BENGKULU COFFEE PRODUCTION DEVELOPMENT

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ABSTRACT

As an agricultural community, in general, Bengkulu province has gardening. The largest plantations for the community are oil palm, rubber and coffee commodities. People depend their lives on abundant natural potentials but have not been able to manage them properly to stimulate added value. All potentials are still managed traditionally so that productivity is very low. The province of Bengkulu is the 3rd largest national coffee producer, but so far Bengkulu coffee is sold through Lampung and Palembang so it is not known outside. The problems are: The low income and welfare of the coffee farmers in Bengkulu province; The promotion and branding of Bengkulu coffee has not been recognized either nationally or internationally. The intention of compiling the Bengkulu coffee development master plan. This research includes descriptive research, namely explaining factual phenomena conceptually. The factual findings of the research are verified with existing theoretical concepts. This research uses a SWOT analysis method/technique. This analysis is used to determine the most appropriate strategy in developing Bengkulu coffee marketing/branding and developing human resources for coffee farmers. From the results of the research and discussion, it was concluded that there was still a need for greater effort or strength to overcome various kinds of weaknesses and take advantage of the opportunities that existed to overcome obstacles / obstacles. With the following development efforts: 1) Optimizing cooperation networks, both government and related stockholders; 2) Optimizing priority programs for superior coffee production to benefit special economic zones; 3). Following up the MOU with KPTIK and Pemprop Bengkulu to realize Bengkulu as a national coffee area; 4). Fighting for Bengkulu to get HAKi to increase regional competitiveness; 5) Increased production of superior coffee already has sufficient value in the eyes of consumers; 6) Utilization of technology supported by a conducive investment climate; 7) Improved training for farmers who are right on target; 8) Empowerment of culture / arts that support increased demand for coffee; 9) Bengkulu Coffee development is in line with the policy of the President of the Republic of Indonesia, and responds to the implementation of the 2020 visit wonderfull tour; 10) Optimizing land use to attract investors. 11) Empowerment enhancement of the spirit of local farmers to produce quality coffee. 12) Make a price contract so that farmers are protected, so that coffee farmers are protected. 13) Encouraging farmers to plant superior seed coffee to anticipate the need for quality coffee. 14) Utilizing access to technology to meet coffee demand.

Keywords : Coffee; Development; Production; SWOT analysis

INTRODUCTION

As an agrarian society, generally Bengkulu province has gardens. The community's largest plantations are oil palm, rubber and coffee commodities. The community depends on the abundant natural potential but has not been able to manage it properly to stimulate added value. All potentials are still managed traditionally so that their productivity is very small. Bengkulu province is the 3rd largest national coffee producer, but so far Bengkulu coffee is sold through Lampung and Palembang, so it is not well known to the outside.

Based on data from the Department of Horticultural Food Crops and Plantations of Bengkulu Province in 2018, it was recorded that Bengkulu Robusta coffee plantations had an area of 85,929 hectares with a total production of 59,429 (tons), among others, located in North Bengkulu with an area of 5,166 hectares 3,300 tons, Muko-muko Regency 94 hectares 50 tons, rejang lebong 23,037 hectares 15740 tons Kepahiang 24,686 hectares 19,204 tons, Lebong 8,097 hectares 4,995 tons, South Bengkulu 2,682 hectares 2,044 tons, total 7,983 hectares 4,882 tons, Kaur 9,770 hectares 6,021 tons and Bengkulu City 4 hectares 3 tons middle of 4,411 hectares 3,190 tons. It is also recorded that Bengkulu Arabica coffee plantations have an area of 1,536 hectares with a total production of 789.17 tons, including located in North Bengkulu with an area of 652 hectares with 274 tons, Muko-muko Regency 9 hectares, Rejang Lebong 515 hectares 179 tons, Kepahiang 60 hectares 32 tons, and Bengkulu Tengah 300 hectares 304 tons.

The problems that exist in Bengkulu coffee are from the upstream side and from the downstream side, from the upstream side including; difficulty in getting access to subsidized fertilizers, increasing attacks by plant-disturbing organisms, low plant productivity, conventional coffee management processes, unsupportive infrastructure conditions, security of management before harvest, most of the products produced are coffee beans, limited access to capital for farmers , farmers' institutions are still weak and the management of specialty coffee is not yet optimal, while from the downstream side as follows; unavailability of a coffee trade/marketing chain, lack of promotion and marketing for superior coffee products, lack of youth interest in coffee empowerment and management (Pezzey, 1992). Example (Niken Dwinora; Eko Sumartono; and Bambang Sumantri, 2018) explained with Luwak Coffee Kepahiang, B / C Ratio analysis showed that these business ws not feasible because income is lower than the total production cost.

To increase the productivity of coffee plants, it can be done by performing optimal plant maintenance(Sutamihardja, 2004). Maintenance of coffee plants includes weed control, pruning, pest control and fertilization. Weed control that is mostly done by coffee farmers is chemical control. Weeds that often grow and harm coffee plants are Imperata sylindrica, teki grass (*Cyperusrotundus*), Cynodon dactylon, Salvias, Digitaria, star fruit (*Oxalisspp*), and Mikaniamicrantha. The method of weed control that is mostly done by coffee farmers is chemical control using herbicides with irregular doses and spraying times. In the cultivation of coffee plants, the use of quality planting material is one of the most decisive factors in the success of planting. Apart from being determined by plant management factors (plant maintenance), the use of quality planting material will determine the level of productivity that will be obtained. Partially, the factors have a significant influence are experience, motive and class social (Rum, 2021).

The potential advantages possessed by Bengkulu coffee in terms of land area,

production and distinctive taste make the Governor of Bengkulu eager to make Bengkulu coffee better known nationally and internationally, by optimizing production and coaching upstream farmers and marketing Bengkulu coffee globally.

Welcoming the Bengkulu Governor's wish, the Bengkulu coffee product development document has been compiled, which later is expected to be a source of information and reference. Purpose in the development of Bengkulu coffee :

1. To increase the income of Bengkulu province coffee farmers
2. Improving the promotion and branding of Bengkulu Coffee at the national and international level.
3. To Develop the knowledge of farmers and field officers on coffee cultivation technology farmers
4. Increasing the role and function of farmer institutions in coffee plantation areas;
5. Prepareing technological innovations to increase coffee production and quality;

Beneficiaries

The preparation of this Bengkulu coffee master plan is as a reference for stakeholders in:

1. Policy makers at various levels of government in Bengkulu;
2. Implementation and development of coffee programs at various levels of government in Bengkulu;
3. Poktan/Gapoktan and rural communities in the agricultural environment as targets for the implementation of the KOPI program;
4. Private parties who will develop KOPI;
5. Academics in implementing and assisting the development of the KOPI Program in Bengkulu;
6. The legislative body in implementing and developing KOPI in Bengkulu;

7. The wider community in the implementation and development of the KOPI program in Bengkulu;
8. To equalize perceptions in the operational implementation and development of an integrated and sustainable Coffee

Coffee is a drink brewed by coffee beans that have been roasted and ground into powder. Coffee is a commodity in the world that is cultivated in more than 50 countries. There are two varieties of coffee trees that are generally known, namely Robusta Coffee (Coffea canephora) and Arabica Coffee (Coffea arabica).

Processing of coffee before it can be drunk goes through a long process, namely harvesting ripe coffee beans either by machine or by hand, then processing the coffee beans and drying them before turning them into logs. The next process is roasting with varying degrees. After roasting the coffee beans are ground or ground into coffee grounds before the coffee can be drunk.

History records that the discovery of coffee as a nutritious and energy drink was first discovered by the Ethiopians on the African continent around 3000 years (1000 BC) ago. Coffee then continues to grow until today to become one of the most popular drinks in the world which is consumed by various groups of people. Indonesia itself has been able to produce more than 400 thousand tons of coffee per year. Usually these friends or groups in addition to providing information also provide opinions and exchange stories related to the coffee shop.(Ajiwibani, M. P., & Edwar, 2015) With an attractive taste and aroma, coffee can also reduce the risk of developing cancer, diabetes, gallstones, and various heart (cardiovascular) diseases.

The word coffee itself originally comes from Arabic: *qahwah* which means

strength, because at first coffee was used as a high-energy food. The word qahwah again changed to kahveh which came from Turkish and then changed again to koffie in Dutch. The use of the word coffee was immediately absorbed into the Indonesian language into the word coffee that is known today.

Coffee is an important type of beverage for most people around the world. conformity as a change in behavior or beliefs as a result of real or intangible pressure from group (Robert A Baron; Donn Byrne, 1991). Not only because of the enjoyment of coffee drinkers but also because of the economic value for countries that produce and export coffee beans (such as Indonesia). To some this product, made from the roasted beans of the coffee plant (a flowering plant of the Rubiaceae family), is referred to as "the second most legally traded commodity" in human history.

The coffee sold in the world is usually a combination of roasted beans from two varieties of the coffee tree: arabica and robusta. The difference between these two varieties mainly lies in their taste and caffeine levels. Arabica beans, which are more expensive on the world market, have a milder taste and have 70% lower caffeine

content than robusta beans. (Maciejewski, G., Mokrysz, S., & Wroblewski, 2019) Explained that consumers who consume coffee not only because of the taste of the coffee, but also because of the appearance and taste motifs served on the coffee. Another study conducted by (Teixeira, 2020) and (Song, H., Bae, S. Y., & Han, 2019), identified the coffee consumption experience by making consumers as comfortable as possible such as trendy and comfortable coffee shop designs, providing delicious additional food menus, providing wifi services, variants special coffee taste, and friendly environment.

Coffee development requires government intervention for its development in the context of the arrangement of regional arrangements and development programs that are integrated with the development of other sectors in general and the agricultural sector in particular(Emil, 1990). (Fery Murtiningrum; Gracia Gabrienda, 2019) It was found that the coffee marketing channel occurred in Rejang Lebong Regency had 5 types of marketing channels. Marketing margins and the biggest profits are obtained by large traders Interventions that can be carried out by the government can be seen in

Figure 1. Master Plan Development Diagram Bengkulu Coffee

(Province, 2019)Based on the diagram of the coffee development master plan above, a framework of thought is formulated in the preparation of the Coffee master plan design as shown in Figure II.2, below:
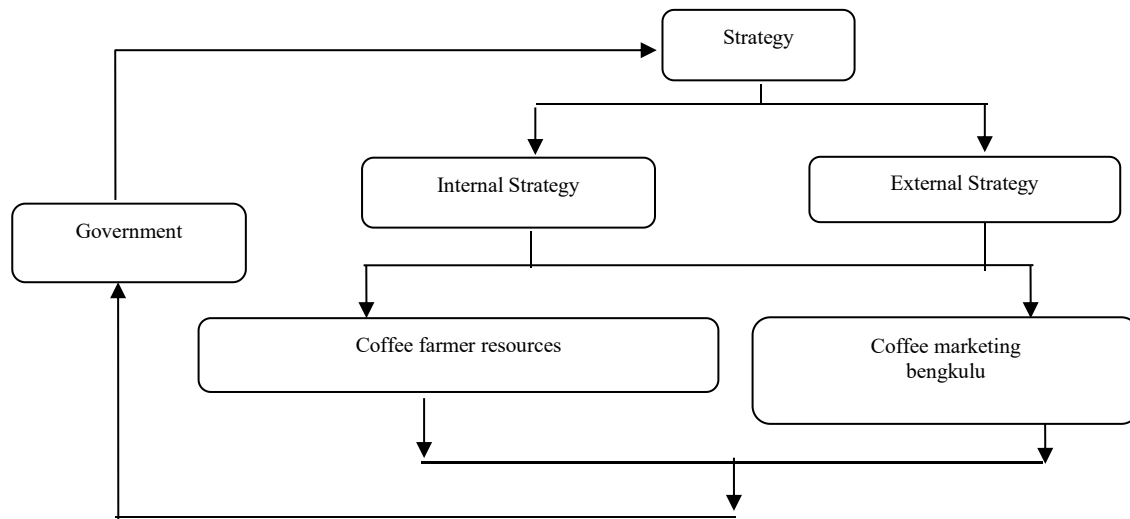

Figure 2. Design Framework Strategy Map and Road Map

METHODOLOGY
3.1 RESEARCH METHOD

This research includes descriptive research, namely explaining factual phenomena conceptually. The factual findings of the research are verified with existing theoretical concepts. The approach taken is a survey of a number of respondents selected based on certain criteria. The unit of analysis used in this research is coffee farmers, stakeholders, and relevant stakeholders as well as the local government of coffee producing districts, business actors/coffee traders in Bengkulu province.

3.2 TIME, PLACE AND POPULATIONS OF RESEARCH

The population of this research object is coffee farmers, stakeholders, and related stake holders, coffee connoisseurs, Bengkulu provincial government and districts in 8 (eight) districts, namely: Kepahiang, Rejang Lebong, Lebong, Seluma, South Bengkulu. , Kaur, Central Bengkulu, North Bengkulu, as the population of Bengkulu coffee development respondents, the total number of respondents is 400 (four hundred) respondents.

Sampling in these 8 districts is because these areas are producers of robusta and arabica coffee in Bengkulu province.

Table 1. List of Respondent Samples for Supporting Questionnaires

No	Respondent	Amount Respondent
1	Governor of Bengkulu	1
2	Kaur District Regent	1
3	South Bengkulu Regency Regent	1
4	Regent of Seluma	1
5	North Bengkulu Regency Regent	1
6	Regent of Lebong Regency	1
7	Regent of Rejang Lebong Regency	1
8	Regent of Kepahiang	1
9	Central Bengkulu Regent	1
10	Provincial/District DPR	9
11	Provincial/District Agriculture Office	9
12	Provincial/Regency Office of Trade and Industry	9
13	Provincial/District Office of Cooperatives and SMEs	9
14	Provincial/District Village Community Empowerment Service	9
15	Provincial/District Tourism Office	9
16	Provincial/District Environmental Service	9
17	Head of Bank Indonesia Representative Office Bengkulu Province	1
18	Chancellor of State/Private Universities in Bengkulu Province	7
19	Head of Bengkulu Province OJK Office	1
20	Head of PT. Pelindo Bengkulu Branch office	1
21	Head of TNKS Bengkulu Province	1
22	Head of BKSDA Bengkulu Province	1
23	Principal of the Kelobak Agricultural Development School (SPP)	1
24	Head of NGO in Bengkulu Province	1
25	Head of the Bengkulu Province Banking Headquarters	8
26	Head of the Bengkulu Province Banking Branch Office	26
27	AEKI Chairman	1
	Amount	112

Source: Primary data analysis, 2021

Table 2. List of Respondents Sample for Upstream, Downstream and Production Questionnaires

NO	SAMPLE OF RESPONDENTS	AMOUNT
1	Kepahiang district - Farmer, GAPOKTAN and Coffee instructors and traders	45
2	rejang lebong district - Farmer, GAPOKTAN and Coffee instructors and traders	40
3	Lebong County - Farmer, GAPOKTAN and Coffee instructors and traders	40
4	Kaur District - Farmer, GAPOKTAN and Coffee instructors and traders	35
5	Seluma County - Farmer, GAPOKTAN and Coffee instructors and traders	30
6	North Bengkulu Regency - Farmer, GAPOKTAN and Coffee instructors and traders	30
7	South Bengkulu Regency - Farmer, GAPOKTAN and Coffee instructors and traders	25
8	Central Bengkulu Regency - Farmer, GAPOKTAN and Coffee instructors and traders	25
9	Coffee Manager/Coffee Trader/Coffee Distributor in Bengkulu City	18
Amount		288

3.3 SAMPLE DETERMINATION METHOD

This research variable uses SWOT modeling, the quadrant position for the SWOT strategy can be calculated using a combination of ratings and weights, by collecting information through a questionnaire with the target being the resources of coffee farmers, coffee business actors/traders, stakeholders, local governments and technical stakeholders. related. Then the calculation of the weighting based on the results of filling out the questionnaire for further analysis is carried out. The model used to calculate the weights is as follows:

Table 3: SWOT Weight Model

Code	Information
RD	Low (Strengths, Weaknesses, Opportunities, Threats), if the issue does not greatly affect current conditions
CP	Enough (strengths, Weaknesses, Opportunities, Threats), if the issue does not affect current conditions
IT	High (Strengths, Weaknesses, Opportunities, Threats), if the issue cannot be justified at this time
ST	Very High (Strengths, Weaknesses, Opportunities, Threats), if the issue affects current conditions

Source: Rangkuti (2014)

Because the number of weights must be equal to 1 (one) for each evaluation matrix, the weights for each respondent do not have to be the same, depending on the number

of variables selected, or can be formulated as follows:

$$A(ST) + B(TI) + C(CP) + D(RD) = 1.00 \dots\dots\dots\dots\dots\dots\dots (3.1)$$

Where:

A = the number of ST in one evaluation matrix

B = the number of IT in one evaluation matrix

C = the number of CP in one evaluation matrix

D = the number of RDs in one evaluation matrix

SB = weight value Very Good

BA = Good value weight

CP = Sufficient value weight

KR = weight value Less

To make it easier, the value of the comparison ratio between RD to ST, is made equal to 2, so that:

$$RD:CP:TI:ST = 1:2:3:4:8:16\dots\dots$$
$$\dots\dots\dots\dots(3.2)$$

If then : $ST = x$

$$TI = \frac{1}{2}x\dots\dots\dots\dots\dots\dots\dots\dots(3.2.1)$$

$$CP = \frac{1}{4}x \dots\dots\dots\dots\dots\dots\dots (3.2.2)$$

$$RD = \frac{1}{8}x\dots\dots\dots\dots\dots\dots\dots\dots(3.2.3)$$

$$SK = \frac{1}{16}x\dots\dots\dots\dots\dots\dots\dots(3.2.4)$$

So that:

$$A(x) + B\left(\frac{1}{2}x\right) + C\left(\frac{1}{4}x\right) + D\left(\frac{1}{8}x\right) +$$
$$E\left(\frac{1}{16}x\right) = 1.00\dots\dots \quad (3.3)$$

$$x = 16/(16A + 8B + 4C + 2D + E)\dots$$
$$\dots\dots\dots\dots\dots\dots\dots\dots\dots(3.3.1)$$

$$x = SB\dots\dots\dots\dots\dots\dots\dots(3.3.2)$$

The model used to calculate the Rating is as follows:

Table 4 : SWOT Rating Model

Information	Score
The issues raised are not urgent	1
The issues raised are less urgent	2
The issues raised are urgent	3
The issues raised are very urgent	4

Source: Primary data analysis, 2021

Each respondent is free to enter a rating according to his opinion for each dimension attribute. After obtaining the weight and rating values, the total value for each dimension is calculated based on the following formulation:

Value (strength–weakness) = (rating(Sn)xweight(Sn)) + (rating(Wn)xweight(Wn))............. (3.4)

Value(opportunity–threat)=∑ (rating(On) x weight(On)) +∑(rating(Tn) x weight(Tn))……............... .... (3.5)

3.4 DATA TYPES AND SOURCES METHOD

Types and sources of data to be collected include:

1. Primary data

Primary data is data that will be obtained through direct interviews at the research site. Data related to primary data include the following; questionnaires submitted to coffee farmers, business actors/coffee traders, stakeholders, local governments and related technical stakeholders(Regulation, 2008).

2. Secondary data
1. Data obtained from the GRDP of Bengkulu province in 2018.
2. Report data from the Department of Food Crops, Horticulture and Plantation of Bengkulu Province in 2018.

The instrument used in this study was a questionnaire given to coffee farmers, business actors/coffee traders, local government stakeholders and related technical stakeholders

3.5 ANALYSIS METHOD

This research covers development strategy of Bengkulu coffee marketing/branding and human resource development strategy of coffee farmers .

This research uses a swot analysis method/technique. This analysis is used to determine the most appropriate strategy in developing Bengkulu coffee marketing/branding and developing human resources for coffee farmers. SWOT analysis is used considering the advantages of this analysis tool can determine the right strategy in making decisions for the implementation of the development strategy.

One method to find out the strengths, weaknesses, opportunities and threats of an organization is a SWOT analysis. (Rangkuti, 2014)SWOT analysis is an evaluation of the strengths and weaknesses, opportunities and threats from the environment. In SWOT analysis, the best strategy to achieve the mission of an organization is to: 1) exploit the opportunities and strengths of an organization, and at the same time; 2) neutralize the threat; 3) avoid or correct the weakness.
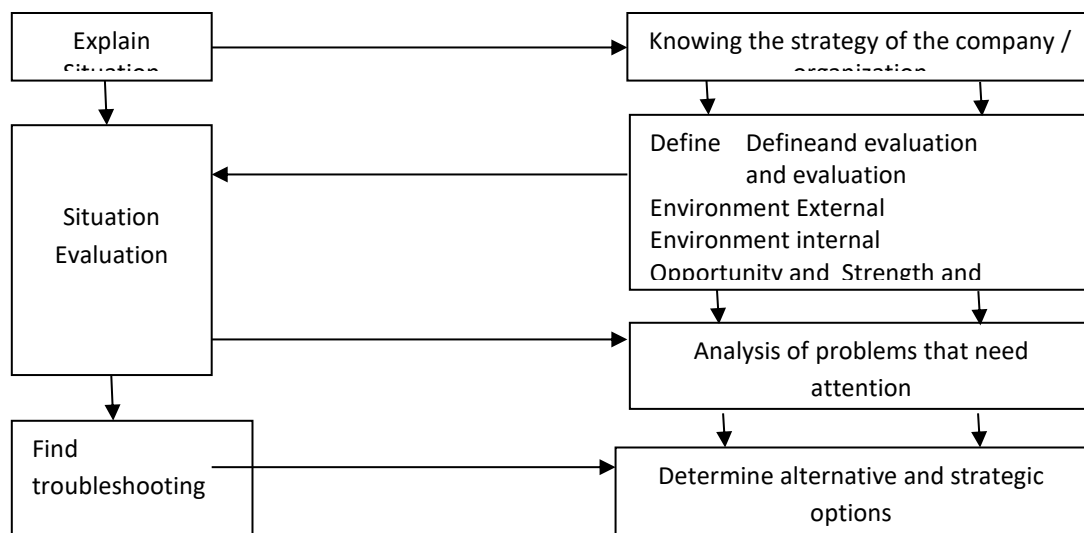
Source: (Rangkuti, 2014)
Figure 3. Diagram of the SWOT analysis process

RESULTS AND DISCUSSION

Bengkulu Province is located in the west of the Bukit Barisan mountains. The area of Bengkulu Province is approximately 1,991,933 hectares or 19,991.33 square kilometers. The area of Bengkulu Province extends from the border of West Sumatra Province to the border of Lampung Province and the distance is approximately 567 kilometers. (BPS Bengkulu Province, 2016).

Astronomically, Bengkulu Province is located between 2o16' North Latitude and 3031 South Latitude and between 101o01'-103o41'East Longitude. Meanwhile, if viewed from its geographical position, Bengkulu Province in the north is bordered by West Sumatra Province, in the south by the Indonesian Ocean and Lampung Province, in the west by the Indonesian Ocean and in the east by Jambi Province and South Sumatra Province. (BPS Bengkulu Province, 2018).

Bengkulu Province is directly adjacent to the Indonesian Ocean on a coastline of approximately 525 kilometers. The eastern part is hilly with fertile highlands, while the western part is a relatively narrow lowland, extending from north to south interspersed with undulating areas. (BPS Bengkulu Province, 2018).

The seasons that occur in Bengkulu Province as in other regions in Indonesia are known as two seasons, namely the rainy season (December-March) and the dry season (June-September) while April-May and October-November are transitional periods. (BPS Bengkulu Province, 2018).

Table 5. Area by Regency/City in Bengkulu Province 2018

Area code	County/City	Area (km2)	Percentage to Bengkulu Area
(1)	(2)	(3)	(4)
01	South Bengkulu	1,186.10	5.95
02	Rejang Lebong	1. 639.98	8.23
03	North Bengkulu	4. 424.60	22.21
04	Kaur	2. 369.05	11.89
05	Kepahiang	2. 400.44	12.05
06	Mukomuko	4. 036.70	20.27
07	Lebong	1. 929.00	9.68
08	Seluma	665.00	3.34
09	Central Bengkulu	1. 123.94	5.64
10	Bengkulu City	144.52	0.73
	Total number	19. 919.33	100.00

Source: BPS Bengkulu Province 2018

4.1. AREA AND PRODUCTION OF PEOPLE'S PLANTATIONS

There are 2 (two) types of coffee plants planted by coffee farmers in the Bengkulu Province, namely: Robusta Coffee and Arabica Coffee. (Regulation, 2010)These are spread over 8 (eight) regencies, namely: Kepahiang, Rejang Lebong, Lebong, Central Bengkulu, North Bengkulu, South Bengkulu, Seluma, Kaur districts. The districts of Kepahiang, Rejang Lebong and Lebong are the largest districts that produce Robusta and Arabica coffee. Robusta coffee plantation area is 84,763 ha and Arabica coffee plantation area is 1,536 ha.
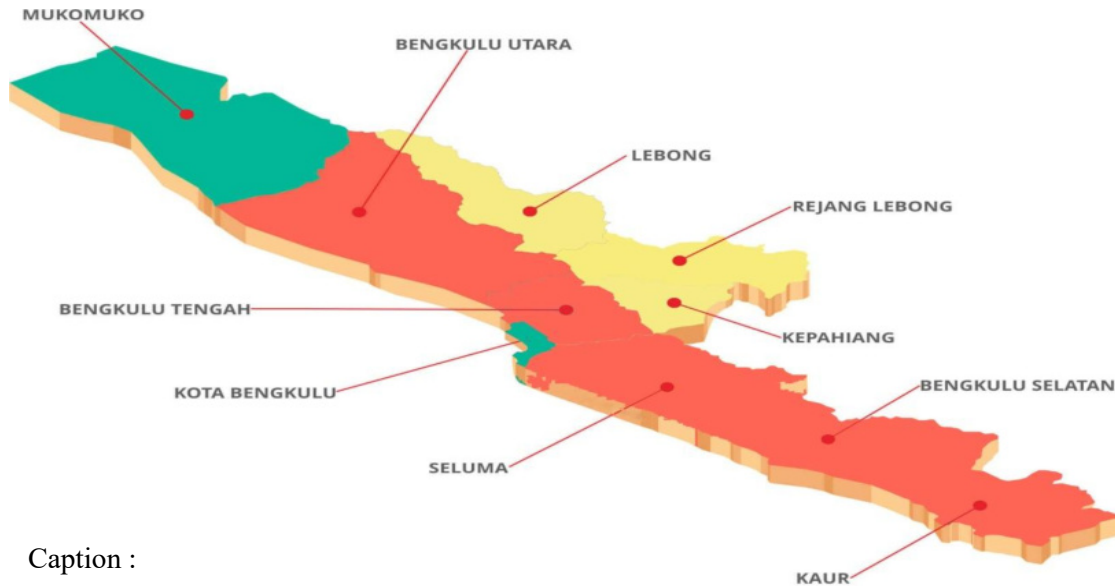
Caption :

Blue is a non-coffee producing area
Color Red Coffee producing area
Yellow is the biggest coffee producing region

Figure 4. Map of coffee plantation area in Bengkulu Province (*Bengkulu Province RPJMD*, n.d.)

4.2.1 Robusta Coffee

Robusta coffee (Coffee canephora) is this coffee has a bitter taste and is quite acid so that if it is made into a grounded coffee and consuming it with a high enough frequency it will cause an increase in stomach acid (Dionesius Budi; Wahyu Mushollaeni; Yusianto Yusianto; Atina Rahmawati, 2020). (Budiyanto Budiyanto; Damres Uker; Toto Izahar, 2021) Explained, Juremian and Kirmanan are other names for the Sintaro 2 and Sintaro 3 coffee clones, the national superior robusta coffee clones that have been cultivated in Sidorejo Village, Province Bengkulu. The quality and physical properties of coffee beans are evaluated according to the Indonesian National Standard (SNI) 01-02907-2008 procedure.

The area and production of smallholder plantations according to the type of commodity and plant conditions in 2019 for the type of robusta coffee with details are in the table below:

LUAS AREAL DAN PRODUKSI PERKEBUNAN RAKYAT
MENURUT JENIS KOMODITI DAN KEADAAN TANAMAN
ANGKA TETAP TAHUN 2018

No.	KOMODITI KAB./KOTA	LUAS AREAL (HA)				PRODUKSI (TON)	PRODUKTIVITAS (KG/HA)	PETANI (KK)	WUJUD PRODUKSI	RATA-2 LUAS KEBUN (HA)
		T B M	T M	TTM/TR	JUMLAH					
1	2	3	4	5	6	7	8	9	10	11
	KOPI ROBUSTA									
1	Bengkulu Utara	705	3.609	853	5.166	3.300	915	4.610	Kopi Beras	1,12
2	Mukomuko	13	80	1	94	50	625	163		0,58
3	Rejang Lebong	1.979	19.572	1.486	23.037	15.740	804	18.475		1,25
4	Kepahiang	1.110	23.566	10	24.686	19.204	815	13.593		1,82
5	Lebong	1.036	6.924	137	8.097	4.995	721	5.435		1,49
6	Bengkulu Selatan	130	2.527	25	2.682	2.044	809	3.623		0,74
7	Seluma	738	6.799	446	7.983	4.882	718	7.629		1,05
8	Kaur	2.010	7.578	182	9.770	6.021	795	7.343		1,33
9	Kota Bengkulu	-	4	-	4	3	660	5		0,81
10	Bengkulu Tengah	159	4.252	-	4.411	3.190	750	2.607		1,69
	PROVINSI	7.879	74.911	3.140	85.929	59.429	793	63.483		1,35

Figure 5. Robusta coffee plantation area and production

4.2.2. Arabica coffee

The area and production of smallholder plantations according to the type of commodity and the state of the plant, the tamarind numbers in 2019 for the type of Arabica coffee, with details in the table below:

LUAS AREAL DAN PRODUKSI PERKEBUNAN RAKYAT
MENURUT JENIS KOMODITI DAN KEADAAN TANAMAN
ANGKA TETAP TAHUN 2018

No.	KOMODITI KAB./KOTA	LUAS AREAL (HA)				PRODUKSI (TON)	PRODUKTIVITAS (KG/HA)	PETANI (KK)	WUJUD PRODUKSI	RATA-2 LUAS KEBUN (HA)
		T B M	T M	TTM/TR	JUMLAH					
1	2	3	4	5	6	7	8	9	10	11
	KOPI ARABIKA									
1	Bengkulu Utara	73	266	313	652	274	1.030	488	Kopi Beras	1,34
2	Mukomuko	-	5	4	9	0	34	38		0,24
3	Rejang Lebong	284	231	-	515	179	775	505		1,02
4	Kepahiang	1	59	-	60	32	542	191		0,31
5	Lebong	-	-	-	-	-	-	-		0,00
6	Bengkulu Selatan	-	-	-	-	-	-	-		-
7	Seluma	-	-	-	-	-	-	-		-
8	Kaur	-	-	-	-	-	-	-		-
9	Kota Bengkulu	-	-	-	-	-	-	-		-
10	Bengkulu Tengah	-	300		300	304	1.013	345		0,87
	PROVINSI	358	861	317	1.536	789,17	917	1.567		0,98

Figure 6. Area and production of Arabica coffee plantation

4.2. BENGKULU COFFEE DEVELOPMENT

The analysis used is a SWOT analysis with internal strategy factors (IFAS) and strategy external factors (EFAS)(Rangkuti, 2014). From the results of questionnaires and data processing, the following results are obtained:

Table 6. Strategies for developing Bengkulu coffee products, internal and external factors, supporting factors

	INTERNAL FACTORS		AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Strength	S1	The commitment of the regional head to develop Bengkulu coffee cultivation	349	3	0.203	0.609
	S2	The second priority program of Bengkulu Province is coffee as a leading commodity	344	3	0.200	0.601
	S3	MOU with KPTIK on Bengkulu coffee development	325	3	0.189	0.568
	S4	Geography in Bengkulu supports coffee cultivation	377	4	0.219	0.878
	S5	Bengkulu Province already has intellectual property rights (IPR) on coffee	323	3	0.188	0.564
TOTAL POWER			**1718**		**1,000**	**3.219**
Weaknesses	W1	Budget realization in the coffee sector is low, both at the Prov, District/City levels	258	3	0.218	0.654
	W2	Lack of synergy between government and stakeholders	307	2	0.259	0.519
	W3	Regulations regarding coffee are still few	306	2	0.258	0.517
	W4	The sustainability and sustainability of the coffee program is still weak	313	2	0.264	0.529
TOTAL WEAKNESSES			**1184**		**1,000**	**2.218**
STRENGTHSWEAKNESSES						**1.002**

Source: Primary data analysis, 2021

EXTERNAL FACTOR EVALUATION (EFE) MATRIX

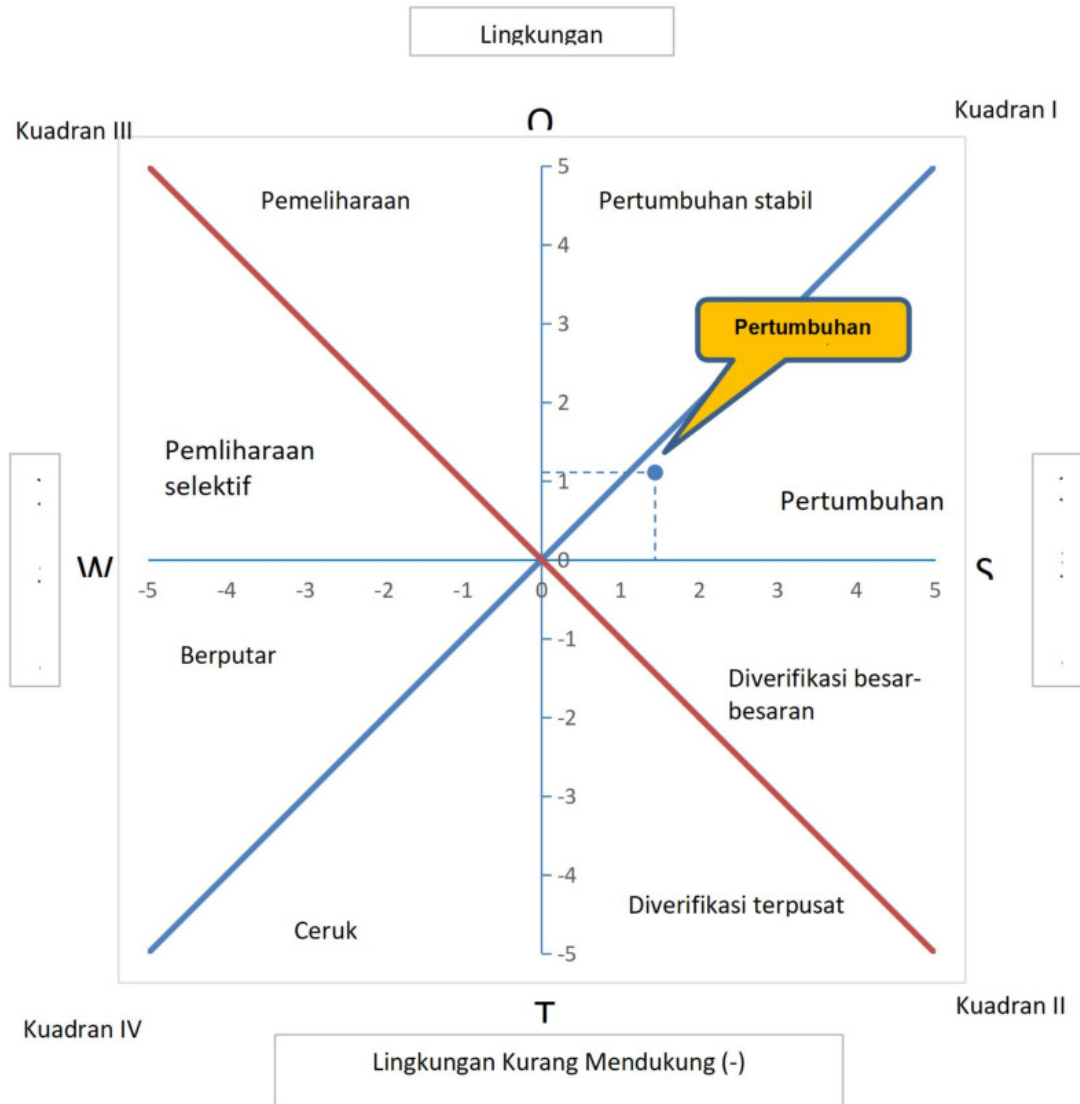|		EXTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Opportunities	O1	There is a cooperation network formed by regional leaders with coffee producing regions	336	3	0.322	0.965
	O2	There is a coffee-based special economic zone (SEZ)	329	3	0.315	0.944
	O3	Bengkulu is a coffee national area	380	4	0.364	1.455
	TOTAL OPPORTUNITY		**1045**		**1,000**	**3.364**
Threats (Threats)	T1	Provincial ego to create a coffee centralization system	245	3	0.205	0.615
	T2	Lack of support from banks in coffee cultivation	317	2	0.265	0.530
	T3	The cooperative relationship between local governments and coffee stakeholders has not been maximized	294	2	0.246	0.492
	T4	Baai Island port facilities are still inferior compared to other regional ports	340	1	0.284	0.284
	TOTAL THREAT OPPORTUNITIES		**1196**		**1,000**	**1,921 1,443**

Source: Research Results, processed data.

**Figure 7 Graph. Development of Bengkulu coffee, internal and external
factors of the supporting sector**

Table 7. Bengkulu Coffee Product Development Strategy Internal and External Factors Upstream Factors

		INTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Strength	S1	The type of coffee grown is the superior variety	272	3	0.230	0.691
	S2	There is already technology used in the planting process until it is finished	238	3	0.202	0.605
	S3	Local coffee training	214	2	0.181	0.362
	S4	Customs or arts or dances related to coffee	190	2	0.161	0.322
	S5	Land area or area conducive to coffee cultivation (Ha)	267	3	0.226	0.678
TOTAL POWER			**1181**		**1,000**	**2,658**
Weaknesses	W1	Difficulties in the process of changing the function of protected forest land into coffee plantations	280	2	0.187	0.375
	W2	There are low varieties of coffee seeds	248	3	0.166	0.498
	W3	The use of traditional technology is still low in the process of planting to picking	259	2	0.173	0.347
	W4	Local regulations related to coffee	263	2	0.176	0.352
	W5	The safety factor in growing coffee until it becomes a product that is ready to be sold is still lacking	263	2	0.176	0.352
	W6	Farmer education level	181	3	0.121	0.363
TOTAL WEAKNESSES			**1494**		**1,000**	**2.287**
STRENGTHSWEAKNESSES						**0.371**

Source: Primary data analysis, 2021

EXTERNAL FACTOR EVALUATION (EFE) MATRIX

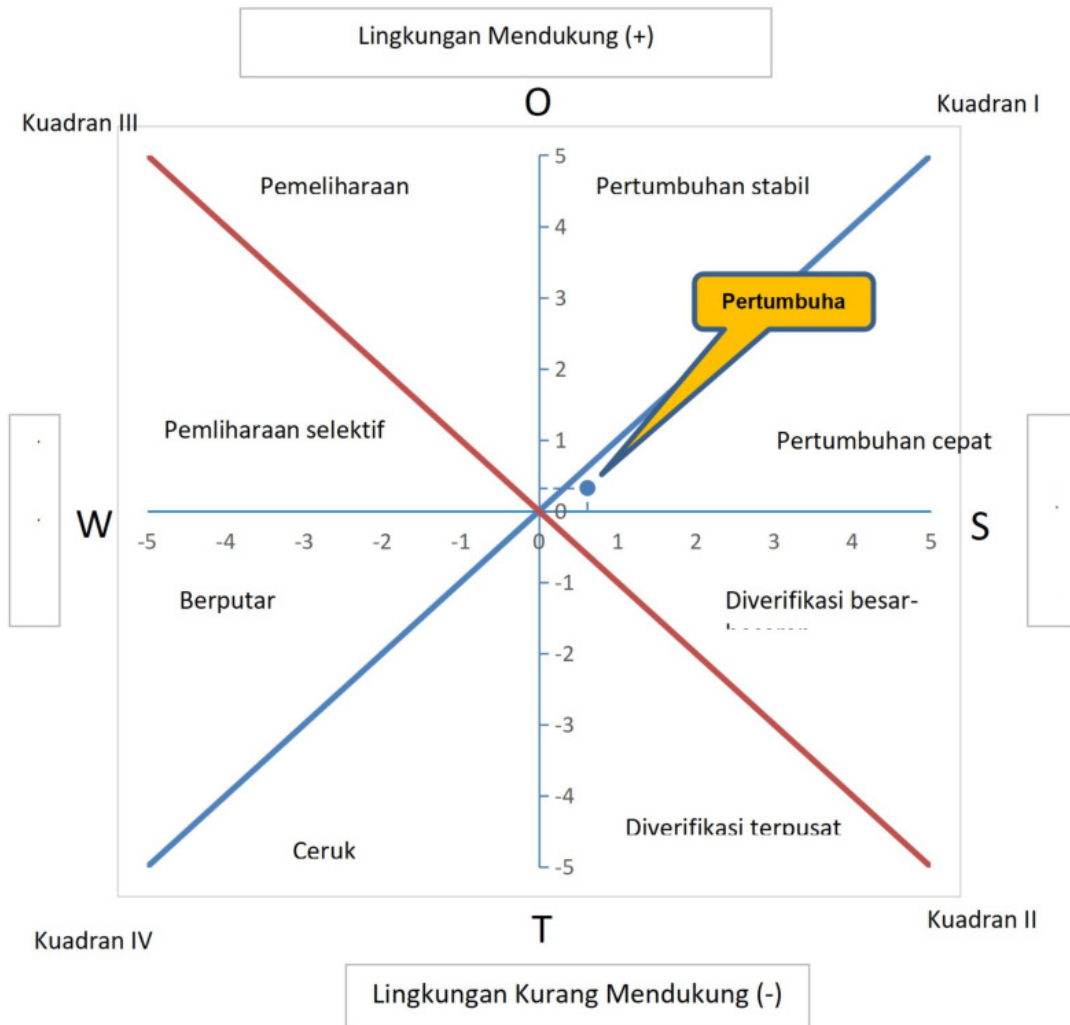|		EXTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Opportunities	O1	Bengkulu coffee has a pretty good value in the eyes of consumers	297	3	0.168	0.503
	O2	The climate of this area supports coffee cultivation	338	4	0.191	0.763
	O3	There is a lifestyle of hanging out in cafes for coffee while chatting in this area	251	2	0.142	0.283
	O4	The demand for Bengkulu coffee is increasing	314	3	0.177	0.532
	O5	The policy set by the President of the Republic of Indonesia regarding coffee development supports the development of Bengkulu coffee	262	3	0.148	0.444
	O6	The plan to visit wonderfull Bengkulu will increase coffee-based tourism	310	3	0.175	0.525
		TOTAL OPPORTUNITY	**1772**		**1,000**	**3.049**
Threats (Threats)	T1	There are verified other commodities	239	3	0.229	0.686
	T2	Other areas that have developed coffee	243	3	0.233	0.698
	T3	Brand image of coffee competitors outside Bengkulu	280	2	0.268	0.536
	T4	No zoning of coffee habitat	283	2	0.271	0.542
		TOTAL ACAMAN	**1045**		**1,000**	**2,461**
		OPPORTUNITIES				**0.588**

Source: Primary data analysis, 2021

Figure 8. Graph. Development of Bengkulu coffee, internal and external factors of the upstream sector

Table 8. Strategies for developing Bengkulu coffee products, internal and external factors, downstream factors

		INTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Strength	S1	Bag-quality coffee beans sell for a higher price	225	3	0.206	0.618
	S2	Availability of appropriate technology for coffee processing	205	3	0.188	0.563
	S3	Availability of local market, national market and international market for coffee	209	3	0.191	0.574
	S4	There are many types of attractive coffee packaging models	224	3	0.205	0.615
	S5	There is a potential for an ocean port, namely the Baai Island Port	229	3	0.210	0.629
		TOTAL POWER	**1092**		**1,000**	**3,000**
Weaknesses	W1	The level of knowledge of coffee farmers regarding the coffee harvesting process is still low	170	3	0.093	0.280
	W2	Coffee management is still traditional	194	3	0.107	0.320
	W3	Market penetration is still weak	205	2	0.113	0.225
	W4	Database on coffee in Bengkulu is still lacking	190	3	0.104	0.313
	W5	The type of coffee packaging used is very lagging	208	2	0.114	0.228
	W6	The coffee warehouse receipt system is not enough each	203	2	0.111	0.223
	W7	Coffee plant verification is not maximized	208	2	0.114	0.228
	W8	The government still has not carried out the role of a technical OPD assistant	220	2	0.121	0.242
	W9	The chain of trade is too long	223	2	0.122	0.245
		TOTAL WEAKNESSES	**1821**		**1,000**	**2.304**
		STRENGTHSWEAKNESSES				**0.696**

Source: Primary data analysis, 2021

EXTERNAL FACTOR EVALUATION (EFE) MATRIX

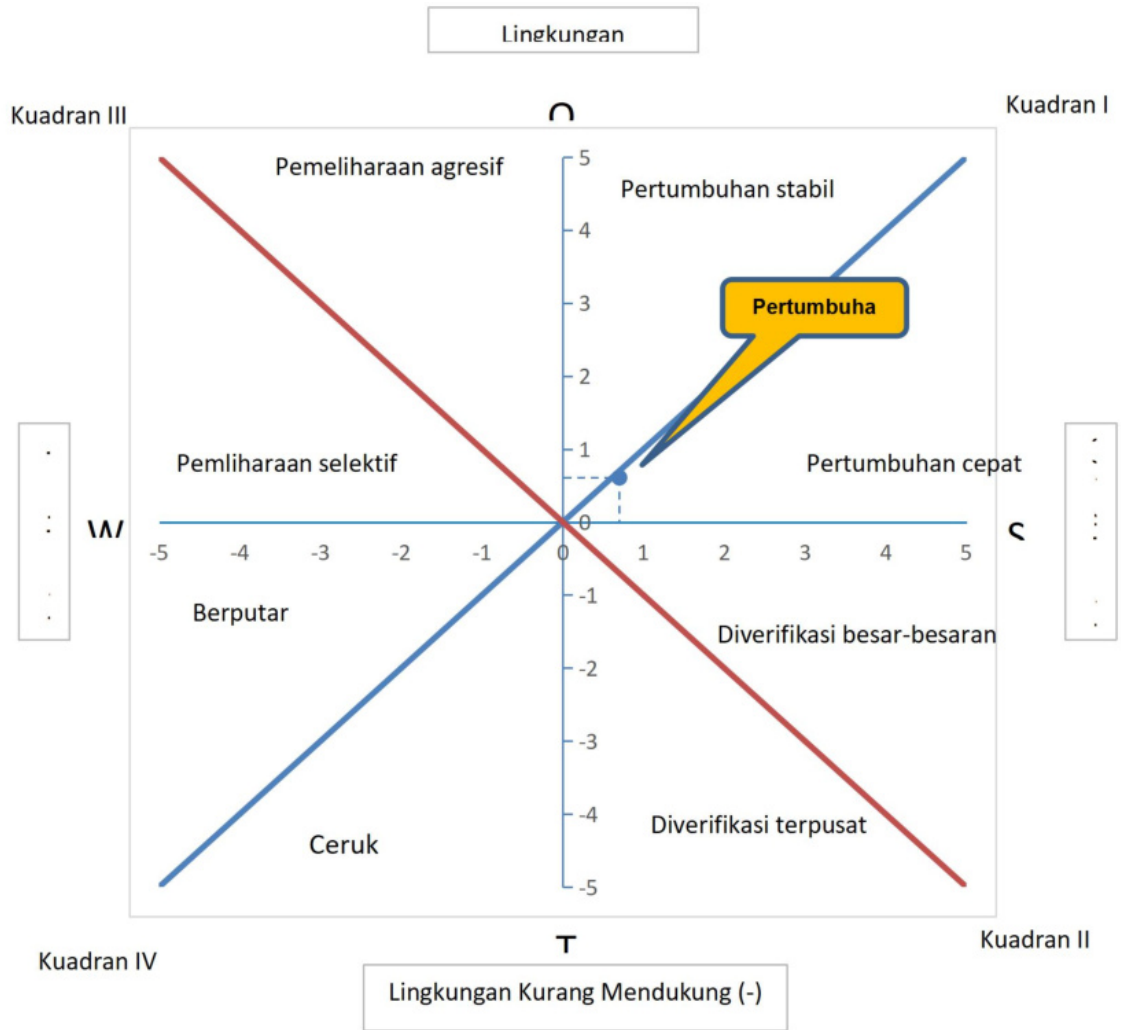|	EXTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Opportunities	O1 Coffee can be used not only for consumption but also for health and beauty	224	3	0.353	1.058
	O2 Verified coffee plants i.e. stems, flowers, leaves and seeds	210	3	0.331	0.992
	O3 Regulation of coffee capital investment in Bengkulu is easy to do	201	3	0.317	0.950
	TOTAL OPPORTUNITY	**635**		**1,000**	**3,000**
Threats (Threats)	T1 Coffee from outside the region is widely sold in Bengkulu	173	3	0.177	0.531
	T2 Farmers find it difficult to get capital because it is difficult to access capital from investors	194	3	0.199	0.596
	T3 Other regions already have good coffee marketing networks	198	2	0.203	0.405
	T4 The application of 3K agribusiness (quality, quantity and continuity) has been applied in other areas	203	2	0.208	0.416
	T5 There are no investors who are interested in investing in coffee in Bengkulu	209	2	0.214	0.428
	TOTAL ACAMAN	**977**		**1,000**	**2.376**
	OPPORTUNITIES				**0.624**

Source: Primary data analysis, 2021

**Figure. 9. Development of Bengkulu coffee, internal and external factors of
the downstream sector**

Table 9, Bengkulu coffee product development strategy, internal and external factors of production

		INTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Strength	S1	The land in this area is suitable for coffee cultivation	378	4	0.234	0.936
	S2	The spirit of farmers in growing coffee in the local area	372	4	0.230	0.921
	S3	The selling price of coffee benefits farmers	306	3	0.189	0.568
	S4	It's easy to get superior varieties of coffee seeds	289	3	0.179	0.537
	S5	Easy access to technology for increased productivity	270	2	0.167	0.334
TOTAL POWER			**1615**		**1,000**	**3.297**
Weaknesses	W1	Land management that is managed is not optimal	255	3	0.154	0.462
	W2	Capital for coffee cultivation management	277	2	0.167	0.335
	W3	Difficulty receiving new information about modern coffee cultivation technologies	269	3	0.162	0.487
	W4	Difficulty level of selling price prediction	294	2	0.178	0.355
	W5	Coffee farmer productivity level	295	2	0.178	0.356
	W6	Optimizing the use of coffee cultivation technology	266	3	0.161	0.482
TOTAL WEAKNESSES			**1656**		**1,000**	**2.477**
STRENGTHSWEAKNESSES						**0.820**

Source: Primary data analysis, 2021

EXTERNAL FACTOR EVALUATION (EFE) MATRIX

		EXTERNAL FACTORS	AMOUNT	RATING	WEIGHT (%)	WEIGHT X RATING
Opportunities	01	Many investors are interested in quality coffee beans	312	3	0.195	0.585
	02	Bengkulu coffee is considered quality coffee	322	3	0.201	0.603
	03	The climate in this area supports coffee cultivation	356	4	0.222	0.889
	04	Lifestyle change hanging out at the cafe for coffee	263	2	0.164	0.329
	05	The number of requests for coffee	348	3	0.217	0.652
		TOTAL OPPORTUNITY	**1601**		**1,000**	**3.058**
Threats (Threats)	T1	The condition of the area is not safe for coffee cultivation	270	3	0.232	0.695
	T2	Other coffees are better in terms of quality and brand image	292	2	0.250	0.501
	T3	Farmers have no bargaining power	302	2	0.259	0.518
	T4	Plant pest organisms (OPT) are eradicated	302	2	0.259	0.518
		TOTAL ACAMAN	**1166**		**1,000**	**2.232**
		OPPORTUNITIES				**0.827**

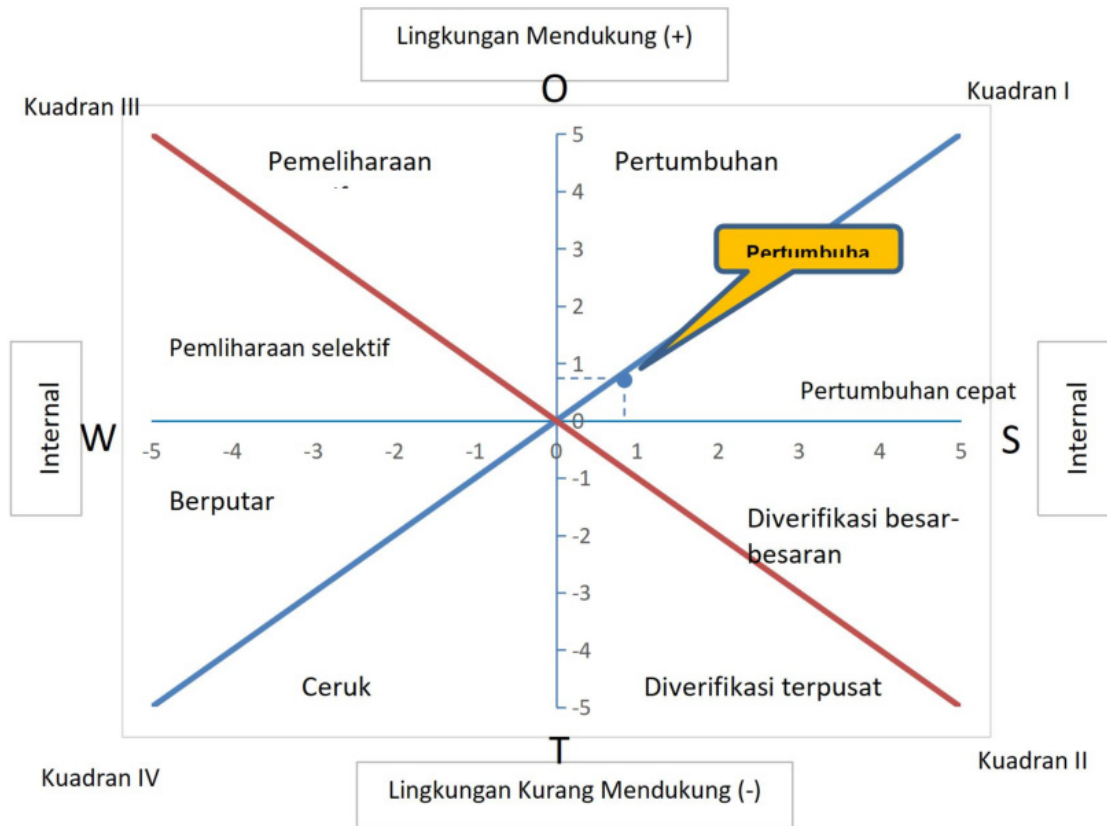Source: Primary data analysis, 2021

Figure 10. Development of Bengkulu coffee, internal and external factors in the production sector

Strength-Opportunities (SO) Strategy

The strategy chosen by SO is in quadrant I with an aggressive/development strategy with relatively low conditions (0.371 ; 0.588). This means that greater efforts or strengths are still needed to overcome various kinds of weaknesses and take advantage of existing opportunities to overcome obstacles/obstacles. With the following development efforts:

1. Increased production of superior coffee already has sufficient value in the eyes of consumers.
2. Utilization of technology supported by climate conducive investment.
3. Improved targeted farmer training.
4. Empowerment of culture/art that supports increasing demand for coffee

5. The development of Bengkulu Coffee is in line with the policies of the President of the Republic of Indonesia, and answer the implementation of the 2020 visit wonderfull tourism.

Strength-Opportunities (SO) Strategy

The strategy chosen by SO is in quadrant I with an aggressive/development strategy with relatively low conditions (0.696 ; 0.624). This means that greater efforts or strengths are still needed to overcome various kinds of weaknesses and take advantage of existing opportunities to overcome obstacles/obstacles. With the following development efforts:

1. Increased knowledge of post-harvest coffee farmers to improve

the quality of coffee beans with the aim of increasing prices.
2. Increased use of appropriate technology to overcome traditional coffee management.
3. Optimizing local, traditional, and international markets to overcome weak market penetration.
4. Enhancement better coffee packaging, attractive hygiene.
5. Increasing land, sea or air transportation routes as well as establishing a marketing network for processed coffee beans as well as promotions.
6. Increasing the diversification of coffee product diversity.
7. Increasing the role of technical OPD in coffee development
8. Shorten the chain *supply* coffee trade to create efficiency and effectiveness.

Strength-Opportunities (SO) Strategy

The strategy chosen by SO is in quadrant I with an aggressive/development strategy with relatively low conditions (0.820 ; 0.827). This means that greater efforts or strengths are still needed to overcome various kinds of weaknesses and take advantage of existing opportunities to overcome obstacles/obstacles. With the following development efforts:
1. Optimizing land use to attract investors.
2. Increasing the empowerment of local farmers' enthusiasm to produce quality coffee.
3. Make price contracts so that farmers are protected, so that coffee farmers are protected.
4. Encourage farmers to plant superior coffee seeds to anticipate the need for quality coffee.

5. Leveraging access to technology meets the demand for coffee.

Strength-Opportunities (SO) Strategy

The strategy chosen by SO is in quadrant I with an aggressive/development strategy with relatively low conditions (1.002 ;1.443). This means that greater efforts or strengths are still needed to overcome various kinds of weaknesses and take advantage of existing opportunities to overcome obstacles/obstacles. With the following development efforts:
1. Optimizing the network of cooperation, both government and related stakeholders.
2. Optimizing priority programs for superior coffee production by utilizing special economic zones.
3. Following up on the MOU with KPTIK with the Bengkulu Provincial Government to realize Bengkulu as a national coffee area.
4. Fight for Bengkulu to get HAKi to increase regional competitiveness.

CONCLUSION

Greater efforts or strengths are still needed to overcome various kinds of weaknesses and take advantage of existing opportunities to overcome obstacles/obstacles. With the following development efforts:
1. To increase the income of Bengkulu province coffee farmers with Increased production of superior coffee already has sufficient value in the eyes of consumers; Utilization of technology supported by a conducive investment climate; Following up on the MOU with KPTIK with the Bengkulu

Provincial Government to realize Bengkulu as a national coffee area; Optimizing priority programs for superior coffee production by utilizing special economic zones; Make price contracts so that farmers are protected, so that coffee farmers are protected and Encourage farmers to plant superior coffee seeds to anticipate the need for quality coffee and Increasing the empowerment of local farmers' enthusiasm to produce quality coffee.

2. Improving the promotion and branding of Bengkulu Coffee at the national and international level with Optimizing the network of cooperation, both government and related stockholders; Fight for Bengkulu to get IPR to increase regional competitiveness; and The development of Bengkulu Coffee is in line with the policies of the President of the Republic of Indonesia, and answers to the implementation of the 2020 visit wonderfull tourism.

3. To Develop the knowledge of farmers and field officers on coffee cultivation technology farmers is Improved targeted farmer training;

4. Increasing the role and function of farmer institutions in coffee plantation areas; with Empowerment of culture/art that supports increasing demand for coffee;

5. Prepared technological innovations to increase coffee production and quality with Leveraging access to technology meets the demand for coffee.

RECOMMENDATION

1. Setting a master plan, with an operational strategy map and roadmap.
2. Decoffee development science in a commodity development cluster with the main priority being education and culture-based coffee with a mass visit market segment, followed by the second priority cluster for the nature-based coffee segment (small-medium scale).
3. Undrawg investors to provide facility support and technology support in a productive partnership model between investors-community and government.
4. Development of human resources for the apparatus and the community (farmers) with a new culture of tourism service industry players (including building a pioneer cadre of coffee managers in rural areas).

1. Practice consistent short and medium term development, full of commitment with achievement ambition.
2. Undrawg parties both external to the government and OPD to support development in a synergy with maximum roles and contributions.

CONGRATULATIONS

Expressing gratitude to all respondents starting from coffee farmers, coffee traders, MSME groups downstream of coffee products which are spread in eight coffee-producing districts in Bengkulu province; Kepahyang Regency, Rejang Lebong, Lebong Regency, North Bengkulu, Central Bengkulu, Seluma, South Bengkulu, Kaur and all the stack holders who have helped this research.

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