Optimization of Coffee Farmers in Modern and Traditional Coffee Processing to Increase Selling Price in Lemah Putih Village

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ABSTRACT

Coffee, beloved for its complex flavor and invigorating aroma, is brewed from roasted and ground coffee beans. Quality beans processed using optimal methods can significantly increase the selling price of Indonesian coffee, both domestically and internationally. Within the context of economics, particularly in free market systems, the market plays a critical role. It functions as the mediator between producers, who offer goods, and consumers, who determine demand through their purchasing choices. In this dynamic, consumers hold significant power, dictating the flow of goods and services through their preferences. However, there are challenges faced by coffee farmers in Lemahputih Village. This study aims to address these challenges by focusing on three key questions (1) Optimization Strategies: How can coffee farmers in Lemahputih Village optimize their operations for both modern and traditional coffee processing methods? (2) Quality and Price: How can improved processing techniques enhance the quality of coffee produced in Lemahputih Village, thereby increasing its selling price? (3) Islamic Economics Perspective: In the context of Islamic economics, what approaches can be employed to further increase the selling price of coffee produced in Lemahputih Village? This study addresses a gap in previous research by delving deeper into the theoretical perspectives surrounding coffee processing and optimization within the framework of Islamic economics. Research Methods: This study employs a descriptive research approach, aiming to capture and analyze factual information concerning the optimization of coffee processing methods in Lemahputih Village. This qualitative method, also known as the analytical method, involves data collection through various means, including interviews with coffee farmers, village officials, and relevant market stakeholders. Additionally, the study draws upon existing statistical data and relevant literature to provide a comprehensive analysis of the current situation and potential optimization strategies.
INTRODUCTION

Considering the COVID-19 pandemic has not only created stories of grief, there is also joy experienced by coffee farmers where coffee bean production has experienced a significant price decline. This has had a major impact on farmers who tend to or rely on coffee bean prices. The most felt impact of the COVID-19 pandemic by farmers is the drastic decline in the price of agricultural products due to the decline in purchasing power of the community. This is not proportional to the efforts and operational costs incurred by farmers when cultivating. In addition, the government has currently implemented policies to socialize and implement social distancing, work from home (WFH), and large-scale social restrictions (PSBB). These policies are felt to make it very difficult for coffee farmers to market their agricultural products, which has resulted in many coffee production results experiencing a decline in quality and even rotting. To optimize the coffee bean processing process in an effort to increase farmer income from coffee production, careful calculations need to be made.

In the economy, the market plays a very important role, especially in a free/liberal economic system. The market is the one that plays a role in bringing together producers (who produce and offer goods) and consumers (who determine the quantity and type of goods/commodities they want). Consumers determine the position of the market, as consumers are the ones who determine the flow of goods and services. It can be said that there is a mutual dependence between producers and consumers. Producers will try to use the factors of production available to produce various types of goods needed by consumers. Therefore, in producing these necessities, producers hope that consumers will buy the goods they produce at a price that exceeds the production costs (including promotion/marketing) that have been incurred by the producers. The difference is what the producers expect as the profit to be obtained. Usually producers always have the principle of "producing goods with relatively low costs to maximize profits to be obtained." Thus, Islam has certain norms in terms of market mechanisms. According to the Islamic view, what is needed is a form of certain use and distribution and the formation of a productive work system.

After conducting observations in Lemahsugih District, I found a phenomenon that was in line with the title I raised, besides it was also supported by research data that I found in the field. The phenomenon I found in the field is also in line with the theory I chose. Based on the background, it can be seen that coffee is a commodity that has high economic value. Black coffee is the result of direct extraction from boiling coffee beans served without any added flavorings. And it is widely consumed by teenagers and the elderly, with many coffee lovers among teenagers and the elderly. So in the processing process, including an important factor that should not be missed in the coffee industry in order to have coffee quality. However, in the processing of coffee that is processed both modern and traditional has not been optimal in processing and marketing digitally, so many teenagers or the elderly do not know it, so it is difficult to increase the selling price of coffee. Based on the above description, the researcher wants to conduct research on the processing of coffee that is processed both modern and traditional and the selling price of coffee in Lemahputih Village, Lemahsugih District. The researcher compiled research related to the optimization of the selling price of coffee that is processed both modern and traditional. And the efforts of Coffee Processing by Coffee
Farmers can improve the quality of coffee selling prices. With the Increase in the Selling Price of Coffee in the Perspective of Islamic Economics

LITERATURE REVIEW

Optimization

Optimization is a process of finding the best solution from a set of alternative solutions. Optimization is done by maximizing an objective function without violating the existing constraints. With optimization, a system can improve its effectiveness, such as increasing profits and minimizing time. Optimization is a process of finding the best solution, not always the highest profit that can be achieved if the goal of optimization is to maximize profits, or not always the smallest that can be suppressed if the goal of optimization is to minimize. The definition of optimization is the result achieved according to desire, so optimization is the achievement of results according to expectations effectively and efficiently. Optimization is also often interpreted as a measure where all needs can be met from the activities carried out. Optimization is a measure that causes the achievement of the goal if viewed from the angle of effort, process, and so on (Adi, 2015).

Definition of Coffee

Coffee is a drink that comes from the processing of coffee beans. Coffee is classified into the family Rubiaceae with the genus Coffea. In general, coffee only has two species, namely Coffea arabica and Coffea robusta. However, coffee is also commonly called a drink that can make the drinker feel awake. Coffee is one of the commodities in the world that is cultivated in more than 50 countries. Two varieties of coffee trees that are commonly known are Robusta Coffee (Coffea canephora) and Arabica Coffee (Coffea arabica). Coffee can be classified as a psychostimulant drink that will keep people awake, reduce fatigue, and provide physiological effects in the form of increased energy. The processing of coffee before it can be drunk goes through a long process, starting from harvesting the ripe coffee beans, either by machine or by hand, then the coffee beans are processed and dried before becoming coffee beans. The next process is roasting with varying degrees of roast. After roasting, the coffee beans are ground or crushed into coffee powder before coffee can be drunk (Noparianda, 2019).

Coffee is a plant that has been cultivated for a long time and has a high economic value. 70% of world coffee consumption comes from Arabica coffee, and 26% comes from Robusta coffee. Coffee originated in Africa, the Ethiopian Highlands. However, coffee itself was only known to the international community after it was initially sold by Arab traders outside the original southern Arabian region. In Indonesia, coffee was brought by the Dutch East India Company (VOC) and was widely known in 1696. Coffee plants in Indonesia began to be produced on the island of Java, and were only experimental, but because the results were satisfactory and were considered by the VOC to be quite profitable as a trading commodity, the VOC spread it to various regions so that the residents would plant it (Wibowo, 2021).

Coffee Processing: Modern and Traditional Methods

Modern Processing
In the modern processing method, farmers wait for selective harvests with selective picking during harvest. Fruits that are harvested in a wet and plucking manner are processed into green beans. Harvested coffee has 3 (three) levels: (1) the initial level (wet) is the picking of fruits caused by the fruit being eaten by insects or dry, (2) the intermediate level is the picking of ripe fruits on the tree (selective), and (3) the last level is the collection of coffee fruits, both young and ripe fruits. The post-harvest handling methods carried out consist of 3 (three) processing methods, namely the drying process (dry process) and the wet process (wet process). The drying process consists of 2 (two) processing processes, namely Natural and Honey, while the wet process consists of 1 (one) processing process, namely Full Wash. All three processes use ripe (red) coffee fruits, grouping (grading), packaging, and storage. The full wash processing process is a wet method with a fermentation process to obtain a pleasant taste and aroma for coffee lovers. Coffee processing with the wet method gives a pleasant aroma and produces a purer taste. Wet processing is a finding to provide better coffee quality than dry processing, especially for export market purposes. The post-harvest stages of wet processing (full wash) are picking red fruits, sorting 1, sorting 2, peeling off the skin of coffee cherry (pulper), fermentation for 2x12 hours, washing until the mucus disappears, drying with a solar dome dryer for 4 days, sorting 3, grouping (grading), packaging, and storage.

Traditional Processing

The traditional way of making coffee starts from picking coffee beans from the coffee plantation, sorting coffee beans, peeling off the coffee skin, drying coffee beans, roasting coffee beans traditionally using a frying pan. The fuel itself uses a wood stove because it can add a unique flavor and aroma to the coffee that will be produced. During the roasting process, the coffee beans must be turned over regularly so that the coffee beans do not burn. The next step is to grind the coffee beans so that powder can be produced. The traditional grinding process is done by pounding it in a mortar until it is smooth. The pounding process is repeated several times so that the resulting coffee powder can have a smooth texture. The next step is to screen the coffee by shaking it. The purpose is to separate the particles of coffee powder that are still large in size. And after taking the soft coffee powder, it can be packaged directly and stored in a clean place.

Comparison of Modern and Traditional Processing

Advantages of Modern Processing
- Produces coffee with a cleaner and more consistent taste
- Has a longer shelf life
- Is more efficient in terms of time and labor

Advantages of Traditional Processing
- Produces coffee with a more unique and complex flavor
- Is often considered to be more environmentally friendly
- Can be done with relatively simple equipment

RESEARCH METHODS

The method in this study is a qualitative descriptive research method, which is a research method that is sought to observe problems systematically and accurately regarding the facts of a particular object. The qualitative descriptive research method is a valuable tool for researchers who want to gain a detailed understanding of a particular phenomenon. This
method can be used to study a variety of topics, including social issues, cultural practices, and individual experiences. Descriptive research seeks to describe and interpret reality according to a certain perspective or state of mind. This process is often referred to as the analytical process. Thus, this research is expected to be able to provide a detailed, systematic, and comprehensive overview of all things related to the title discussed.

RESULTS AND DISCUSSION

Coffee farmers in modern processing have optimized all aspects of coffee production, from plant care, processing, production, to sales. By optimizing all aspects, coffee farmers can optimize the price to be affordable for buyers and facilitate the sale of coffee processed in a modern way. In optimizing all aspects, coffee farmers in modern processing aim to maintain production quality, facilitate sales, so that coffee farmers in modern processing can progress rapidly and improve the farmers’ economy to increase farmers’ income from coffee farming results in Lemahputih Village.

Coffee farmers in traditional coffee processing have maximized everything from plant care, processing, production, to sales so that coffee sales are affordable for buyers. With this, coffee farmers optimize all aspects of coffee, especially in plant care and coffee processing because by maximizing it can produce good coffee beans to be processed into quality coffee. All this care is for coffee farmers to progress rapidly and to improve the economy of the Lemahputih Village farming community well. Until now, coffee farmers in traditional coffee processing still maximize in any way so that the trust of buyers to coffee farmers remains well maintained and to be able to improve the local economy quickly and well.

There are some constraints and solutions for coffee farmers in increasing the selling price of coffee processed in a modern and traditional way. The following are some things to consider:

1. The constraint experienced by farmers in increasing the selling price of coffee is too many plant pests that attack coffee plants so that coffee plants produce poor-quality coffee beans and are less satisfied because of the presence of coffee plant pests. After the presence of coffee plant pests, coffee farmers find it difficult to increase the selling price of coffee because they produce poor-quality beans, making it difficult to achieve the farmers' target of increasing the sale of coffee beans processed in a modern way. However, in an effort to increase the selling price of good coffee, coffee farmers must eradicate coffee plant pests. The eradication of coffee plant pests is intended to increase the selling price of coffee very quickly and well because coffee farmers who are processed in a modern way need very many and good coffee beans because coffee farmers who are processed in a modern way have coffee sales competition with coffee farmers who are processed in a traditional way.

2. The solution for coffee farmers who are processed in a modern way must be able to compete and optimize good and perfect coffee sales with coffee farmers who are processed in a modern way so that coffee farmers who are processed in a modern way can increase the selling price of coffee better than the sale of coffee processed in a traditional way. Or hold education about coffee so that it can process coffee beans well and correctly so that it is in demand by the modern market, so that it can increase the selling price of coffee.
In addition to the constraints and solutions mentioned above, there are still other constraints and solutions that can be considered by coffee farmers in increasing the selling price of coffee. For example, coffee farmers can also focus on increasing the quality of their coffee by using better seeds, fertilizers, and processing methods. They can also try to find new markets for their coffee, such as online or international markets. By taking these steps, coffee farmers can help to improve their livelihoods and the economy of their communities.

The solution to increase the sales of traditionally processed coffee is to create packaging for the processed coffee and be able to compete with the sales of coffee processed in a modern way. Because with the development of the times which is brighter than before, so traditional coffee farmers are able to improve the quality of coffee that is good and perfect in order to increase the sales of traditionally processed coffee and can increase the selling price of traditionally processed coffee.

The market mechanism in the view of Islamic economics is freedom in the market so that the market is free in managing production and prices, but there are some people who take advantage of this moment so that they can monopolize prices with this Islamic economics need a government that can oversee the market mechanism that is running. In Islamic economics, it is explained that price determination depends on or is entrusted to the market mechanism that runs naturally, in this case, price determination in Islam can be referred to the hadith of the Prophet Muhammad Saw as conveyed by Anas RA, in connection with the rise in prices of goods in the city of Madinah. With this hadith, it is clear that Islam taught the concept of market mechanism much earlier (more than 1160 years) than Adam Smith.

During the time of the Khulafaur Rashidin, they controlled the supply, which is the amount of goods offered, to control prices. Demand, or referring to the size of demand, is done to instill simplicity and avoid consumerism. With this, the regulation or increase in the selling price of coffee depends on supply and demand in the market.

In increasing the selling price of coffee in Lemahputih Village, there are several factors that need to be considered. Some factors that support price increases in the perspective of Islamic economics are as follows:

1. The price of the goods themselves and the price of other goods or substitutes
   If the price of goods rises, supply will increase. Conversely, if the price of goods is low, supply will decrease. For example, sugar and coffee. If the demand for coffee increases, the demand for sugar also increases. Conversely, if the demand for coffee decreases, the demand for sugar also decreases.

2. Production costs
   Costs are something that is spent to produce goods and services, including labor costs, raw materials, rent, machinery, and others. Production costs are one of the factors that sellers consider in determining the price in offering their products. In coffee production, fertilizers, greenhouses for drying, and machines for processing coffee cooking are needed. With the presence of several stages that are carried out, it requires production costs.

3. The level of technology used
   Technology can help to reduce production costs. For example, the use of greenhouses can help farmers to dry coffee beans more efficiently and control the moisture content of
the beans. The use of machines to peel coffee beans can also speed up the processing time.

4. The number of sellers

The number of sellers has a direct impact on supply. The more sellers that are able to sell goods at a certain price level, the higher the supply will be. In the case of coffee, there is a certain price range that is considered to be acceptable. However, if sellers are able to compete by offering the best quality and a unique product, they can increase sales.

5. Natural conditions

Natural conditions, such as natural disasters, can reduce the supply of certain goods. For example, coffee production can be affected by weather conditions, which can lead to a decrease in production.

6. Expectations of future prices

Sellers may sometimes withhold goods from the market in anticipation of higher prices in the future. This is permissible in Islam if it is done to protect the price of goods and prevent producers from incurring losses. However, if the withholding of goods is done for speculative purposes, such as hoarding to create scarcity and raise prices for profit, this is prohibited in Islam. Hoarding goods for profit is considered to be ihtikar, which is forbidden in Islam.

CONCLUSION

The optimization of coffee processing, both modern and traditional, can be summarized as follows:

1. Modern processing: focus on maintaining production quality and marketing both online and offline. Modern processing is usually sold to cafes, middlemen, or canners outside of Majalengka, such as Garut, Bandung, and Jakarta. Coffee sold to cafes is usually in the form of green beans, while coffee sold to middlemen is usually in the form of green beans.

2. Traditional processing: focus on maximizing coffee cultivation and maintaining customer trust. Traditional processing is usually sold to middlemen. Coffee that has been ground into ground coffee is made only when there is an order from a customer. Green beans are sold to exporters because traditional coffee producers have partnered with exporters, such as exporters from South Korea.

In conclusion, both modern and traditional coffee processing methods have their own advantages and disadvantages. The best method for you will depend on your individual preferences and needs. If you are looking for coffee with a clean and consistent taste, then modern processing is a good option. If you are looking for coffee with a more unique and complex flavor, then traditional processing may be a better choice.

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