, Horticulture, and Food and Beverage Industry—for the proposed new autonomous district of North Sukabumi County in the development of inclusive and sustainable economic growth, we can see how relevant these recommendations are to the current conditions of Sukabumi County. In this context, it is important to delve deeper into each sub-sector, the challenges they face, and the potential that can be leveraged to achieve the goals of sustainable economic development.

First, the Food Crops sub-sector plays a vital role in the economy of the prospective autonomous region of North Sukabumi Regency. As outlined in the Regional Spatial Plan (RTRW) of Sukabumi Regency, it is included in the Strategic Regency Area (KSK) for the development of the Cicurug–Sukabumi–Sukalarang Rapid Economic Growth Corridor, which encompasses the development of the prospective administrative center of the new autonomous region (DOB), trade, services, offices, residential areas, social and cultural facilities, agriculture, industry, tourism, agribusiness, and fisheries, as well as the control of protected areas.

Sukabumi Regency is known for its fertile soil and climate conducive to the growth of various types of food crops, where the agricultural sector is the primary livelihood of the majority of the population (Bangsawan & Dwiprabowo, 2012). By utilizing modern agricultural technology, such as the use of organic fertilizers and efficient irrigation systems, agricultural productivity can be significantly improved (Tasya & Silvia, 2024). Additionally, the implementation of sustainable agricultural practices, such as crop rotation and agroforestry, can help maintain soil fertility and reduce negative impacts on the environment (Gulo et al., 2024).

However, the challenges faced by the Food Crop Agriculture sub-sector cannot be ignored (Rusastra et al., 2005). One of the main challenges is climate change, which can affect rainfall patterns and temperatures, thereby impacting crop yields. Therefore, it is important to conduct research and development (R&D) in agriculture to find crop varieties that are more resistant to extreme conditions. For example, the development of drought-resistant rice varieties could be a solution to this challenge.

In addition, training for farmers on environmentally friendly agricultural techniques is also necessary so that they can adapt to the changes that occur.

Furthermore, the horticulture sub-sector also has great potential for development in the New Autonomous Region of North Sukabumi (Putri et al., 2024). With its abundant biodiversity, this area has the opportunity to grow various types of vegetables and fruits. For example, vegetables such as chili peppers, tomatoes, and leafy greens can be produced on a large scale and marketed both locally and to other regions. Additionally, fruits like durian, mangosteen, and rambutan can become flagship commodities that attract consumer attention. In this regard, it is important to establish an efficient distribution network to ensure that horticultural products reach consumers in the best possible quality.

However, challenges in the horticulture sub-sector are no less significant. One of the main challenges is the lack of access to market information and appropriate agricultural technology for farmers. Therefore, the development of an integrated agricultural information system can be a solution to help farmers obtain the information they need. For example, mobile applications that provide information on market prices, weather, and good cultivation techniques can greatly assist farmers in making the right decisions. In addition, cooperation between the government, research institutions, and farmers also needs to be strengthened to create an ecosystem that supports the development of the horticulture sub-sector.

Furthermore, the Food and Beverage Industry sub-sector is also an important pillar in the economic development of the New Autonomous Region of North Sukabumi (Kusdiana & Gunardi, 2014). With increasing public awareness of the importance of consuming local products, the food and beverage industry based on local raw materials has excellent opportunities for growth. For example, processed products from agricultural outputs such as chips, jams, and traditional beverages can be produced on a large scale and marketed. Additionally, the development of healthy and organic food products can attract a growing market segment concerned about health.

However, challenges in this sub-sector must also be addressed. One of the main challenges is the limited access to capital and technology for small and medium-sized enterprises (SMEs) in the food and beverage industry. Therefore, it is important to create mentoring and training programs for business actors to improve the quality of their products and business management. For example, training on good packaging and effective marketing strategies can help UKM compete in an increasingly competitive market.

In connecting these three subsectors, we can see synergies that can be utilized to create inclusive and sustainable economic development through a balanced development planning process (Rustiadi et al., 2018, 2021). For example, agricultural products can serve as raw materials for the food and beverage industry, while the output from this industry can add value to agricultural products. Additionally, proper horticultural development can support sustainable agriculture by providing a broader product diversification. Therefore, collaboration between farmers, industry players, and the government is crucial for creating an efficient and sustainable value chain.

As outlined in the Regional Spatial Plan (RTRW) of Sukabumi Regency, the Strategic Regency Area (KSK) encompassing the Cicurug–Sukabumi–Sukalarang Corridor also supports the development of these three priority sub-sectors. With the development plan for this area as a potential center for the new autonomous region (DOB), trade, services, offices, residential areas, social and cultural activities,

agriculture, industry, tourism, agribusiness, fisheries, and the management of protected areas. For example, developing good infrastructure will facilitate accessibility for farmers to market their products. Additionally, the presence of government and service centers in this area can create new job opportunities for the local community, which in turn will increase purchasing power and support local economic growth while maintaining the environment, thereby becoming a key driver in promoting inclusive and sustainable economic development in the proposed new autonomous district of North Sukabumi.

4. Conclusion

Since Indonesia implemented decentralization, demand for establishing new autonomous regions has increased. However, an in-depth analysis is needed to justify why a region should be designated as an autonomous region. This analysis can provide a solid foundation for supporting the establishment of new autonomous regions. This study presents scientific evidence to support the argument for granting autonomy to the proposed new autonomous region of North Sukabumi Regency.

The results of this study indicate that the development of the Food Crops, Horticulture, and Food and Beverage Industries subsectors in North Sukabumi Regency is a strategic step that can become a leading sector in promoting inclusive and sustainable economic development in the New Autonomous Region of North Sukabumi Regency. Each subsector has great potential to become a leading sector and be developed, but it also faces various challenges that must be overcome. With the right approach, including the application of technology, improved access to information, and strengthened cooperation among various stakeholders, inclusive and sustainable economic development can be achieved in the prospective new autonomous region of North Sukabumi Regency. As a result, the prospective new autonomous region of North Sukabumi Regency will become economically self-reliant and contribute positively to the community's overall well-being while maintaining environmental sustainability for future generations. Further research is suggested to analyze scenarios for sustainable development activities.

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