Marketing Strategy of OSE Robusta Coffee-Argopuro Mountain, Jember District

Nita Kuswardhani[1, a] and Ratnawati[1]

Author Affiliations
[1]*Agricultural Industrial technology Study Program – Faculty of Agricultural Technology, University of Jember*

Author Emails
[a] *Corresponding author: nita.ftp@unej.ac.id*

Abstract. Marketing is becoming a crucial aspect for agricultural businesses because there is a marketing planning process and implementation of the conception, pricing, determination process, product, promotion, place or distribution, and social and managerial approach. Competition in coffee causes robusta coffee produced from the Argopuro mountains to require an appropriate marketing strategy. The research goal is 1) to determine the factors that influence the choice of marketing channels robusta coffee at the slope of Argopuro mountain Bangsalsai, Jember, 2) formulate a marketing strategy for Robusta coffee -slope of Argopuro mountain Bangsalsai, Jember. Methods of analysis used logit analysis to know the factors that influence and SWOT analysis for the suitable marketing strategy formulation and the study of the QSPM to see the priority strategies used. The results showed that the real against the marketing channel selection is the income and the attachment to the contract. The best marketing strategy of robusta coffee on the slope of the Argopuro mountains from Tugusari and Curah Kalong village, Bangsalsari, was the strengthening coffee branding, followed by improving on quality and sortation process.

Keywords: marketing, robusta coffe, Argopuro mountain.

INTRODUCRTION

The plantation subsector is one of the most important agricultural subsectors and the country's largest foreign exchange earner besides oil and gas. The plantation commodity that is widely cultivated by plantation farmers in Indonesia is coffee, especially robusta coffee. Indonesia is one of the largest coffee producers in the world with production reaching 639 thousand tons in 2016 [1]. Indonesia's coffee production is ranked fourth largest after Brazil, Vietnam, and Colombia. Of Indonesia's total coffee production, around 67% of coffee is exported while the remaining 33% is used to meet domestic needs.

Currently, Indonesian coffee plantations cover a total area of 1.23 million hectares (933 million hectares of robusta coffee plantations and 307 million hectares of arabica coffee plantations). More than 90% of the total plantations are cultivated by small-scale farmers, while one of the regions that contributes to coffee production is East Java. This province at the very tip of Java recorded an increase in coffee production in 2016 of up to 67,000 tons compared to the same period the previous year which was only 65,000 tons. According to the intensity of coffee cultivation in the East Java Plantation Community Industrial Zone (KIMBUN), there are only two areas that show a relatively intensive level of land use, one of which is the Ijen-Raung-Argopuro area covering Bondowoso Regency (5,633 ha), Banyuwangi (3,857 ha), Jember (7,329 ha), Situbondo (1,981 ha) [2].

Jember Regency, especially the slopes of the Argopuro mountains, is an area that has high potential and opportunities for planting coffee commodities. The development of a coffee area, production, and productivity in Jember Regency over the three years, from 2013 to 2015, has increased. The harvest area in 2013 was 3,254.05 ha, in 2014 it was 3,275.58 ha, and in 2015 it was 3,280.26 ha. Coffee production from 2013 to 2015 respectively was as follows 17,755.46 q, 24,915.30 q, and 24,697.56 q, while coffee productivity was 5.46 q/ha, 7.61 kw/ha, and 7.53 q/ha [3].

Based on preliminary research on the marketing of smallholder coffee by coffee farmers on the slopes of the Argopuro Mountains, there are two efficient marketing channels, namely marketing channel 1 (farmers – middlemen – exporters – consumers) and marketing channel 2 (farmers – middlemen – wholesalers – consumers) [4]. The existence of two efficient marketing channel options can make it easier for farmers to increase their coffee yields. However, in choosing the right marketing channel from these two channels, farmers are also faced with certain factors that can influence farmers to choose between the two marketing channels. Many competitors produce coffee from other regions, so when marketing coffee you will face intense competition, this is the background for conducting research related to the marketing of robusta coffee on the slopes of the Argopuro Mountains, Jember Regency.

METHODOLOGY

Research Location

The research conducted in Bangsalsari District, on the slopes of the Argopuro mountains, Jember Regency, specifically in Tugusari Village and Curah Kalong Village. The determination of this area was carried out based on the fact that on the slopes of the Argopuro mountains, Jember Regency, especially in this village, is an area that produces good quality of coffee commodities as same as other area. In fact exporters have begun to be interested in farmer's coffee in that area. Apart from that, the population and processing of robusta coffee in these two villages is the largest compared to others in Bangsalsari District, Jember Regency

Sampling

Coffee marketing data in Tugusari Village and Curah Kalong Village was collected through field observations, direct interviews with coffee farmers and coffee middlemen using questionnaires. The number of samples taken in this research was 43 farmers. This value is obtained using the Slovin formula with an allowance percentage of 10%. The following is the Slovin formulation formula:

Keterangan:
n   = sampel size
N   = population size
e   = margin of error (10%)

Sampling to determine the factors that influence the opportunity to select marketing channels was carried out using a simple random sampling method

Data Analysis Method

The data analysis used in this research is logit analysis to determine the factors that influence farmers in choosing marketing channels, analysis of the robusta coffee marketing environment which consists of the IFE matrix and EFE matrix, to determine the marketing position of coffee using SWOT analysis [5], and to formulate appropriate marketing strategy using QSPM (Quality Strategic Planning Matrix). QSPM was created by giving an AS (Attractiveness score) for each internal and external factor of the proposed strategy. AS scores range from 1 to 4 with criteria 1 = no effect, 2 = little influence, 3 = moderate influence, 4 = very influential. AS's value was obtained by aligning internal and external strategic factors that can influence strategic alternatives [6,7]. In more detail, the stages of data analysis are as follows:

a.   Identify the Company Internal and External Factors
      Identification of internal factors is done by listing all the strengths and weaknesses of coffee marketing on the slopes of the Argopuro Mountains in Jember, while identification of external factors is done by listing the opportunities and threats that coffee marketing has on the slopes of the Argopuro Mountains in Jember.
b.   Giving weight to each factor
      Determining the weights in internal and external analysis is done by asking questions to experts.
c.   Giving Ratings
      Ratings describe how effective the current marketing strategy is in responding to existing strategic factors.
d.   Multiplication of Weights and Ratings
      Determine the weighted value of each factor obtained by multiplying the weight by the rating of each factor. Total weighted value. Obtained from the sum of the weighted values of each factor.
e.   Matching Stage

The matching stages used are the IE matrix and SWOT matrix. IE Matrix To determine the company's position, there are 9 cells in the IE matrix. The IE matrix consists of two dimensions, namely the total score of the IFE matrix on the.

f.   Decision Stage

The matrix used in marketing strategy decision-making is QSPM. QSPM analysis is used to evaluate strategies based on the main internal-external factors that have been identified in the SWOT matrix.

RESULT AND DISCUSSION

Factors Influencing Marketing Channel Selection

Marketing of robusta coffee on the slopes of the Argopuro mountains, Bangsalsari District, Jember Regency has been carried out for a long time. robusta coffee farmers on the slopes of the Argopuro mountains, Bangsalsari District, and Jember Regency began to be reluctant to sell robusta coffee in the form of cherry due to low price, so coffee farmers preferred to sell robusta coffee in the form of ose coffee. Coffee producers must use their intellectual capacity to produce new value-added and high-priced products to compete in niche markets [8]. It must also be supported by supply chain and production models that are intertwined with strong farmers and coffee processing industries [9].

Some factors influence the choice of marketing for robusta coffee by coffee farmers on the slopes of the Argopuro mountains, Bangsalsari District, and Jember Regency, so it is necessary to analyze the factors that influence coffee farmers in choosing marketing channels. Based on previous research by [10], six factors influence farmers' choice of marketing channels. Factors that are thought to influence decision-making in selecting marketing channels include land area (X1), farming experience (X2), income (X3), production amount (X4), contractual commitments (D1), land control (D2), Of these six factors, we then tested whether these variables influenced farmers' decisions to market their products. Testing was carried out using logit regression analysis of farmers' decisions in marketing products by considering that the dependent variable or variable (y) had a value between 0 and 1.

Testing of each independent variable (variable x) on the dependent variable (variable y) is determined by the significance value in the variable table in the equation, if the calculated significance value is <0.05 then the variable is significant, which means that the variable x affects farmers' decision making to choose marketing channels. If the significance value is > 0.05 then the variable is not significant, which means that the x variable does not influence farmers' decision-making in choosing marketing channels. Factors that influence farmers' decisions to choose marketing channels for robusta coffee are income and contractual commitments. The results of the logit regression analysis of each independent variable partially can be seen in Table 1.

TABLE 1. Ligit regression result

Variabel independen	B	S.E	Wald	df	Sig.	Exp (B)
Income	2,598	0,803	10,468	1	0,001	13,431
Contractual Commitment	1,883	1,009	3,481	1	0,048	6,573
Constant	-1,840	0,645	8,128	1	0,004	0,159

Based on Tabel 1, logit model was:

Y $= a \times X3^b \times D1^c$
Y $= -1{,}735 \times X3^{2{,}598} \times D1^{1{,}883}$

Income

Income in this research is obtained by multiplying the amount of production and the price received by farmers. Determining whether marketing channels influence revenue can be seen from the Wald test value, namely 10.468 with a significance value of 0.001. The significance value of the income factor is smaller than the predetermined confidence level, namely 95% ($0.001 \leq 0.05$). The income factor has a real influence on the opportunities for choosing marketing channels 2 (farmers – middlemen – wholesalers – consumers).

The regression coefficient for the income factor is 2.598, meaning that if there is an increase in income of 1 rupiah, it will increase the odds ratio for the opportunity to choose marketing channel 2 by 2.598 assuming other

factors are constant. Meanwhile, the opportunity to choose each marketing channel can be seen from the Exp (B) value, which is 13.431. This value can also be interpreted as the higher the income, the opportunity for farmers to choose marketing channel 2 is 13,431 times higher than marketing channel 1 (farmer – middleman – exporter – consumer).

The average income for robusta coffee in Tugusari Village and Curah Kalong Village is Rp. 25,376,000 per harvest season. Apart from being influenced by the amount of production, the income obtained by robusta coffee farmers is also influenced by the price level received by the farmers. There is a difference in the price of coffee received by farmers in marketing channel 1 and marketing channel 2, the difference received is around Rp. 500 to Rp. 1,000. Increasing the income of coffee farmers can help fulfill living needs and also provide capital for farming in the following season. Income from the coffee harvest is used to meet needs until the next harvest season. During this period, sometimes the harvest is not sufficient to cover the needs until the next harvest season, so farmers usually borrow from local middlemen, with the condition that the farmer must sell his coffee to the middleman for the amount of the farmer's loan. Apart from that, farmers can also borrow cash from the farmer groups they join. Therefore, farmers sell their coffee to middlemen in marketing channel 2, because outside of the harvest season middlemen still make small purchases. This is different from middlemen in marketing channel 1 who must meet their quota to make deliveries to exporters.

Contractual Commitment

Contractual ties indicate farmers who have a cooperative relationship with middlemen or other marketing institutions and farmers who do not have a cooperative relationship with middlemen or other marketing institutions. The Wald test value for contractual attachment is 3.481 with a significance level of 0.048. The significance value of contract attachment is greater than the predetermined confidence level, namely 95% (0.048 ≤ 0.05), so it can be stated that contract attachment has a real effect on the opportunity to choose marketing channel 2 (farmers – middlemen – wholesalers – consumers).

The regression coefficient for contractual engagement is 1.883. This means that the more farmers who engage in contract engagement, the greater the odds ratio for the opportunity to choose marketing channel 2 will be by 1.883. The opportunity for selecting marketing channel 1 and marketing channel 2 can be seen from the Exp (B) value of 6.573, meaning that farmers who enter into a contract agreement have a 6.573 times greater chance of choosing marketing channel 2 compared to farmers who do not enter into a contract agreement, assuming all variables are constant.

The occurrence of contractual ties between middlemen or other marketing institutions and coffee farmers is caused by several factors, one of which is that the farmer has borrowed money before harvesting so at harvest time the farmer must sell the amount of money borrowed to the middleman. The location of middlemen around farmers' houses helps farmers sell coffee beans without having to incur large costs. Apart from that, middlemen provide loans to farmers to meet their daily needs or farming needs on the condition that the coffee beans are sold to the middleman. Farmers who are bound by contracts also sell a small portion of the coffee beans to other middlemen. This is due to the status of middlemen apart from being traders, but also as residents in the Tugusari Village and Curah Kalong Village areas, either as neighbors or relatives. This is the basis for considering coffee farmers to help each other by not only selling coffee beans to one middleman but also to other middlemen, even though in relatively small quantities. So it is possible for farmers who have contractual ties to sell their produce.

Marketing Strategy for Robusta Coffee on the Slopes of the Argopuro Mountains, Jember Regency

Based on the analysis of internal and external factors, strengths and weaknesses, opportunities and threats can be identified. Internal factors (strengths and weaknesses) possessed by robusta coffee on the slopes of Argopuro, Bangsalsari District, Jember can be identified as follows. The strengths of robusta coffee on the slopes of Argopuro, Bangsalsari Jember District are as follows: 1) Has regular consumers, 2) Large coffee plantation area, 3) Has a high altitude which is very supportive for the development of coffee commodities, 4) The majority of the population works as coffee farmers, 5) Active farmer groups, 6) Easy farming techniques. The weaknesses of robusta coffee on the slopes of Argopuro, Bangsalsari Jember District are 1) Export in the form of beans, 2) Long marketing chain, 3) The level of technology used by coffee farmers is still said to be low, 4) Difficult access to transportation. External factors (opportunities and threats) possessed by robusta coffee on the slopes of Argopuro, Bangsalsari District, Jember can be identified as follows. Opportunities for robusta coffee on the slopes of Argopuro, Bangsalsari Jember

District include, 1) Supporting altitude, 2) High market demand, 3) Increasing sales trends, 4) Increasing farmers' income, and 5) Raising the image of people's coffee. Threats faced by robusta coffee on the slopes of Argopuro, Bangsalsari Jember District include, 1) Market competition, 2) Erratic weather changes, 3) Lack of capital to plant/care for coffee, 4) Pest and disease attacks.

The identified strengths and weaknesses are then compiled into an Internal Factor Evaluation (IFE) Matrix, while the identified opportunities and threats are compiled into an External Factor Evaluation (EFE) Matrix. The following is a combination of the Internal Factor Evaluation (IFE) matrix and the External Factor Evaluation (EFE) matrix or what is called the Internal External (IE) matrix.
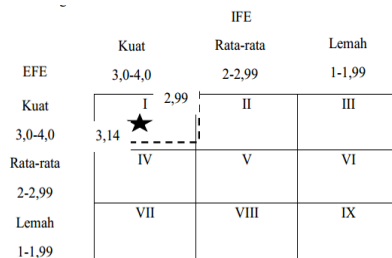
FIGURE 1. Matriks IE

Based on the calculation of the Internal Factor Evaluation (IFE) score, a total score of 2.99 was obtained and the total score for the External Factor Evaluation (EFE) matrix was 3.14. The meeting point of these two axes is in cell I, which shows that the internal marketing strength of robusta coffee is in a strong position. Divisions in cells I, II, and IV can implement the growth and build strategy. The strategy commonly implemented is intensive, namely by market penetration and product development.

Market penetration strategy is a strategy that seeks to increase market share for products that already exist on the market through increasing marketing efforts. In carrying out market penetration, coffee middlemen/farmers on the slopes of Argopuro, Bangsalsari District, Jember Regency can increase promotion by expanding the dissemination of information about the superiority of robusta coffee produced by coffee farmers on the slopes of Argopuro, Bangsalsari District, Jember Regency as well as distributing robusta coffee to several large traders between cities or exporter.

A product development strategy is a strategy that seeks to increase sales by improving or modifying existing products. In implementing product development strategies, it is hoped that farmers can improve quality. Quality improvement can be done by picking only red coffee when harvesting coffee. Apart from that, farmers can also improve their processing processes, both dry and wet processing.

The results of calculating the value of internal condition factors and the value of external condition factors for Robusta coffee on the slopes of Argopuro, Bangsalsari District, Jember can be compiled into a SWOT matrix. The SWOT matrix is a tool for matching key internal and external factors, the SWOT matrix is shown in Table 2.

The final analysis used is the Quantitative Strategic Planning Matrix (QSPM) which is a technique that can objectively determine prioritized alternative strategies and requires good intuitive judgment. QSPM uses input from the analysis of matching results between the EFE SWOT Matrix and the IFE SWOT matrix. Based on the SWOT analysis, alternative strategies were obtained to increase the marketing of robusta coffee on the slopes of Argopuro, Bangsalsari Jember District, namely 7 alternative strategies. QSPM analysis is used to determine appropriate alternative strategies as priorities. The QSPM analysis calculation can be seen in the Table 3.

TABLE 2. SWOT matrix

	STRENGTH (S)	WEAKNESSES (W)
IFAS **EFAS**	1. Loyal costumer 2. Huge area 3. Suitable latittitude for plantation 4. The majority of the population works as coffee farmer 5. Active farmer groups 6. Easy farming techniques	1. Export in the form of coffee beans 2. Long marketing chain 3. The level of technology use by coffee farmers is still said to be low 4. Difficult access to transportation
OPPORTUNITIES (O) 1. Appropriate latitude 2. High market demand 3. Increasing sales trend 4. Increase in farmer income 5. Raise the image of farmer's coffee	**STRATEGI S-O** 1. Improve coffee bean picking patterns 2. Carry out sorting for quality classification 3. Improve the robusta coffee cultivation system	**STRATEGI W-O** 1. Increase in coffee production 2. Processing robusta coffee beans into ground coffee/processed coffee
TREATHS (T) 1. There is market competition 2. Erratic weather changes 3. Lack of capital to plant/care for coffee 4. There are pest and disease attacks	**STRATEGI S-T** 3. Improving the quality of robusta coffee to face market competition 4. Strengthening Jember coffee branding 5. Form a business cooperative	**STRATEGI W-T** 1. Targeting new markets and customers, for example supplying robusta coffee to other cities or starting to enter industrial areas 2. Provide technical guidance to smallholder coffee farmers and provide financing through the People's Business Credit (KUR) program and the Partnership Program (PK) from banks.

TABLE 3. Analisa QSPM

Alternatif strategi	Bobot	AS	TAS	Peringkat
1. Improve coffee bean picking patterns	0,10	3,2	0,32	VI
2. sorting for quality classification	0,11	3,6	0,39	III
3. Improve the robusta coffee cultivation system	0,10	3,4	0,34	V

Alternatif strategi	Bobot	AS	TAS	Peringkat
4. Improving the quality of robusta coffee to face market competition	0,12	3,8	0,41	II
5. Strengthening Jember coffee branding	0,13	4,0	0,46	I
6. Form a business cooperative	0,11	3,4	0,37	IV
7. Increase in coffee production	0,09	3,0	0,27	VIII
8. Processing robusta coffee beans into ground coffee/processed coffee	0,07	2,8	0,20	X
9. Targeting new markets and customers	0,09	3,4	0,30	VII
10. Provide technical guidance to smallholder coffee farmers and provide financing	0,08	3,0	0,24	IX

Based on the calculation table for selecting alternative strategies using the QSPM method using attractiveness scores (Attractiveness Scores or (AS)) and total attractiveness scores (Total Attractiveness Scores or (TAS)) shows the alternative strategies that are most popular with respondents. The alternative strategy with the highest TAS value is a strategy that needs to be implemented first by robusta coffee farmers on the slopes of Argopuro, Bangsalsari District, Jember. The results of the questionnaire show that the highest TAS value is an alternative strategy regarding strengthening Jember coffee branding with a total attractiveness value (TAS) of 0.46.

Branding or what is better known as a brand, is very necessary in marketing robusta coffee. This branding is used to create certain signs/imprints in the minds and hearts of consumers through various ways so that they have an impact that consumers will remember. The most important element in a branding activity is the trade name or brand itself. So far, robusta coffee produced by coffee farmers on the slopes of the Argopuro mountains, Bangsalsari District, Jember Regency, is better known by exporters as Dampit coffee. This is because Jember Coffee does not yet have a brand at the exporter level. Therefore, it is necessary to brand Jember coffee so that consumers prefer Jember coffee products over coffee from competing products.

CONCLUSION

1. Factors that have a real influence on the opportunities for selecting marketing channels are income and contract commitments.
2. The marketing strategy for robusta coffee on the slopes of the Argopuro mountains, especially in Tugusari Village and Curah Kalong Village, Bangsalsari District, Jember Regency, is the main priority, namely strengthening Jember coffee branding as well as improving and classifying quality to increase selling value so that it is not inferior to coffee products from other areas.

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