

Strategy for Developing Superior Commodities in the Horticulture Sub-Sector in West Lombok Regency

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Abstract: West Lombok Regency is one of the regencies in West Nusa Tenggara that has the highest agricultural sector, one of which is the Horticulture sub-sector. The Horticulture sub-sector has sub-sectors including Vegetables, fruits and medicines with various types of commodities, but the Horticulture sub-sector commodities have not been optimized properly. The purpose of this study is to (1) Identify superior commodities in the Horticulture sub-sector and (2) Analyze the development strategy for superior commodities in the Horticulture sub-sector in West Lombok Regency. The method used in this study is the Descriptive method. The unit of analysis is the experts/stakeholders of West Lombok Regency with a total of 20 respondents. The data analysis used is the LQ (*Location Quotient*) and AHP (*Analytical Hierarchy Process*) methods in determining superior commodities and SWOT (*Strengths, Weaknesses, Opportunities, Threats*) analysis in determining commodity development. The results of the study show (1) The leading commodities of the Horticulture sub-sector in West Lombok Regency are water spinach, jackfruit, cayenne pepper, water apple, long beans, rambutan, ginger, cardamom and Laos. (2) The strategy for developing water spinach commodities in West Lombok Regency is to expand the market with the support of partners and institutions as well as the use of technology and optimization of the use of infrastructure in order to increase quality production and be able to compete in the market and be able to meet consumer needs and demands.

Keywords: Leading Commodities, Horticulture, LQ, AHP, SWOT.

I. INTRODUCTION

The agricultural sector is a sector that plays a role as a provider of food and food ingredients, feed, bioenergy and is the mainstay in creating nature-based jobs with a fairly large number compared to other sectors in supporting the Indonesian economy. This is because it is basically an economic activity that processes the use of production factors to produce output, so that finally this process produces a flow of compensation for production factors owned by the community (Nadzirah 2020).

The role of the agricultural sector in regional economic development is quite large. This is because the agricultural sector is able to become the sector with the largest contribution to the Gross Regional Domestic Product (GRDP), the mainstay of regional exports and absorption of labor, so that agribusiness development needs to be used as a pillar of regional economic development. Agribusiness development must pay attention to two important aspects, namely focusing on increasing the production of commodities with high economic value and increasing attractiveness through the development of production systems, marketing, trade in agricultural products (agribusiness) and information systems (Rugesty, 2014). The diverse commodities in each region require the determination of superior regional commodities, so that they can obtain a picture of the region's ability to produce a product, create value, manage resources in a real way, provide employment opportunities, generate income and increase competitiveness.

Agriculture is seen as a sector that has a special ability in combining growth and equity or quality growth. In a broad sense, agriculture consists of five sub-sectors, namely food crops, horticulture, livestock, fisheries and forestry. The agricultural sector also contributes to national and regional economic development. It is only natural that the agricultural sector in general and the horticulture sub-sector in particular are used as the driving force of development (Keratop, 2016). In other words, national and regional economic development is placed on the development of the agricultural sector so that it truly produces a strong agricultural sector.

West Nusa Tenggara is one of the provinces with great agricultural sector potential so that it has room to be developed as an effort to advance agriculture in Indonesia. One of the areas that has potential in the complex agricultural sector is West Lombok Regency. West Lombok Regency is a fertile area and is one of the rice buffer areas in NTB. The condition of West Lombok seen from geography, topography, and climate can affect food crops and horticulture. Horticultural commodities are one of the new sources of growth in the agricultural sector, because they have high potential and can contribute to the regional economy. Horticultural commodities in the form of fruits, vegetables and medicines (Biopharmaka) are one of the important commodities to meet the nutritional needs of the community. The increasing population also contributes to the increase in demand for horticultural commodities.

West Lombok Regency is one of the regencies in NTB that excels in agriculture. This can be seen from the contribution of the agricultural sector to the GRDP until the end of 2023 of 21.16 percent. The agricultural sector is a leading sector in West Lombok Regency because every year it contributes more than 20 percent. One of the leading agricultural sectors is the horticulture sector, which is one of the main sources of income that is quite advanced and is being cultivated and has a planting area and harvest area that is still quite high. Based on BPS (2024), the harvested area of horticultural crops in West Lombok Regency is +2,198 ha with a total production of 2,664,474 Kw. Strategic horticultural commodities based on the West Lombok Regency Agriculture Service 2023 for vegetable commodities consist of kale, chilies, tomatoes and long beans. Fruit commodities are bananas, watermelon, durian, jackfruit, mangosteen, rambutan, while medicinal commodities are ginger, kencur and Laos. The largest vegetable commodity is water spinach with a production of 58,280 kw, while the lowest is Merang Mushroom, which is 126 Kw. The largest fruit production is Mango and Jackfruit, each producing 253,770 Kw and 127,081 Kw. Mango and jackfruit are typical fruits of West Lombok Regency whose production is quite large and can boost the economy of its people and their existence is quite evenly distributed in each sub-district in West Lombok. Then the commodity with the lowest production is Pamelorange with a production level of around 63 Kwp per year (BPS West Lombok 2024).

Horticulture in West Lombok Regency has great potential in developing superior commodities such as vegetables, fruits and medicines. However, there are still many agricultural problems that occur in West Lombok Regency, namely limited infrastructure, land conversion, sources of farmer financing to low market access and low farmer knowledge of modern cultivation and product marketing techniques.

From these problems, there needs to be a projection and strategy carried out by the government and farmers of West Lombok Regency. Therefore, it is necessary to identify superior agricultural commodities in the Horticulture sub-sector and formulate a strategy for developing superior Horticulture commodities that can be developed according to the conditions of West Lombok Regency so that they can help in economic progress. Therefore, the objectives of the study are to (1) Identify superior commodities in the Horticulture sub-sector in West Lombok Regency (2) Analyze the strategy for developing superior commodities in the Horticulture sub-sector in West Lombok Regency.

II. METHODS

This study uses a descriptive method with the determination of sample areas carried out by *purposive sampling*. The analysis unit is experts or practitioners from related institutions in West Lombok Regency. The determination of the number of respondents was carried out by *purposive sampling* by determining 20 respondents from related agencies or institutions. The types of data used in this study are quantitative data and qualitative data. The data sources used are primary data and secondary data. Data collection was carried out using survey and interview techniques with a team of experts or experts in West Lombok Regency which were guided by a list of questions (questionnaires). To achieve the objectives set in this study, the data to be collected was analyzed in several data analysis models, namely the *Location Quotient (LQ)* method, *Analytical Hierarchy Process (AHP)*, and SWOT Analysis.

Location Quotient (LQ)

LQ analysis is used in determining the superior commodities of the Horticulture sub-sector in West Lombok Regency. The LQ value will indicate the extent to which a region is able to produce a particular commodity.

The LQ method equation is as follows: $LQ = \frac{Vi/Vt}{Yi/Yt}$

Where: LQ: Location Quotient Index, Vi: Production value of Horticulture sub-sector commodities in West Lombok District, Vt: Total production value of Horticulture sub-sector commodities in West Lombok District, Yi: Production value of Horticulture sub-sector commodities in West Lombok Regency, Yt: Total production value of Horticulture sub-sector commodities in West Lombok Regency.

Value description

LQ > 1: This means that the livestock commodity is a superior commodity in the region. It has advantages.

comparative, because apart from being able to meet the needs of the region itself, it can also be exported outside the region.

LQ = 1: the livestock commodity is not classified as a superior regional commodity and does not have any advantages.

comparative because it can only meet needs within its own region.

LQ < 1: the livestock commodity is not classified as a superior regional commodity and does not have any advantages.

comparative because it is not yet able to meet the needs within its own region.

Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process (AHP) is a method used to evaluate and make multi-criteria decisions. The AHP diagram is as follows:

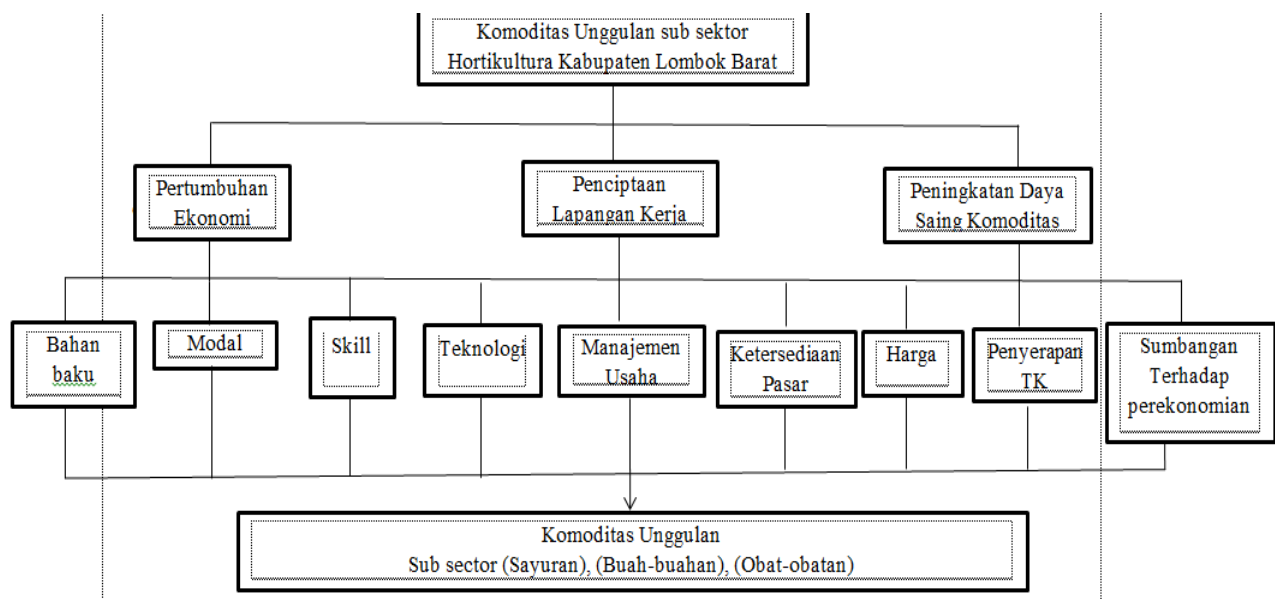


Figure 1. Hierarchical Structure

Figure 1 is a model of AHP preparation, the top level or development of superior commodities in the Horticulture sub-sector is the main objective to be achieved in this study. To achieve this goal, there are 3 criteria used, namely, Economic growth, Job creation and increasing commodity competitiveness. While at the next level are sub-criteria used to achieve the criteria. Economic growth has 3 sub-criteria to achieve the criteria objectives, namely raw materials, capital and skills. Job creation has 3 sub-criteria, namely technology, business management and market availability. While increasing commodity competitiveness has 3 sub-criteria to achieve the criteria objectives, namely price, TK absorption and contribution to the economy. At the last level is an alternative criterion for the superior sub-sector that will be developed

for the Horticulture Sub-sector in West Lombok Regency. The alternative criteria in this study are sub-sector commodities from the Horticulture Sector, namely vegetables, fruit plants and medicinal plants (*biopharmaceuticals*).

Next, the formula for calculating the consistency index and consistency ratio is presented as follows:

Calculate the consistency (*Consistency Index*) CI using the formula:

$$Ci = (\lambda \max - n) / (n - 1)$$

Calculating *the Consistency Ratio* (CR) using the formula:

$$CR = CI / IR$$

SWOT Analysis

The SWOT matrix is used to compile the strategic factors of superior commodities. This matrix can clearly describe how the opportunities and threats faced by the company can be adjusted to the strengths and weaknesses it has. The SWOT matrix can be seen in Table 1.

Table 1. SWOT Matrix

IFAS	STRENGTH (S)	WEAKNESS (W)
	1.	1.
	2.	2.
EFAS	3.	3.
OPPORTUNITY (O)	SO Strategy	WO Strategy
1.	1.	1.
2.	2.	2.
3.	3.	3.
THREATS (T)	ST Strategy	WT Strategy
1.	1.	1.
2.	2.	2.
3.	3.	3.

Source: Rangkuti (2017)

The explanation for each strategy formulation above is as follows:

- SO strategy, this strategy utilizes all strengths to seize and take advantage of opportunities as much as possible.
- ST strategy, this strategy uses existing strengths to overcome threats.
- WO strategy, this strategy is determined based on the utilization of existing opportunities by means of minimize existing weaknesses
- WT strategy, this strategy is based on defensive activities and tries to minimize existing weaknesses and avoid threats.

III. RESULT

A. Leading Commodities of the Horticulture Sub-Sector in West Lombok Regency

1. Location Quotient (LQ)

LQ analysis is used to show whether a sub-district's horticultural commodities are superior or not to the share of horticultural commodities in the Regency. LQ value > 1, comparative (Commodities exceed the needs of the region itself and can be traded outside the region), LQ value = 1, meaning that horticultural commodities are not classified as superior commodities, because they do not have a comparative advantage (Commodity production is only sufficient to meet the needs of the region itself); and LQ value <1, meaning that horticultural commodities are not classified as superior commodities; because they have not been able to meet their own needs and still require commodity supplies from outside

the region. Each region in West Nusa Tenggara has superior commodities that have more value than other regions, both in terms of production and harvest area. Several commodities in West Lombok Regency grow and produce well so that they can meet the needs of their own region and also have the potential to supply the needs of other regions. This shows that these commodities are comparatively superior compared to other regions in West Nusa Tenggara Province. The following are superior horticultural commodities in each horticultural sub-sector.

a. Superior Horticultural Commodities Vegetable Group

Vegetables are plant-based foods that contain high levels of nutrients and essential minerals needed by the body. Vegetables are used as food ingredients, food supplements or as daily snacks. Vegetables are generally in the form of leaves, legumes, grains, plant stems and tubers to vegetables in the form of fruits (Pitaloka, 2017) Vegetable commodities that are widely cultivated commercially in West Lombok Regency are very diverse and in this study there were 13 types of vegetables, namely shallots, oyster mushrooms, mustard greens, large chilies, dry chilies, cayenne pepper, straw mushrooms, long beans, kale, cucumbers, tomatoes and spinach.

Table 2. LQ Value of Vegetable Commodities in West Lombok Regency

Subdistrict	Vegetable Commodities												
	BM	JT	SW	CB	CK	CR	JM	KP	KK	MM	TG	TM	BY
Sekotong	0.0	0.0	0.0	0.0	0.0	1.1	0.0	3.0	0.0	5.5	5.7	5.9	0.0
Lembar	0.0	0.0	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gerung	0.0	0.0	0.0	1.8	9.1	1.2	0.0	3.7	0.8	0.8	1.8	1.6	0.0
Labuapi	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
Kediri	1.3	0.0	0.0	0.0	0.0	6.6	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Kuripan	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Narmada	0.0	0.0	0.0	5.4	0.0	1.1	0.0	1.0	2.2	1.0	0.5	0.5	0.0
Lingsar	0.0	0.0	13.6	0.0	1.4	0.2	13.6	0.6	2.6	0.0	0.0	0.0	13.6
Gunungsari	0.0	0.0	0.0	0.0	3.9	0.6	0.0	2.9	2.1	1.5	0.0	0.0	0.0
Batu Layar	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Processed Primary Data, 2024

The selection of superior horticultural commodities in the vegetable group was carried out by mapping the base commodities with the highest LQ values from each central sub-district area in West Lombok Regency. LQ analysis was carried out by comparing commodity production in West Lombok Regency with the production level in West Lombok District. The results of the calculation of the LQ value of horticultural commodities in the vegetable group in the central production sub-district area in West Lombok Regency are shown in table 4.23.

Based on the calculation results in table 4.23, it can be explained that the superior vegetable crop commodities are horticultural commodities that have an LQ value > 1. Water spinach is a superior vegetable commodity in West Lombok Regency because it is superior in 6 sub-districts, namely Labuapi, Kediri, Kuripan, Narmada, Lingsar and Gunung Sari sub-districts, with the highest LQ value in Labuapi Sub-district with an LQ value > 2.8 and the lowest LQ> 1.4 in Kediri Sub-district. The Cayenne Pepper commodity has an LQ> 1 and is superior in 6 sub-districts, namely Sekotong, Lembar, Gerung, Kediri, Kuripan and Narmada with the highest LQ value in Lembar Sub-district, namely LQ> 11.8 and the lowest LQ> 1.1 in Narmada Sub-district. Long Bean Commodity has LQ> 1 and is superior in 4 sub-districts, namely Sekotong, Gerung, Narmada and Gunung Sari with the highest LQ value in Gerung sub-district, namely LQ> 3.7 and the lowest LQ> 1.0 in Narmada Sub-district. Curly Chili and Cucumber Commodities are superior commodities LQ> 1 in 3 sub-districts, namely Curly Chili is superior in Gerung, Lingsar and Gunung Sari sub-districts. Cucumber has LQ> 1 in Sekotong, Narmada and Gunung Sari Sub-districts. And Red Onion, Large Chili, Eggplant, Tomato are superior in 2 sub-districts, namely Labuapi and Kediri Red Onion, Gerung and Narmada Large Chili, while Eggplant and Tomato are equally superior in Sekotong and Gerung Sub-districts.

The commodities of Oyster Mushroom, Mustard Greens, Straw Mushroom and Spinach are only superior in 1 sub-district, namely Oyster Mushroom in Batu Layar Sub-district, Mustard Greens, Straw Mushroom and Spinach are equally superior

in Lingsar Sub-district with the same LQ value, namely $LQ > 13.6$, this is in accordance with the results of the study that Lingsar Sub-district has the highest 3 commodities and is the only sub-district that has Production Results with 3 types of commodities.

The results of the LQ analysis show that the leading commodities for vegetable crops in West Lombok Regency are water spinach, cayenne pepper and long beans.

b. Superior Horticultural Commodities in the Fruit Group

Fruits are parts of plants on the surface of the ground that grow larger, have fleshy fruit and contain a lot of water. Fruits in food science are not limited to the results of the formation of fruit buds (true fruits). Fruits are plant foods that contain important nutrients and minerals, especially vitamins, sugars and fiber. Fruits are generally consumed directly as food or processed again as food ingredients (Angelia, 2017).

The fruit commodities that are widely cultivated commercially in West Lombok Regency are very diverse with 23 types of fruits, but in this study there were only 15 types of agricultural commodities obtained from the results of calculations and interviews with respondents regarding superior commodities from ten sub-districts in West Lombok Regency. 15 types of fruit commodities are durian, water apple, guava, longan, mango, mangosteen, pineapple, jackfruit, papaya, banana, rambutan, sapodilla, soursop, melon and watermelon. The following are the LQ values of 10 fruit commodities in West Lombok Regency in 2023.

Table 3. LQ Value of Fruit Commodities in West Lombok Regency

Subdistrict	Fruit Commodities														
	DN	JA	JB	LK	MG	MS	NN	NK	PP	PG	RN	SW	SK	M N	SK
Sekotong	0.0	0.1	1.5	0.1	2.3	0.0	0.0	0.4	0.0	0.8	0.0	0.7	1.8	0.0	3.4
Lembar	0.0	1.0	29.7	0.0	0.0	0.0	25.7	2.2	6.5	0.1	0.0	0.0	1.9	0.0	0.0
Gerung	0.0	1.3	1.4	79.6	0.7	0.0	5.4	0.7	1.8	0.3	1.2	9.3	1.3	73.2	23.3
Labuapi	0.4	1.0	0.3	1.0	1.0	0.2	0.0	2.0	4.2	0.8	1.3	2.6	0.8	0.0	0.0
Kediri	0.0	0.0	6.0	0.0	0.6	0.0	0.0	4.3	0.4	0.0	1.6	1.3	0.7	0.0	0.0
Kuripan	0.0	1,0	0.6	0.5	1.8	0.0	0.0	1.5	8.5	0.3	0.0	0.0	1.5	0.0	0.0
Narmada	1.5	1.7	0.6	0.8	0.1	1.6	0.0	0.5	0.2	2.1	1.7	1.4	0.8	0.0	0.0
Lingsar	2.1	2.2	0.4	0.4	0.7	3.6	2.1	0.3	2.0	0.1	2.1	0.9	0.9	2.0	0.0
Gunungsari	0.8	0.7	0.2	0.0	1.2	0.1	0.0	2.9	0.5	0.0	1.2	0.1	0.3	0.0	0.0
Batu Layar	1.4	9.4	5.7	0.0	0.8	0.1	0.0	1.3	0.1	0.7	0.8	2.2	3.8	0.0	0.0

Source: Processed Primary Data, 2024

Based on the calculation results in table 4.25, it can be explained that the superior commodity of fruit plants is a horticultural commodity that has an LQ value > 1 . Jackfruit is a superior commodity of the fruit group in West Lombok Regency because it is superior in 6 sub-districts, namely Lembar, Labuapi, Kediri, Kuripan, Gunung Sari and Batu Layar sub-districts with the highest LQ value in Kediri sub-district with an LQ value > 4.3 and the lowest, namely $LQ > 1.3$ in Batu Layar sub-district.

Jackfruit is a popular tropical fruit commodity in West Nusa Tenggara, in addition to being consumed directly, jackfruit is also often processed into various sources of products such as chips, dodol and sweets. One of them is in West Lombok Regency, jackfruit is able to become a superior commodity and is able to help the community's economy. One of the superior products produced by jackfruit commodities in West Lombok Regency is jackfruit Dodol. In addition, the demand for jackfruit in West Lombok Regency is increasing every year. According to the West Lombok Agriculture Service, jackfruit consumption in the local market increases by around 10% per year, driven by the trend of healthy food and the use of jackfruit in various culinary delights. In addition, West Lombok jackfruit has high export potential and is promising to neighboring countries such as Malaysia and Singapore.

Water Apple commodity has $LQ > 1$ and is superior in 6 sub-districts, namely Gerung, Labuapi, Kuripan, Narmada, Lingsar and Batu Layar with the highest LQ value in Batu Layar sub-district, namely $LQ > 9.4$ and the lowest $LQ > 1.0$ in Kuripan sub-district. Rambutan commodity has $LQ > 1$ and is superior in 6 sub-districts, namely Gerung, Labuapi, Kediri,

Narmada, Lingsar and Gunung Sari with the highest LQ value in Lingsar sub-district, namely LQ > 2.1 and the lowest LQ > 1.2 in Gerung sub-district. Guava, papaya, sapodilla and soursop commodities are superior commodities with LQ > 1 in 5 sub-districts, namely superior Guava in Sekotong, Lembar, Gerung, Kediri and Batu Layar sub-districts. Papaya has LQ > 1 in Lembar, Gerung, Labuapi, Kuripan and Lingsar sub-districts. Meanwhile, Sapodilla is superior in Gerung, Labuapi, Kediri, Narmada and Batulayar Districts. And Soursop in Sekotong, Lembar, Gerung, Kuripan and Batu Layar Districts is superior with LQ values > 1. Durian, Mango, Pineapple commodities are superior in 3 districts, namely for durian superior in Narmada, Lingsar and Batu Layar districts, Mango superior in Sekotong, Kuripan and Gunung sari districts, and Pineapple superior in Lembar, Gerung and Lingsar districts and for watermelon superior in Sekotong and Gerung Districts. Longan, Mangosteen, Melon and Watermelon commodities are superior in 2 districts, namely for Longan superior in Gerung and Labuapi districts, Mangosteen superior in Narmada and Lingsar districts, and Melon superior in Gerung and Lingsar districts and for watermelon superior in Sekotong and Gerung Districts. Meanwhile, bananas are only superior in 1 sub-district, namely Narmada, this is in accordance with the results of research that Narmada sub-district has the highest banana commodity and has succeeded in innovating by utilizing bananas into many types of products.

The results of the LQ analysis show that the leading commodities for fruit plants in West Lombok Regency include Jackfruit, Rambutan and Water Apple.

c. Leading Horticultural Commodities in the Pharmaceutical Group (*Biopharmaka*)

Medicinal plants (*biopharmaceuticals*) are plants (plants) that are consumed and are useful for medicine, cosmetics and health. Medicinal plants are also used for food ingredients as cooking spices and food supplements. The parts of medicinal plants that are consumed or used are the leaves, stems, flowers, fruits, seeds, tubers or roots (Annisa, et. Al, 2022). Medicinal plant commodities cultivated in West Lombok Regency are seasonal plant commodities such as ginger, galangal, kencur, turmeric, and temureng; and also annual plants, such as lime and lemongrass (BPS West Lombok Regency, 2024). The LQ value of medicinal plants in the production center sub-districts is in table 4.26.

Table 4. LQ Value of Drug Commodities in West Lombok Regency

Subdistrict	Pharmaceutical Commodities														
	JH	KL	KC	KY	LS	LG	LB	MD	MK	ST	TG	TK	TW	JN	SI
Sekotong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lembar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gerung	7.6	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labuapi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kediri	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kuripan	2.4	0.0	14.1	4.1	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Narmada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lingsar	4.4	0.0	4.3	2.4	2.2	9.2	9.2	9.2	9.2	9.2	0.6	1.0	7.5	9.2	9.2
Gunungsari	4.0	0.0	3.1	7.1	6.9	0.0	0.0	0.0	0.0	0.0	10.0	9.6	0.0	0.0	0.0
Batu Layar	0.1	1.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

Source: Processed Primary Data, 2024

Based on the calculation results in table 4.27, it can be explained that the superior medicinal plant commodities are horticultural commodities that have an LQ value > 1. Ginger and Laos are superior medicinal group commodities in West Lombok Regency because they are equally superior in 4 sub-districts, namely in Gerung, Kuripan, Lingsar, and Kediri sub-districts with the highest LQ value for Ginger commodities, namely in Gerung Sub-district with an LQ value > 7.6 and the lowest, namely LQ > 2.4 in Kuripan Sub-district, while the highest Laos commodity is in Kuripan Sub-district LQ > 10.6 and the lowest LQ > 2.2 in Lingsar Sub-district.

Ginger production in West Lombok Regency in 2023 was 18,949 kg and Lingsar District was the largest ginger production center with a production volume of 9006 kg. Ginger production in 2023 was ranked 6th for the highest ginger production in the West Nusa Tenggara region. And Lingsar District is one of the contributors to ginger production spread every year and followed by Gunung Sari District which is able to produce enough ginger for its area and is sent outside its area (BPS NTB Province, 2024).

The commodities of Kencur and Turmeric have $LQ > 1$ and are superior in 3 sub-districts, namely Kuripan, Lingsar and Gunung Sari with the highest LQ value of Kencur in Kuripan sub-district, namely $LQ > 14.1$ and the lowest LQ > 3.1 in Gunungsari sub-district and the highest Turmeric in Gunungsari $LQ > 7.1$ and the lowest Lingsar with $LQ > 2.4$. The commodity of Cardamom is superior in 1 sub-district, namely in Batu Layar sub-district with $LQ > 1.3$. And for the commodities of Temuireng and Temukunci, they have $LQ > 1$, both are superior in 1 sub-district, namely Gunungsari sub-district. While for the commodities of Lempuyang, aloe vera, Mahkota dewa, mengkudu, Sambilotto, Temulawak, Lime and Lemongrass, they are both superior in 1 sub-district, namely Lingsar sub-district. This is because Lingsar is able to produce 8 types of commodities and has succeeded in supplying other areas, and is the only sub-district that continues to produce every year. Sekotong, Kediri, Narmada, Lembar and Labuapi sub-districts do not have superior drug production results, this is because the results of interviews with respondents said that drug data for the 5 sub-districts were not recorded in the annual BST data at the sub-district or district level. Based on the results of interviews conducted with informants for 3 sub-districts that do not have superior drug production results, this is because the people in the area do not want to produce on a large scale, they only plant drugs for personal consumption in their yards as cooking ingredients or as a living pharmacy, this is considered when they plant on a large scale the profits obtained will not be large, and the results obtained are not the same as when they plant vegetables or fruits. Therefore, drug production in 3 sub-districts is not recorded in BPS data or BST data from the West Lombok Agriculture Service.

The results of the LQ analysis show that the leading commodities for medicinal plants in West Lombok Regency are Ginger, Galangal and Laos.

2. Analytical Hierarchy Process (AHP)

The AHP hierarchy in this study was formed after the focus of determining superior commodities and superior alternatives was determined. This hierarchy consists of four levels. The first level is the focus to be achieved in the AHP, which is to find superior commodities in the Horticulture sub-sector. The second level is the objective of determining superior commodities, namely Economic Growth, Job Creation and Increasing the competitiveness of commodities. The third level is the Criteria which consists of nine criteria, namely raw materials, capital, skills, technology, business management, market availability, price, TK absorption and Contribution to the economy. The fourth level is the alternative commodity, which consists of Cayenne pepper, Water Spinach, Long Beans, Water Apple, Jackfruit, Rambutan, Ginger, Galangal and Laos.

From all the criteria choices made in determining the superior Horticulture sub-sector, the results of the total criteria choices were obtained, namely:

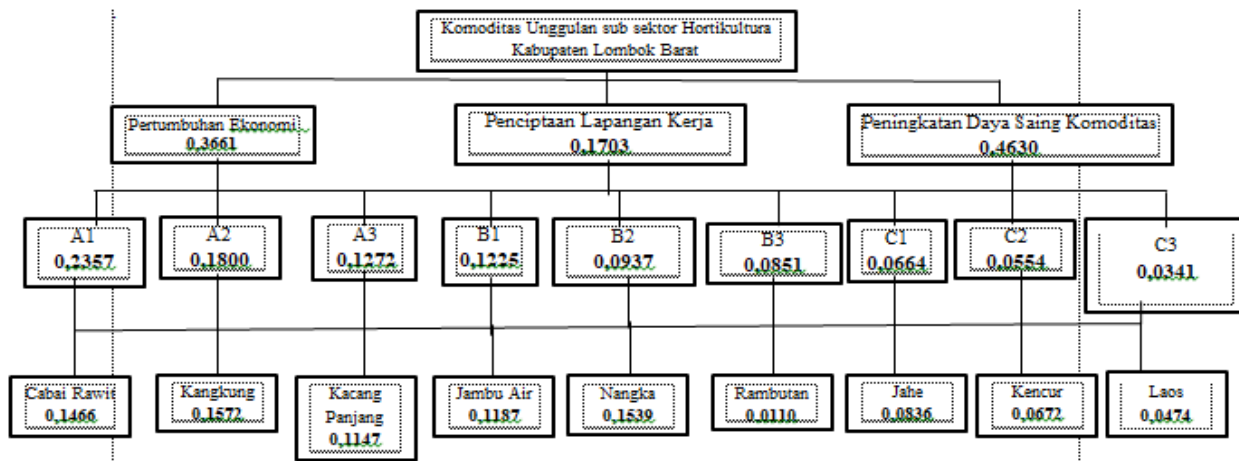


Figure 2. AHP Calculation Results

Based on the image above, the order of superior commodities to be developed from the Horticulture sector of West Lombok Regency has been obtained. Based on the calculation of the weight of the objectives that have the greatest weight and are a priority is the objective of Increasing Commodity Competitiveness. While the objective of Economic Growth is the second priority and the last or third priority is the objective of Job Creation.

Thus, in order to manage the Horticulture subsector, the main focus of the Objective is to pay attention to Raw Materials. The high acquisition of raw materials is expected to be able to support the production of superior commodities in West Lombok Regency. Raw materials are considered important because with the availability of raw materials the production process can take place, can increase added value and generate business profits.

The second thing that needs to be considered and prioritized is Capital. Capital is very important in determining the progress or decline of Horticultural commodity results, especially in today's world developments. Increasingly tight commodity competition encourages farmers to compete by seeking capital in order to maintain their farming businesses. Capital has a major influence on the agricultural process, because when there is no capital, farmers cannot buy fertilizer and improve the quality of their plants so that the results obtained are not optimal.

The three sub-criteria of Skill are the third focus that needs to be considered. While the last sub-criteria that is the priority focus is the contribution to the economy that can make commodities have economic value, provide benefits to consumers, have forward and backward linkages, provide economic multiplier effects and at the same time provide economic benefits for all stakeholders and regions that produce these superior commodities.

Based on the results of the alternative analysis of Superior Horticultural Commodities with AHP analysis, the ranking order was obtained, namely Water Spinach with a value of 0.1572, then followed by Jackfruit commodities with a value of 0.1539, cayenne pepper with a value of 0.1466, water guava with a value of 0.1187, long beans with a value of 0.1147, rambutan with a value of 0.110, ginger with a value of 0.0836, kencur with a value of 0.0672 and the ninth rank is Laos with a value of 0.0474.

At this stage, 1 commodity that received the highest assessment was determined to be determined as an alternative superior commodity in the Horticulture subsector. The commodity is Kangkung Commodity with a value of 0.157 which will then be compiled a SWOT strategy to obtain its development strategy.

B. Strategy for Developing Superior Commodities in the Horticulture Sub-Sector in West Lombok Regency

The superior commodity resulting from the calculation of LQ and AHP weighting is the kale commodity. The strategy for developing superior commodities, especially kale commodities, needs to be developed. This is because this commodity is a commodity that can increase regional income and improve community welfare. The kale commodity has a product quantity that is able to meet the needs of the community in its region and the community outside the region. In addition, the kale commodity also has the potential for rapid development because the continuity of farming efforts is always maintained. To find out the strategy used in developing the kale commodity, first identify the factors that influence the development of kale in West Lombok Regency, which consist of internal and external environmental factors. Internal environmental factors consist of strengths and weaknesses. External factors consist of opportunities and threats. Environmental factors have a real influence on the possibility of success or failure in developing the kale commodity, besides that it can also create opportunities and threats in business.

Based on the results of the questionnaire on each internal and external factor which is assessed based on a rating value ranging from 1 to 4 (strongly disagree to agree), the results of the SWOT analysis on the kale commodity can be seen in Table 4.31 and Table 4.32 below.

Table 5. IFAS Matrix (Internal Factor Analysis System)

No	Internal Factors (Strengths and Weaknesses)	Weight	Rating	Score
	Strength			
1	Geographical position in developing Kangkung commodities	0.13	4	0.54
2	There is support from local government	0.14	4	0.56
3	Adequate agricultural facilities and infrastructure	0.14	4	0.58
4	Farmer's business experience	0.13	4	0.54
	Total	0.55		2.21
	Weakness			
1	Implementation of technology is not yet optimal	0.12	4	0.48
2	Financing limitations and sources of financing for farmers	0.12	4	0.50
3	declining quality of cultivated land	0.07	2	0.15
4	Water spinach is a short-lived plant	0.13	4	0.51
	Total	0.45		1.64
	Total Internal Factors	1.00	1.00	3.85

Source: Processed Primary Data, 2024

Based on Table 4.31, it shows that the total internal factor weighting score is 3.55 which is obtained from the sum of the strength factor scores of 2.12 and weaknesses of 1.43. This shows that the strength factor for the kale commodity in West

Lombok Regency is greater than the weakness factor as an obstacle to the development of the kale commodity. The main strength of the development of the kale commodity in West Lombok Regency is adequate agricultural facilities and infrastructure, while the main weakness of the development of the kale commodity is the limited financing and sources of financing for farmers.

Table 6. EFAS Matrix (External Factor Analysis System)

No	External Factors (Opportunities and Threats)	Weight	Rating	Score
Opportunity				
1	Development of technologies that increase productivity and efficiency	0.12	4	0.49
2	collaborate with other parties	0.12	4	0.46
3	Public consumption of vegetable products is high	0.12	4	0.46
4	stable commodity prices	0.12	4	0.48
5	High market opportunity	0.12	4	0.49
Total		0.60		2.39
Threats				
1	Competitiveness of other commodities	0.11	4	0.44
2	Unpredictable weather	0.10	4	0.41
3	Lack of innovation in product marketing both in terms of packaging and product quality	0.10	3	0.31
4	Low price of water spinach commodity	0.09	3	0.27
Total		0.40		3.81
Total External Factors		1.00	1.00	3.81

Source: Processed Primary Data, 2024

Based on Table 4.32, it can be seen that the total external factor weighting score is 3.63 which is obtained from the sum of the opportunity factor scores of 2.31 and the threat of 1.32. This shows that the opportunity factor for the kale commodity in West Lombok Regency is greater than the threat factor as an obstacle to the development of the kale commodity. The main opportunity for the development of the kale commodity in West Lombok Regency is the market opportunity and the development of efficient technology for the production and marketing process of the kale commodity, while the main threat to the development of the kale commodity is the competitiveness of other commodities.

From the analysis of the internal and external factor tables, it shows that the scores of each factor include strength, namely 2.21, weakness factor, namely 1.64, opportunity factor, namely 2.39 and threat factor, namely 1.42. The factors included in the SWOT diagram that have been calculated for their similarities are used to determine the center point of the Kangkung commodity development strategy in West Lombok Regency which is in quadrant I, namely the Aggressive strategy. Quadrant I strategy shows the use of all strengths to take advantage of the opportunities available for the development of Kangkung commodities. The purpose of this diagram is to determine the strategic position of the Kangkung commodity. The difference between internal and external factors of Kangkung can be seen as follows:

$$IFAS = \text{Strength Factor} - \text{Weakness Factor} = 2.21 - 1.64 = 0.57$$

$$EFAS = \text{Opportunity Factor} - \text{Threat Factor} = 2.39 - 1.42 = 0.97$$

So the SWOT diagram is obtained:

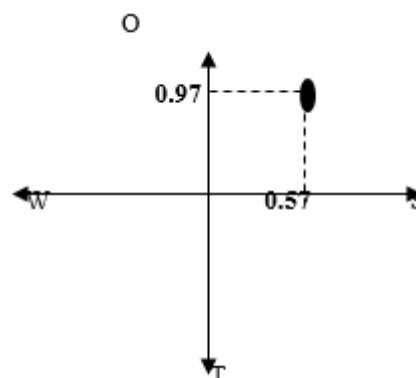


Figure 3. SWOT diagram for water spinach commodity

Table 7. SWOT Matrix Analysis of Water Spinach Commodity

<p>IFAS EFAS</p>	<p><i>Strength (S)</i></p> <ol style="list-style-type: none"> 1. Geographical position in developing water spinach commodities (S1) 2. There is support from local government (S2) 3. Adequate facilities and infrastructure (S3) 4. Farmer's business experience (S4) 	<p><i>Weakness (W)</i></p> <ol style="list-style-type: none"> 1. Marketing of water spinach commodities has not yet expanded (W1) 2. Financing limitations and sources of financing for farmers (W2) 3. decreasing quality of cultivated land (W3) 4. Water spinach is a short-lived plant (W4)
<p><i>Opportunities (O)</i></p> <ol style="list-style-type: none"> 1. Development of technologies that increase productivity and efficiency (O1) 2. collaborate with other parties (O2) 3. Public consumption of kale products is high (O3) 4. stable commodity prices (O4) 5. High market opportunity (O5) 	<p><i>SO Strategy</i></p> <ol style="list-style-type: none"> 1. Expanding market development with the support of partners and institutions from the private and state sectors so that commodity prices in the market remain stable (S1, S2, S4, O2, O4) 2. Utilization of technology as well as farmer skills and experience in increasing quality production, competing in the market and being able to meet consumer needs and demands (S3, O1, O4) 3. Optimizing the use of infrastructure and utilization of technology and information to meet community consumption of water spinach products (S2, S4, O1.O3). 	<p><i>WO Strategy</i></p> <ol style="list-style-type: none"> 1. Taking a direct approach from farmers to consumers to shorten the commodity marketing chain and expand the market through social media to improve welfare (W1, W2, O3, O5) 2. Utilizing technology to improve land quality to produce quality water spinach and wide marketing (W3, O1, O5) 3. Cooperate in managing the planting system for water spinach commodities according to the planting season so that commodity prices on the market can remain stable (W4, O2, O4,)
<p><i>Threats (T)</i></p> <ol style="list-style-type: none"> 1. competitiveness of other commodities (T1) 2. unpredictable weather (T2) 3. Lack of innovation in product marketing both in terms of packaging and product quality (T3) 4. Low price of kale commodity (T4) 	<p><i>ST Strategy</i></p> <ol style="list-style-type: none"> 1. Providing government assistance programs in terms of product marketing, both through promotional programs, market formation and cooperation with distribution companies (S2, T3, T4) 2. Utilizing natural resources in the location such as fertile soil or abundant water sources by planting types of plants that are suited to the local climate (S1, S3, T1, T3) 3. Utilizing the experience and skills of farmers in vegetable cultivation to minimize errors in the cultivation process (S4,T2) 	<p><i>WT Strategy</i></p> <ol style="list-style-type: none"> 1. Forming partnerships with financial institutions or investors who can provide financial support to farmers so that farmers can take advantage of market trends so they can compete with other commodities (W2, T1) 2. Improve the vegetable cultivation process by grouping plant types so as to minimize losses due to errors in the cultivation process (W3, W4, T2). 3. increasing new innovations in packaging vegetable commodities so that commodity marketing expands and commodity prices become high (W1, T3, T4)

Source: Processed Primary Data, 2024

Alternative Strategy for Kangkung Commodity Development in West Lombok Regency. SO (Strength - Opportunities) strategy is intended to formulate an effective strategy by maximizing the strengths that are owned to utilize existing opportunities to achieve goals, can be done with alternative strategies.

Through SWOT matrix analysis, the strategy for developing water spinach commodities in West Lombok Regency is obtained by utilizing internal and external factors. The combination of each of these factors produces 17 strategic factors that need to be considered. Based on the 17 strategic factors for developing water spinach commodities, 3 (three) selected strategies are then determined as a priority scale for developing the intended strategy as explained below.

1. Expanding market development with the support of partners and institutions from both the private and state sectors. The existing market can market some water spinach to the provincial market, but there are not many and various types of commodities that can be sent to foreign markets, so with the support of partners and institutions, it is hoped that it can increase the market reach of water spinach commodities. By increasing market reach, it will be easier for consumers to obtain water spinach so that West Lombok Regency water spinach can be more widely known.

2. Utilization of technology as well as farmer skills and experience in increasing quality production, competing in the market and being able to meet consumer needs and demands.

The water spinach produced by farmers is already good, but it is necessary to increase the quality of production, by utilizing existing technological advances such as the use of agricultural machinery, product packaging to upstream to downstream processing methods and improving product quality better, and the experience that farmers already have can be used to optimize quality products so that they can compete in the market and can meet consumer needs.

3. Optimizing the use of infrastructure and utilization of technology and information to meet community consumption of water spinach

Optimization of infrastructure that is already owned by farmers and has been provided by related institutions creates an opportunity to meet consumer needs for water spinach commodities. Infrastructure such as road access to storage warehouses needs to be optimized so that the products produced can be stored and marketed according to market demand, and farmers need to pay attention to infrastructure so that the production and marketing processes become efficient and optimal.

IV. CONCLUSION

Based on the results of the analysis and discussion, several conclusions can be drawn as follows:

1. The leading commodities of the Horticulture sub-sector in West Lombok Regency are water spinach, jackfruit, cayenne pepper, water apple, long beans, rambutan, ginger, cardamom and Laos.
2. The strategy for developing water spinach commodities in West Lombok Regency is to expand the market with the support of partners and institutions as well as the use of technology and optimization of the use of infrastructure in order to increase quality production and be able to compete in the market and meet consumer needs and demands.

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