# The Profit and Berkah (Blessing) from Palm SAP Production to Gain Optimal Mashlahah in Rokan Hulu-Riau Province 

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#### Abstract

Palm sap is produced from male flower bunches that are cut off and tapped. Palm sap tapped by palm farmers is valuable since it generates profit and blessing for farmers. This study aims to determine and analyze the production of palm sap by sugar palm farmers in Rokan Hulu Regency, Riau Province, which has reached the Optimal Mashlahah. The execution of mashlahah in production activities is laba and blessing. Thus, palm sap producers will be capable of determining the combination of laba and berkah in realizing optimal mashlahah. The non-technical content of blessings is found in resources (inputs), results (outputs), and the production process. The data analysis method used was a quantitative method with descriptive data analysis. The model used was the "Comparative Model Approach" with two forms of production stages, namely the production stage containing 95 percent of sharia elements (optimal mashlahah) and the production stage containing $<95$ percent of sharia elements (not optimal mashlahah). The data analysis technique in this research is the descriptive technique. The analysis of the production stages used quantitative analysis by examining aspects of resources (inputs), production processes, and results (outputs). These three aspects were analyzed based on physical attributes such as ownership of sugar palm plants and the beneficial value for palm sap producers.


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> Based on the results of the study, it was found that the production of Palm sap in Rokan Hulu Regency, Riau Province had not yet reached the Optimal Mashlahah. This conclusion goes in line with the comparative approach, in which it is stated that the stages of palm sap production based on sharia standards was still far lesser than 95 percent, namely (IOO - 46.67$)=53.33$ percent. The results of this research provide contribution through recommendation and knowledge for palm sap farmers to apply sharia-based production activity as taught in the Qur'an. This study also instills and grows Islamic values through Qur'an recital groups.

Keywords: Profit, Optimal Mashlahah Optimal, Palm Sap

## A. INTRODUCTION

Production is a consumption chain that provides consumer needs for goods and services. In economic activity, both producers and consumers aim to obtain optimal mashlahah. Thus, producers in the Islamic Economics perspectives are not optimal profit-seeking economic actors, but rather mashlahah seekers. The execution of mashlahah in production activities is laba and berkah. Therefore, producers will determine the combination of laba and berkah that can realize optimal mashlahah.

Production is part of economic activity, and the actors are called producers. The word production is implied in the Word of Allah SWT, in AlQur'an Surah Luqman [3I] Verse: 20 stating: "Do you not see that God has made all that is in the heavens and all that is on the earth of service to you, and lavished on you His favors, outward and inward?"

Allah SWT provides all that is in the heavens and on earth as an input or factor of production (resource). Using these resources, the producers carried out this process to produce outputs (goods and services). Output is utilized for the needs of mankind, so that they can use it optimally, with the intention that it can be enjoyed both outwardly and inwardly, materially and spiritually. In another sense, production is not only intended to create and add material but is also intended to create and add maslahah. The fulfillment of human needs does not only the accomplishment of physical material needs but also the abstract material needs. In this case, the needs accomplishment related to its relationship with the Creator Allah Azza Wajjallah (hablumminallah).

Based on (Pusat Pengkajian dan Pengembangan Ekonomi Islam (P3EI), 2009), the objectives to realize the producer's optimal mashlahah, (I) is not only about earning laba (profit), (2) is not only in terms of resources that have a technical relationship with output, but also (3) consideration of the nontechnical content of berkah (input) and results (output).

According to (Qardawi, I997), Islamic economics is an economy based on God. This system was from Allah, and the ultimate goal is for Allah by using means that cannot be separated from the Shari'ah of Allah SWT. Economic activities such as production, consumption, import, and export cannot be separated from God, and it is for God. If only focused on production activities, this final goal is in the form of laba and berkah (blessing).

Currently, the Indonesian economy is developing quite rapidly. It is characterized by many emerging new businesses, ranging from small-scale to large-scale. The development of the people's business sector is a tangible manifestation of the government's seriousness to equalize the economy in Indonesia. Therefore, many Central and Regional Governments programs commonly aim for business development. The government expects the program to increase the demand for agricultural commodities.

One of the plantation commodities becoming an economic choice for people in Rambah District, Rokan Hulu Regency is sugar palm. Sugar palm that is commonly called Nau or Enau and becomes a characteristic of Indonesia is a plant with enormous economic potential. If explored properly, many sugar palm plants-based products have enormous economic benefits, one of which is palm sap.

Palm sap is the raw material for palm sugar production, including block palm sugar and granule ones. Unfortunately, palm sugar production has not shown significant development over time. In the last two years, the production was $3,205 \mathrm{Kg}$ in 2018 and decreased to $3,059 \mathrm{Kg}$ in 2019 (Chairman of the Palm Sugar IKM Group, 2020). This condition was due to high price of sap at the traditional palm wine producer reaching Rp. I2,000 per liter, while it requires five liters of sap to produce one Kg of palm sugar. On the other side, palm sugar is sold at R p. $25,000 / \mathrm{Kg}$. In such situation, one's belief and faith to Allah as a moslem that can increase the palm juice production. The low selling price of palm sugar will make palm farmers reluctant to produce palm sugar. Palm farmers will prefer selling their sap to other craftsmen in the form of fresh sap at a higher price (Wayan Widyantara 20I9).

The production of palm sap certainly requires production factors (inputs) such as sugar palm plants, labor, and production equipment. It means that sugar palm farmers do not only think about how many liters of palm juice, labor, and production equipment are used for optimal profit. On the other hand, sugar palm farmers also consider the type of sugar palm plant used in the production process, whether they are still in the halal or good category. They also recognize how much labor and capital goods are used, and how much palm juice is produced to achieve optimal mashlahah. Septian, et al (20I7), and Mahyuddin, et al. (20I7) reported that the average daily sap production ranged between IO-I5 liters/tree. At this rate, it is expected that mashlahah can be reached.

The reason sugar palm production in Rokan Hulu Regency becomes valuable is not the various physical attributes of the palm sap but the relevant value seen by the consumers. Physical attributes attached to palm sap products are the development of sugar palm plants, techniques for obtaining quality palm sap, and so forth. The physical attributes of palm sap determine the functional role of palm sap in meeting the needs for the next product. On the other hand, the value contained in the palm sap will provide psychological satisfaction for the next producer in utilizing the palm sap. This value can originate from the taste, color, pH level of palm juice, and so forth.

Based on the background of the problem and these descriptions, the researchers were motivated to conduct research entitled: "THE PROFIT AND BERKAH (BLESSING) OF PALM SAP PRODUCTION TO REACH OPTIMAL MASHLAHAH IN ROKAN HULU, RIAU PROVINCE"

## Research Problems

Based on the background, the formulation of the problem proposed in this study are: have the profit and berkah (blessing) of palm sap production in Rokan Hulu Regency of Riau Provice reached the optimal mashlahah?

## Research Objective

This study aims to analyze and understand whether the profit of palm sap production in Rokan Hulu Regency in Riau Province have reached the optimal mashlahah.

## B. THEORITICAL

Based on the stated problem regarding the production of Nira Aren in Rokan Hulu Regency, Riau Province, that has reached the optimal Mashlahah, the researchers explain related theories and the underlying analysis of production from a sharia perspective in this literature review.

## Theoretical Framework

The researchers also explain the research components, namely production, production factors, production concepts, palm plants, and palm sap products.

## Production

Production is a human activity to produce and add value to the benefits (utility) of an item which is then utilized by consumers. Technically, production is a process of transforming production factors (inputs) into products (outputs).

The concept of production in the perspective of Islamic Economics is not merely a consumption chain that provides consumer needs for goods and services and not as the ultimate goal of economic activity and even life. It means that production is only a living tool, to achieve a nobler goal and support for aqidah and the mission it carries.

The definition of production can cover various aspects. They include the purpose of the activity to produce output, and also the characteristics attached to it. There are some different definitions of production from some Islamic economists, including:
a. (Siddiqi, I979): defines production activities as providing goods (products) by emphasizing the value of justice and benefit (mashlahah) for consumers, in his view, as long as producers act fairly and bring benefits to consumers, the producer has acted Islamically.
b. (Kahf, n.d.): defines production activities in an Islamic perspective as a human effort to improve not only his material physical condition but also his morality, as a means to achieve the goal of life, as outlined in Islam, namely the happiness of the world and the hereafter.
c. (Mannan, 1992): states that the definition of production emphasizes the importance of the altruism motive for Islamic producers, so he responds carefully to the concept of Pareto Optimality and Given Demand Hypothesis.
d. (Rahman, I995): also emphasizes the importance of fairness and even distribution of production (even distribution of production).

Products produced by manufacturers based on (Pusat Pengkajian dan Pengembangan Ekonomi Islam (P3EI), 2009) are composed of two elements: (I) physical attributes such as raw materials for manufacture, quality and durability of goods, shape or design of goods, and so forth, (2) value that is considered valuable by consumers. The physical attributes of an item essentially determine the functional role of the item in meeting consumer needs. The other element in the form of the value contained in an item will provide psychological satisfaction to consumers in utilizing the item, which can be originated from the item image or brand, history, reputation of the manufacturer, and so forth.

The quote above (Pusat Pengkajian dan Pengembangan Ekonomi Islam (P3EI), 2009) concludes that a product must have two elements in the form, physical attributes are objective, can be compared with each other, and the value attached to an item of subjective value, has Islamic values, which in the end will give berkah. These two elements can create mashlahah. Based on this perspective, the number of products that have mashlahah can be described as follows:
$\mathrm{Q}_{\mathrm{M}}=\mathrm{Q}_{\mathrm{F}}+\mathrm{Q}_{\mathrm{B}}$
where:
goods that have maslahah
QF: goods that have physical attributes (profit)
$\mathrm{Q}_{\mathrm{B}}$ : goods that have a berkah value

## Production Factor

Production activities certainly require various types of economic resources or factors of production (inputs). Factors of production are all things that become inputs, either directly or indirectly in the production process. Consumers can consume the products due to the combination of various production factors in the production process.

Palm sap cannot be produced with the availability of sugar palm plants. There are still many other essential and supporting factors of production, namely labor, means of production, and so forth. Palm sap can be consumed directly by consumers as a fresh drink with a sweet taste and distinctive aroma, and if the process is following the sharia, it is also halal. On the other hand, if the process does not follow the sharia, then the sweet taste is mixed with chelate and sour flavors. It means that it already contains alcohol and is haram. Palm sap
is a product that looks simple and has low value, it also requires a fairly lengthy process, involving various production factors to produce it. Berkah is an important element in maslahah(Pusat Pengkajian dan Pengembangan Ekonomi Islam (P3EI), 2009):

Berkah is a crucial element in mashlahah (Pusat Pengkajian dan Pengembangan Ekonomi Islam (P3EI), 2009). For however and whatever the classification is, the factors of production must include berkah. Therefore, the berkah attaches to every factor used in production and the production process so that the output of the product will contain berkah. Involving berkah as a factor of production is rational, for berkah has a genuine share in shaping output.

When palm sap products are produced with berkah as a production factor, then it will produce a palm sap with a high berkah content as well, compared to using a low berkah production factor. It makes the mashlahah of the palm sap product high. Products with high mashlahah palm juice will be considered as high-value palm juice products, and vice versa.

## Production Concept

Based on the understanding of production and factors of production, and by observing the explanations, a completely different concept of production is needed from the existing ones. The required notion is based on Islamic values, in other words, it is from an Islamic perspective. The production concept from an Islamic perspective application is an exploration of Islamic values and principles in production.

The production guidance, in the Qur'an distinctively, has a vision of the future, is not only oriented towards obtaining a short run of profit but is detrimental in the long run. Thus, the purpose of production is to earn an essential profit and to have a good impact and influence on sustainable living. It means to realize: (I) a balanced way between restrictions on everything that is allowed and not allowed to produce, (2) the social aspect of production that is highly emphasized, and is closely related to the production process, (3) he occurring economic problems that should not be caused by scarcity of resources related to needs, but caused by the laziness of people and their negligence in managing the gifts of Allah SWT.

Creating and increasing mashlahah, achieving an essential profit (within the framework of Islamic goals and laws), and optimally sustaining it are the production goals from an Islamic perspective. Maslahah, in the notion of
production, from an Islamic perspective means: (I) Providing optimal mashlahah for consumers, (2) Providing benefits and blessings for producers.

Berkah in inputs/factors of production means that the use of inputs for the production process must have good and benefits both now and in the future. The use of the 4 (four) inputs: land, labor, capital, and skills lies in the economic philosophy, which is based on Islamic values and sharia boundaries. The four factors of production in economic activity have remuneration in the form of prices of the land price that is in the form of rent ( r ), labor price that is in the form of wages ( w ), the capital price that is in the form of profit-sharing (psh), and skill price that is in the form of profit ( $\boldsymbol{\Pi})$. The price of each production factor is a reward that is berkah so that all use of the production factor does not conflict with Islamic values and sharia limits. The $r^{*}$ for land prices, $\mathrm{w}^{*}$ for labor prices, $\mathrm{psh}^{*}$ for capital prices, and $\mathrm{J}^{*}$ for skills.

Producers' profit or also called profit (profit $=\Omega$ ), is the difference between total revenue (TR) and the total cost of using the factors of production (TC), therefore, $Л \equiv T R-T C$. In contrast to the berkah, it is a total form that can provide goodness and benefits for producers, consumers, and mankind in general. It means that producers in an Islamic perspective do not only earn laba but also gain berkah so that they can be formulated as follows: $Л^{*} \equiv \mathrm{TR}^{*}-\mathrm{TC}^{*}$ (where "=berkah).

The producers will realize berkah in production if they implement Islamic principles and values in all their production activities. The effort to achieve berkah certainly requires costs, which in the short run can reduce profits. On the other hand, in the long run, In Shaa Allah, they can increase profits, due to increased demand by consumers.

Berkah is an element that is crucial in realizing mashlahah. Therefore, whatever and however the classification of blessings, it must be included in the 3 (three) components of production, namely: (I) inputs/factors of production: land, labor, capital, and skills, (2) production processes, and (3) outputs: goods and services. In input, the production process, and output, berkah have a share in creating mashlahah.

The production from an Islamic perspective can be understood as an activity that creates and adds to maslahah, not only creating and adding material. The purpose of production from an Islamic perspective is to earn an essential profit and have a good impact and influence on sustainable living.

The production spirit to produce optimum mashlahah certainly requires guidance with Islamic economic values and principles. The main values and principles in production (P3EI, 2009: 267) are:
(I) Amanah is one of several essential values in Islam, which must continue to be upheld, in the context of "Using economic resources to achieve the goals of human life (Falah)." Allah entrusts resources that exist in this universe to humans, and they are not allowed to exploit and obtain them in an improper way.
(2) Professionalism is when every Muslim is required to be a professional production actor against "having professionalism and competence in their field." Since all matters must be done properly and correctly, every business must be left to the experts. It implies that every production actor in Islam must have accepted expertise to carry out production activities.
(3) Learning is lifelong learning from Islamic teachings, meaning that every Muslim production actor needs to learn continuously, one of the learning media is a workplace. From this workplace, the production actor will gradually be able to gain expertise in production so that his workability will increase. The more increasing capabilities are, the more increasing the products produced, for the production actors are more productive.

## Sugar Palm

Palm sap as the output of the sugar palm (Syakir dan D.S. Effendi, 2010), is a plantation crop that can be cultivated. Sugar palm has a relatively large potential to be developed because it can produce the main product in the form of palm juice, and its derivative products in the form of fresh drinks, sugar, vinegar, and so forth. The main product of the sugar palm is the result of tapping male flower bunches. In addition, other parts of the sugar palm plant can also produce inputs for the manufacture of foodstuffs, including kolang kaling, the fruit of ripe female flower bunches, and palm flour from processing the pith of the no longer productive palm stem (no longer produce palm sap) for the manufacture of food ingredients in the form of cakes, bread, and biscuits.

Sugar palm (Arenga pinnata, MERR) is a plant that has great potential in terms of overcoming food shortages, and is easily adaptable to various agroclimates, ranging from lowlands to 1400 m above sea level (Effendi, 2009). Sugar palm is generally cultivated by small-scale farmers. Since the management
of sugar palm plants has not applied good cultivation techniques, thus the productivity is still relatively low.

The development of sugar palm plantations has relatively large opportunities because palm plants are also easy to adapt to various types of soil, including critical land, Imperata, and for reforestation and forest conservation, and therefore the expectations in Rokan Hulu Regency, Riau Province. The challenges that need to be anticipated in the development of sugar palm include: minimum technological inputs, production management and processing improvements, traditional marketing, and limited dissemination of a small number of farmers, as well as difficulties for superior seeds.
Sugar palm is a type of plant that can predict an increase in land area and the number of poor land areas. Sugar palm is adaptable to various land conditions, agro-climatic, and high tolerance in mixed cropping patterns, including woody plants. It is fast-growing because it has many roots and dense crowns which are very suitable to be developed also on marginal lands which are mostly owned by poor farmers. Sugar palm produces output appearing as palm sap which is feasible to cultivate with low input and is very suitable for water and soil conservation purposes. In addition, sugar palms produce very large above-ground and underground biomass, so that they play an essential role in the CO2 cycle (Syakir dan D.S. Effendi, 20I0).

## Palm Sap

Sugar palm that is commonly called Nau or Enau and becomes a characteristic of Indonesia is a plant with enormous economic potential. If explored properly, many sugar palm plants-based products have enormous economic benefits; such as palm sugar, crystal sugar, and health drinks..

Rokan Hulu Regency, one of which is in Rambah District, is a palm sugar production center that in 2014 produced I4 tons of palm sugar (BPS Rokan Hulu Regency, 20I4). Palm sugar produced in Rambah District, Rokan Hulu Regency, is good quality palm sugar, and it can still be developed, since Rambah District is famous for its traditional palm sugar processed from palm sap (Arenga pinnata) production. The primary raw materials are obtained from palm trees cultivated for generations since people have not cultivated palm trees en masse.

Sugar palm sap as the output of sugar palm is be grouped into two, (I) halal palm sap and (2) non-halal palm sap. Halal palm sap is for producing palm
sugar and crystal sugar. On the other hand, non-halal palm sap is for traditional palm wine. Palm sap is obtained from tapping the 8 -to- 9 -year-old male flower bunches of palm plants. The tapping of palm plants is carried out 2 (two) times in 24 hours, in the morning and afternoon. The palm sap tapped in the afternoon and harvested in the morning is two times higher than the morning tappings harvested in the afternoon. As an example, the total harvested palm sap is 15 liters, the IO liters is the sap harvested in the morning, while the other 5 liters comes from the harvest in the afternoon.

The difference in the quantity of palm sap harvested in the morning and afternoon is caused by the environment and weather conditions. In cold weather, from the afternoon, midnight, until dawn, palm sap drips more, when compared to the morning, noon, until late afternoon when the weather is hotter. In addition to being influenced by weather conditions, soil fertility and plant care also determine the quantity of palm sap harvested. Therefore, it is necessary to care for the plants by (I) fertilizing, (2) watering during the dry season, and (3) controlling the weed.

The raw material for the palm sap product is the palm plant. The quality of palm sap is also determined by whether or not the palm plant is excellent. Palm sap's sweet taste, yellowish color, not sour, and odorless indicate its excellent quality. If the taste of the palm sap is sour, the color is not yellowish, and smells bad, it means that the sugar in the palm sap has fermented. The excellent and poor quality of palm sap can separate from the production process of palm sap. The production mechanism for producing palm sap is as follows:

1. Tapping on old male flower bunches marked by yellow fruit seed and cutting the ends of the bunches to a specific size following the size of the male flower bunches. Palm juice will flow slowly, therefore it needs to be tapped twice a day in the morning and afternoon. Before tapping, the old male flower bunches are beaten and swung for 25 minutes, 2 (two) times a week. The beating and swinging are carried out five to seven times until the male flower bunches emit an aroma and break, then they expand. This activity begins with reading prayer and Shalawat Nabi (the Prophet's blessing). It indicates that the production activity of palm sap is done in syar'i (a). However, when it is done without the Prayer and Shalawat Nabi, it is not done in Syarti (b)
2. Collecting the palm sap is done by using a 75 cm length bamboo container or with other containers (jerricans). The container is tightly tied and covered
with coconut shells and cloth on the tapped bunches. The process of storing palm sap also consists of two versions, that is: (a) Syar'i version is by first inserting into a container a type of crushed tree root, with the length of 5 cm and a diameter of I cm , or using mangosteen peel/young mangosteen fruit/ mangosteen leaf. It is the sap of the mangosteen that makes the palm sap not sour before it is harvested or before being further processed. (b) Not Syar'i version is by first putting it in a storage container of a certain kind of tree bark so that the palm sap becomes sour and brown.
3. Harvesting palm sap 2 (two) times a day, in the morning between 07.00 and 08.00 am and in the afternoon between 3.00 and 4.00 pm , depending on the sugar palm farmers' needs and time.
4. Using the production of palm sap for the next production process, (a) Syar' 1 version: If the harvest is used (self-produced) or sold as raw material for palm sugar production, either in the form of palm sugar or crystal sugar, and can also be sold in the form of boiled palm sap as raw material for making palm coffee. On the other hand, (b) Not Syar'i version: If the harvest is sold to a collector/middleman/tuak (wine) producer for the raw material for making traditional tuak (wine) drinks.

## Framework and Hypothesis

In this section, two things are stated, namely the research framework and hypotheses. The research framework is used to direct research to prove the research hypothesis is accepted or not.

## Framework

The analysis framework of palm sugar production in Rokan Hulu Regency, Riau Province, is described as follows:


Source: P3EI, 2009

Figure I. Framework of thinking
Based on Figure I above, there are three aspects, that are: (I) resources (inputs) described as factors of production consisting of: (a) physical/objective and (b) value/subjective, (2) production process, and (3) result (output). These three aspects are assessed based on physical attributes such as ownership of palm plants and the value that is considered beneficial for producers (palm farmers) and consumers (printed palm sugar craftsmen, palm sugar, and traditional palm wine producers).

## Hypothesis

A hypothesis is a logically estimated relationship between two or more variables expressed in the form of a testable statement (Sekaran, 2009). The hypothesis proposed in this study suspect that the production of palm sugar in Rokan Hulu Regency, Riau Province has not yet reached the Optimal Mashlahah.

## C. METHODOLOGY

## Research Site

This research was conducted in Rokan Hulu Regency, Rambah District, Kaiti Village.

## Type and Source of Data

The type of data used in this research is quantitative data. It was originated directly from the object of research, namely sugar palm farmers in Rokan Hulu Regency, which are categorized as primary data. The primary data analyzed in this study included the characteristics of palm sap farmers from their
sex, age, education background, length of time working as palm sap farmers, and productivity parameters; palm sap supply, production process of palm sap, and the product of palm sap.

## Population and Sample

The population in this study were 60 sugar palm farmers in Rokan Hulu Regency. The sample took as much as 50 percent of the population, 30 respondents, who cirrently live in Rambah District, as the center of palm sap production, in Rokan Hulu Regency, Riau Province.

## Data Analysis Method

The data analysis method in research to analyze the profit and berkah (blessing) of palm sap production to reach the optimal mashlahah in Rokan Hulu Regency, Riau Province is a quantitative method with descriptive data analysis, using a comparative model approach to two production processes that are:
I. The production process that contains 95 percent of sharia elements (optimal mashlahah), namely:

$$
\left[\mathrm{NA}_{\mathrm{m}}=\mathrm{NA}_{f}+\mathrm{NA}_{\mathrm{b}}\right] \geq 95 \%
$$

2. The production process that contains $<95$ percent of sharia elements (mashlahah isn't optimal).
$\left[\mathrm{NA}_{\mathrm{m}}=\mathrm{NA}_{\mathrm{f}}+\mathrm{NA}_{\mathrm{b}}\right]<95 \%$
where:
$\mathrm{NA}_{\mathrm{m}}$ : Palm Sap that have mashlahah
$\mathrm{NA}_{f}$ : Palm Sap that have physical attribute (laba)
$N A_{b}$ : Palm Sap that have a berkah value
After all the data was collected, processed in such a way, then analyzed descriptive-quantitatively so that researchers can determine whether the production of Palm Sap in Rokan Hulu Regency, Riau Province, has reached optimal mashlahah. Production analysis was carried out by analyzing aspects of production factors (inputs), production processes, and production results (outputs). These three aspects were assessed based on physical attributes, such as the legality of palm tree ownership, method, place, and time of harvesting palm sap.

The researchers grouped palm sap farmers based on the production of halal and non-halal palm sap. Furthermore, the percentage level of sugar palm
farmers with halal and non-halal palm sap products was determined. The criteria used to determine the optimal achievement of mashlahah from palm sap production are as follows:
I. The number of sugar palm farmers who produce halal palm juice exceeds the number of palm farmers who produce non-halal palm juice.
2. The total percentage of sugar palm farmers who produce halal palm juice exceeds 95 percent of the total sugar palm farmers.

## D. RESULTS AND DISCUSSION

The results of the research and discussion were obtained from crosssectional data (primary data) of sugar palm farmers as respondents. The data analyzed were respondents' answers by distributing a questionnaire to 30 sugar palm farmers in Kaiti Kacan Rambah Village, Rokan Hulu Regency as the center for palm sap production. The details of the research results and discussion are explained as follows.

## Result

In this subchapter, the researchers present the results of sequential data processing in the form of respondents' characteristics, and palm sap production description at the research site.

## Respondents' Characteristics

The presentation of the characteristics of the respondents is done to describe the sugar palm farmers in Rokan Hulu Regency in general. The sugar palm farmers were characterized by their gender, age, education level, and how long they have been sugar palm farmers. To make it clearer, the presentation of the respondent's characteristics is described below.

## Respondents Based on Sex

The results showed that the gender of the respondents (sugar palm farmers) in Rokan Hulu Regency were as follows:
Table I. Characteristics of Respondents by Gender in Rokan Hulu Regency

| No. | Gender | Palm Sugar Producers (Person) | Percentage (\%) |
| :---: | :---: | :---: | :---: |
| I. | Male | 30 | IOO |
| 2. | Female | 0 | 0 |
| Total |  | 30 | IOO |

Source: Primary Data Processed, 2020.

Based on Table I above, sugar palm farmers in Rokan Hulu Regency are dominated by men, which is one hundred percent. It is because activities as sugar palm farmers need strong stamina, so there is no mistaking that the majority of sugar palm farmers are men. The women are only limited to helping men in the production process of palm sap, including cleaning the storage equipment.

## Respondents Based on Age

The results showed that the age of respondents (palm farmers) in Rokan Hulu Regency were as follows:
Table 2. Characteristics of Respondents by Age in Rokan Hulu Regency

| No. | Age | Sugar Palm Farmers (Person) | Percentage (\%) |
| :--- | :---: | :---: | :---: |
| I. | $<30$ | 2 | 6.67 |
| 2. | $30-39$ | 6 | 20.00 |
| 3. | $40-49$ | 6 | 20.00 |
| 4. | $50-59$ | IO | 33.33 |
| 5. | $\geq 60$ | 6 | 20.00 |
| Total |  |  |  |

Source: Primary Data Processed, 2020.
Based on Table 2 above, the most dominant sugar palm farmers' age in Rokan Hulu Regency is between $50-59$ years, ten people or 33.33 percent. On the other hand, the least is sugar palm farmers under the age of 30 years, 2 (two) people or 6.67 percent. It also means that sugar palm farmers, in general, are aged at and above 40 years, 22 people ( 73.33 percent) in total. Before the age of 40 years or more they generally do not work as sugar palm farmers. This work is generally done to continue the family business.

## Respondents Based on Educational Background

The results showed that the education level of the respondents (palm farmers) in Rokan Hulu Regency was as follows:

Table 3. Characteristics of Respondents Based on Education Level in Rokan Hulu Regency

| No. | Education Level | Sugar Palm Farmers (Person) | Percentage (\%) |
| :--- | :---: | :---: | :---: |
| I. | Elementary School | 20 | 66.67 |


| 2. | Junior High School | 8 | 26.66 |
| :---: | :---: | :---: | :---: |
| 3. | Senior High School | 2 | 6.67 |
| Total | 30 | 100.00 |  |

Source: Primary Data Processed, 2020.
Based on Table 3 above, the most dominant sugar palm farmers in Rokan Hulu Regency are elementary school (SD) graduates, 20 people ( 66.67 percent). Meanwhile, the least is high school (SMA) graduates, 2 (two) people ( 6.67 percent).

It indicates that the production process of palm sap does not require higher education. On average, sugar palm farmers in Rambah District, Rokan Hulu Regency, only graduated from elementary school education (SD). Thus, it also means that the skills possessed by sugar palm farmers are skills that are passed down from generation to generation (inherited by parents).

## Respondents Based on Length of Work

The results showed that the length of work of the respondents (palm sugar farmers) in Rokan Hulu Regency are as follows:

Table 4. Characteristics of Respondents Based on Length of Work in Rokan Hulu Regency

| Jo. | ength of work (Year) | Sugar Palm Farmers (Person) | Percentage (\%) |
| :--- | :---: | :---: | :---: |
| I. | $\leq 5$ | 4 | I3.33 |
| 2. | $6-\mathrm{IO}$ | 6 | 20.00 |
| 3. | II -20 | 8 | 26.67 |
| 4. | $>20$ | I2 | 40.00 |
|  | Total | 30 | I00.00 |

Source: Primary Data Processed, 2020.
Based on Table 4 above, the lengthiest working period for sugar palm farmers in Rokan Hulu Regency is mostly over 20 years, I2 people ( 40.00 percent). Meanwhile, the shortest length of work is under five years, with 4 (four) sugar palm farmers (I3.33 percent). It shows that the production of palm sap in Rokan Hulu Regency is a family business inherited from parents to their
children. Besides, it is also since the control over the sugar palm plantations is generally carried out by methods passed down from parents to their children.

## Palm Sap Production

Palm sap is the output of the production process with the input in the form of palm trees. Thus, it means that there are three elements in the production of palm sap, that are: (I) Input, (2) Production Process, and (3) Output. To make it easier to understand, the three elements are explained as follows:

## Palm Sap Input

Producing palm sap requires production factors. One of the main and most important production factors is sugar palm. Other production factors are labor (labor) consisting of the main workforce, the head of the family and his accompanying workers (his wife and children), and equipment such as a container (bamboo or jerry cans), a knife tapping male flower bunches, and a beater made of wood.

Sugar palm (Arenga pinnata Merr) as input of palm sap has a relatively high economic value. The production process is unique. This uniqueness is compared to the production of palm oil. To take palm sap, the sugar palm plant is harvested from the top and continues downwards, while the harvest of coconut and oil palm plants starts from the bottom and continues upwards. It is the unique characteristic of the sugar palm plant. The upper part is harvested first, and the lower part is harvested later. It is different from coconut and oil palm plants.

The use of inputs (palm crops) from respondents (palm farmers) in Rokan Hulu Regency can be observed in the following table:

Table 5. Respondents Based on Use and Form of Ownership of Inputs (Aren Plants) in Rokan Hulu Regency

| Jo. | Sugar Palm (arenga <br> pinnata, $M E R R)$ <br> (Plant) | Sugar Palm <br> Farmers <br> (person) | Percentage <br> $(\%)$ | Legal <br> Sharia) | Illegal <br> (Not <br> Sharia) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I. | $\leq 5$ | 2 | 6.67 | I | I |
| 2. | $6-8$ | 4 | 12.50 | 3 | I |


| 3. | $9-$ II | I2 | 40.00 | I0 | 2 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 4. | I2 - I4 | I0 | 33.33 | 9 | I |
| 5. | $\geq$ I5 | 2 | 6.67 | 2 | 0 |
|  | Total | 30 | 100.00 | 25 | 5 |

Source: Primary Data Processed, 2020.
Based on Table 5 above, the ownership of sugar palm plants (input use) is at most 9 to II trees. There are I2 people ( 40.00 percent) sugar palm farmers. Meanwhile, the ownership of inputs (sugar palm plant) is at least below and equal to 5 (five) trees and above I5 trees, each 2 (two) sugar palm farmers or 6.67 percent.

Based on the ownership of the inputs, the sugar palm farmers can be grouped into Islamic sugar palm farmers and non-Islamic sugar palm farmers. Shari'a sugar palm farmers are whose raw material is in the form of legal ownership of sugar palm plants. Meanwhile, sugar palm farmers who are not sharia owns the palm plantation owners illegally. Based on Table 5 above, there $\operatorname{are}(5 / 30 \times I 00)=I 6.67$ percent sugar palm plants ownership that is still illegal which utilization is not by using any contracts and agreements. The use of inputs has not yet reached the optimal mashlahah, because the comparative value is still below 95 percent, that is $(\mathrm{I} 00-\mathrm{I} 6.67)=83.33$ percent.

## Palm Sap Production Process

Palm sap as an output has relatively high economic value from the Palm Plant (Arenga pinnata Merr), where the production process is very unique. This uniqueness is compared to the production of palm oil. To take palm sap, the sugar palm plant is harvested from the top and continues downwards, while the harvest of coconut and oil palm plants starts from the bottom and continues upwards. It is the unique characteristic of the sugar palm plant. The upper part is harvested first, and the lower part is harvested later. It is different from coconut and oil palm plants.

The main product (output) of the sugar palm is the result of tapping male flower bunches. In addition, the palm plant can no longer be tapped, the other parts of the palm plant can also produce inputs for different production processes, including kolang kaling from ripe female flower bunches, and sago palm as the ingredient for making cakes, bread, and biscuits derived from processing the pith of the palm stem.

The best tapping conditions for male flower bunches from sugar palm is at the age of 8-9 years when the male flower bunches are old. Tapping can be done 2 (two) times a day, in the morning and afternoon.

The production of palm sap aims to create blessings and add maslahah to human life, not only creating and adding products to meet consumer needs. The fulfillment of consumers' (people) needs does not only the accomplishment of physical material needs but also the abstract material needs. In this case, the needs accomplishment related to its relationship with the Creator Allah Azza Wajjallah (hablumminallah).

The production process of palm sap is very diverse, depending on the intentions and needs of palm farmers. There are two versions of processing that is commonly done by palm farmers:
a. The syar'i version is using raw materials for the manufacture of palm sugar and crystal sugar.
b. The non-syar'i version is using raw materials for making traditional palm wine.

It is clear that in version (a), the production process can create and increase mashlahah. The farmers earn an essential profit within the framework of Islamic goals and laws and, that is, optimally sustainable. Good quality palm sap characteristic is by having a sweet and non-sour taste, yellowish color, and odorless. Meanwhile, Version (b) is only oriented towards making a short profit but losing money in the long term and harming sustainable life which is prohibited, because palm wine is classified as khamr that can be intoxicating, and in Islam, it is haram When the taste of the palm sap is sour, the color is not yellowish, and smells bad, it means that the sugar in the palm sap has fermented. The stages of the palm sap production process are as follows:
I. Tapping on old male flower bunches marked by yellow fruit seed and cutting the ends of the bunches to a specific size following the size of the male flower bunches. Palm juice will flow slowly, therefore it needs to be tapped twice a day in the morning and afternoon. Before tapping, the old male flower bunches are beaten and swung for 25 minutes, 2 (two) times a week. The beating and swinging are carried out five to seven times until the male flower bunches emit an aroma and break, then they expand. This activity begins with reading prayer and Shalawat Nabi (the Prophet's blessing). It indicates that the production activity of palm sap is done in syar'i (a).

However, when it is done without the Prayer and Shalawat Nabi, it is not done in Syar' ${ }^{\prime}$ (b)
2. Collecting the palm sap is done by using a 75 cm length bamboo container or with other containers (jerricans). The container is tightly tied and covered with coconut shells and cloth on the tapped bunches. The process of storing palm sap also consists of two versions, that is: (a) Syar'i version is by first inserting into a container a type of crushed tree root, with the length of 5 cm and a diameter of I cm , or using mangosteen peel/young mangosteen fruit/ mangosteen leaf. It is the sap of the mangosteen that makes the palm sap not sour before it is harvested or before being further processed. (b) Not Syar'i version is by first putting it in a storage container of a certain kind of tree bark so that the palm sap becomes sour and brown.
3. Harvesting palm sap 2 (two) times a day, in the morning between 07.00 and 08.00 am and in the afternoon between 3.00 and 4.00 pm , depending on the sugar palm farmers' needs and time.
4. Using the production of palm sap for the next production process, (a) Syar'i version: If the harvest is used (self-produced) or sold as raw material for palm sugar production, either in the form of palm sugar or crystal sugar, and can also be sold in the form of boiled palm sap as raw material for making palm coffee. On the other hand, (b) Not Syar'i version: If the harvest is sold to a collector (middleman/tuak (wine)) producer for the raw material for making traditional tuak (wine) drinks.

Based on the stages of production (production process) of palm juice carried out by the respondents mentioned above, the researchers grouped the production process of palm juice into sharia and not sharia in Rokan Hulu Regency. It can be seen in the following table:

Table 6. Respondents based on the production process of palm sugar (Syar'i and non- Syar' $^{\prime}$ ) in Rokan Hulu Regency

| No. | Palm Sap | Sugar Palm Farmers (Person) | Percentage (\%) |
| :--- | :--- | :--- | :--- |
| I. | Sharia | 20 | 66.67 |
| 2. | Non-Sharia | I0 | 33.33 |
| Total |  | 30 | IO0.00 |

Source: Primary Data Processed, 2020.

Based on Table 6 above, 20 ( 66.67 percent) sugar palm farmers carry out the syar'i production process of palm sap. Meanwhile, the remaining IO sugar palm farmers carry out the non-syar'i production process of palm juice, 33.33 percent. It means that the production process of palm sap has not yet reached the optimal mashlahah, because the comparative value is still below 95 percent, namely $($ IOO-33.33 $)=66.67$ percent.

## Output (Palm Sap)

As time goes on, palm sap is mostly used as raw material for making traditional palm wine. This condition is caused by some sugar palm farmers' low level of faith in Allah SWT. They only think about the temporary but large profits because palm sap sold to traditional traders/middlemen/ producers of palm wine costs Rp. I2,000 per liter. On the other hand, when processed to palm sugar and crystal sugar, 5 (five) kg of palm sugar and crystal sugar require I (one) kg liter of palm sap. They would only get $\mathrm{Rp} 25,000 /$ kilogram of palm sugar, and Rp 60,000/kilogram of crystal sugar. However, they need additional costs in the form of firewood, labor, and longer time in the production process, as well as the uncertainty of products, since crystal sugar is related to palm sap quality. On the other hand, when the farmers sell it to a traditional palm oil supplier/middleman/producer, with 5 (five) liters of palm sap, they will get a nominal value of Rp. 60,000,- without any additional costs. The products can directly be consumed. However, this Version (b) is widely applied by sugar palm farmers.

The production of palm sap is berkah not only as an economic activity that produces added value, but also produces additional mashlahah, to achieve an essential profit and have a positive impact and effect on the progress of the nation's next-generation, and avoiding the intoxicating khamr. The drops of palm sap for Version (a) will provide berkah and mashlahah.

Sugar palm sap is the output of the use of inputs/production factors with the raw material in the form of palm trees. The production of palm sap undergoes several stages in the process. Besides as a raw material for making palm sugar and crystal sugar, palm sap is also used as a raw material for making traditional palm wine. Palm sap produced as raw material for making palm sugar and crystal sugar is continuously decreasing. It does not mean that the production of palm plants is decreasing, yet more and more palm farmers are selling their products to traditional palm wine makers.

Based on the output produced, palm sap is grouped into halal (syar' ) and non-halal (not syar' ). Of the 30 respondents (palm farmers) in Rokan Hulu Regency, their production is classified in the table as follows:

Table 7. Respondents Based on Output Classification / Sugar Palm (Halal and Non-Halal) In Rokan Hulu Regency

| No. | Palm Sap | Sugar Palm Farmers <br> (Person) | Percentage (\%) |  |
| :--- | :--- | :--- | :--- | :--- |
| I. | Halal (Sharia) | I6 | 53.33 |  |
| 2. | Non-Halal (Non- <br> Sharia) | I4 | 46.67 |  |
| Total |  |  | 30 | I00.00 |

Source: Processed Primary Data, 2020
Based on Table 7 above, I6 sugar palm farmers (53.33\%) produce halal palm sap. The remaining I4 palm farmers ( $46.67 \%$ ) produced non-halal palm sap. It means that the output produced by sugar palm farmers has not yet reached the optimal mashlahah, because the comparative value is still far below 95 percent, namely $(\mathrm{IOO}-46.67)=53.33$ percent.
Discussion
The palm sap processing is very dependent on the intentions and goals of each sugar palm farmer (producer). Processing, in general, carried out by palm farmers falls into two categories:
(a) Syar'i palm farmers: use raw materials in the form of palm plants with legal ownership, start the production process by praying and Shalawat Nabi, and store the sap using a container that has been inserted a certain kind of tree root so that the palm juice does not ferment (does not contain alcohol), so that it becomes as halal palm sap, with a sweet taste, clear yellowish color, and odorless which is then used for making palm sugar or as infusion water from making palm coffee drinks.
(b) Non-syar'i sugar palm farmers: use raw materials in the form of sugar palm plants with mixed ownership between legal and illegal, does not begin the production process with the reading of the Prayers and Shalawat Nabi, store sap using a container that has been inserted a certain kind of bark from a certain tree so that the palm sap undergoes fermentation and contains alcohol. It makes the taste of the palm sap becomes sour and
brown, the color is cloudy yellowish, and has a bad smell so that it becomes non-halal (haram). This non-halal palm sap is then used as input for making traditional palm wine. The non Syar'i farmers sell the sap to a middleman for traditional palm wine for IDR I2,000/liter.

The syar'i palm farmers (group a) create and increase mashlahah in the production process, and they surely achieve an essential profit within the framework of Islamic goals and is optimally sustainable. Meanwhile, non-syar'i sugar palm farmers (group b) are only orienting towards getting high but momentary profits and losses in the long run. In addition, the non-syar' 1 farmers also contribute to an increased negative impact on people's lives, especially for the local young generation by participating in forbidden drinks in Islam. Therefore, it can damage the future of the nation's next generation.

The palm sap produced by a group of syar'i palm farmers will achieve blessings and enjoyment from the drops of halal palm sap. Besides, palm farmers can also increase their income by working as palm sugar craftsmen. Economically, dual professions can increase income through acquiring added value, processing palm sap into palm sugar and crystal sugar. The acquisition of added value as a continuation of the production process of sugar palm is a condition for achieving mashlahah. It is different from the non-syar'i group of sugar palm farmers. They will not get the berkah and enjoyment from the drops of palm sap, and they cannot enjoy the sustainability of the production process. Instead, they get a challenge from the Civil Service Police Unit (SATPOL PP) if they are caught selling alcoholic palm sap to a traditional palm wine producer (manufacturer). Various challenges faced by non-syar'i sugar palm farmers (producers of palm sap containing alcohol) are that they face challenges from the surrounding environment, therefore, it indicates that they do not achieve mashlahah.

In line with the sub-chapter of the research results, the production of palm sugar in Rokan Hulu Regency, Riau Province in 2020 has not yet reached the Optimal Mashlahah. It can be observed either from:
I. The Input has not reached the optimal mashlahah, because the comparative value is still below 95 percent, $(\mathrm{IO} 0-\mathrm{I} 6.67)=83.33$ percent.
2. The production process has not reached the optimal mashlahah, because the comparative value is still below 95 percent, $(100-33.33)=66.67$ percent.
3. The output has not reached the optimal mashlahah, because the comparative value is still far below 95 percent, namely $(100-46.67)=53.33$ percent.

The three stages of the palm sap production process in Rokan Hulu Regency, Riau Province have not yet reached the Optimal Mashlahah because the comparative value is not above and equal to $95 \%$ ( $\geq 95$ percent). The three stages are still far below $95 \%$.

## E. CONCLUSION

## Conclusion

The conclusion explains the realization of the research objectives, which is to determine and analyze whether the production of palm sap in Rokan Hulu Regency, Riau Province in 2020 has reached the optimal mashlahah. Based on the results and discussions described previously, the researchers draw the following conclusions: That the production of palm sap in Rokan Hulu Regency, Riau Province The year 2020 has not yet reached the optimal mashlahah.

## Suggestion

Based on the conclusion that the production of Nira Aren in Rokan Hulu Regency, Riau Province in 2020 has not yet reached the optimal mashlahah this study offers some suggestions, including the following:
I. Inviting and urging sugar palm farmers to no longer carry out non-syar'i stages of palm sap production, from ownership of inputs and production processes, to produce results. Therefore, the output in the form of palm sap will add mashlahah, and will not only be limited to adding profit.
2. Teaching sugar palm farmers the production process from an Islamic perspective by following the guidance in the Qur'an, with a future vision that is not only oriented towards achieving short-run profits but also long-run losses.

Instilling an understanding of Islamic values towards sugar palm farmers gradually and regularly by forming small recitation groups, at least once a week after Friday prayers for 10 to 20 minutes.

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