Utilization Of Coffee And Aren Cultivation In Producing Non-Alcoholic Wine Flavored Aren Coffee Products To Improve The Economy Of The People Of Kutalimbaru, Deli Serdang

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Abstract.

This community service aims to utilize the cultivation of Coffee (Coffea Sp.) and Aren (Arenga Pinnata) plants in the manufacture of Aren Coffee with Non-Alcoholic Wine Flavor as an alternative to plants producing raw materials for innovative processed coffee products in Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency, North Sumatra. The benefits obtained are increasing positive acceptance responses in the Suka Makmur Village community so that this area becomes an alternative for the use of coffee and aren Aren plants as raw material for coffee innovation products. Non-Alcoholic Wine Flavor which can be a new variant of coffee product innovation and increase people's economic income, as well as increase people's knowledge and skills on how to make Non-Alcoholic Wine-Flavored Aren Coffee. The result of the program is the achievement of many understandings and perceptions from the people of Suka Makmur Village who agree and are enthusiastic about becoming a center for the development and planting of coffee and sugar Aren plants. The formation of a technical team for making Non-Alcoholic Wine Flavored Aren Coffee to produce a mainstay product in Suka Makmur Village. The formation of an "IT" team that produces video tutorials and a marketing team (how to make Non-Alcoholic Wine-flavored Aren Coffee and how to cultivate coffee and sugar Aren plants, as well as sell products on social media). Producing ready-to-drink processed products of three in one size of 20 gr, 100 gr, 250 gr, 500 gr and 1000 grams for sale thereby increasing the community's economic income and planting from the availability of 1000 seeds of coffee and sugar Aren plants to the community so that the forest in Suka Makmur Village becomes productive forest.

Keywords: Cultivation, Coffee (Coffea Sp.), Aren (Arenga Pinnata), Coffee Product Innovation and Productive Forest.

I. INTRODUCTION

Coffee plant (Coffea sp.) is part of the Rubiaceae family and the Coffe genus is a plant that can grow upright, branched and can grow up to 12-meters with leaves that grow opposite the stems, branches and branches. The types of coffee that are currently circulating do not all provide their own pleasure for lovers. Robusta coffee is the type of plant that is most popular with coffee lovers around the world. This type of robusta coffee plant is very easy to cultivate both in the yard of the house, plantation or even in pots. Because this plant does not require a number of ingredients which are considered quite difficult for farmers [1]. The demand for Indonesian coffee continues to increase from time to time. Geographically, land in Indonesia is very suitable for coffee plantations because it has an ideal microclimate for coffee growth and production. Coffee planting centers in Indonesia are scattered in various regions because almost all regions in Indonesia from each island are very suitable for growing coffee plants. Economically, coffee is seen as a plantation commodity that has high economic value and is strategic for equal distribution of income so that it contributes significantly to improving the welfare of farmers, providing employment opportunities, and providing foreign exchange income. Therefore, the potential for coffee development in the region is needed to support the improvement of farmers' welfare [2]. Diversification of agricultural businesses to increase agricultural output in order to create stability in income. The application of coffee and other crop diversification by farmers is: coffee-pepper, coffee-chocolate, coffee-pepper brown, coffee-orange, coffeechocolate-orange and coffee-coconut [3], as well as coffee-aren. Aren is also called Enau as the second popular Aren plant after coconut. This plant is a versatile plant like coconut. The Aren tree, has the Latin name Arenga pinnata, from the Arecaceae family. Aren is also known by various names such as nau, hugg, mourning, Aren fiber, taren, akol, akere, moka, tuwa, and others.

The Aren tree is a large and tall tree. Aren trees can reach 25 m in height and up to 65 cm in diameter. The tree trunk is covered with black fibers known as fibers, injuk, juk or duk. The Aren fiber was actually part of the leaf sheath that covers the trunk of the Aren tree. Aren tree leaves are compound pinnate, like coconut leaves. The leaves can reach 5 m in length with petioles up to 1.5 m [4][5]. Suka Makmur Village is part of the Kutalimbaru District in Deli Serdang Regency, North Sumatra Province. This village is located in an area with an altitude of between 1,300-1,500 meters above sea level (DPL) with hilly contours with temperatures between 18°-32° degrees Celsius. The area is affected by dry and rainy seasons [6]. This situation is a very strategic area as a place to grow coffee plants. Suka Makmur Village has a total of 11 hamlets. The distance from this village to the sub-district center is about 7 km and the distance to the city of Medan is about 75 km. The population in Suka Makmur Village is 2396 people with the highest population aged 5-9 years, namely 279 people with the lowest population aged 60-64 years [6]. This Community Service is carried out for the Suka Makmur village community whose area is surrounded by forest so that it is hoped that the community will plant coffee between the Aren trees, the community is eager to improve their welfare by carrying out coffee cultivation which is an effort to use community forest land as a diversification of industrial product crops to increase community economic value. This activity is part of our collaboration in the fields of Training, Development, Agribusiness, and others in the UMKM sector in North Sumatra with Ms. Zuliana in the field of Research Matching Fund 2021 processing Aren plants into Ant Sugar and it is going well.

This year we are continuing our collaboration in the management of conversion forests into coffee and Aren plantation forests in creating the final product of Aren coffee with the taste and aroma of non-alcoholic wine. The potential for large enough coffee land and the enthusiasm of the forest village community to improve their welfare through coffee cultivation is the main motivation for the Prima Indonesia University academic community to carry out dedication to technology transfer and education in an activity of the assisted village service program in the form of the Application of Business Partners. Sugar Aren and coffee plants are future agricultural business commodities, considering that the sugar Aren and coffee commodity business sector is one of the favorite businesses. The government and private companies have turned the coffee plant into a non-oil and gas income sector in the plantation sector which is of interest to the people in Sumatra, Java, Kalimantan, Sulawesi and even in Irian as well as oil Aren, rubber, cocoa plantations which had previously become commodity plantation export businesses. Likewise, Aren plants have started to become plants that produce Aren sugar products that are exported abroad. The culture of the people of North Sumatra and even throughout the country is inseparable from the habit of drinking coffee every day, but drinking coffee still uses a lot of cane sugar instead of Aren sugar. As a result, the consumption of cane sugar exceeds the production of Aren sugar.

However, the high number of patients with diabetes continues to increase due to the large amount of cane sugar consumed every day.Referring to the problems above, the urgency of this activity is to show that this Aren commodity is still an alternative choice for today's farmers, only a handful of farmers are utilizing their natural resources to manage conservation forests into productive Aren and coffee forests. Aren and coffee plants will be able to be processed into processed products with innovation. The mushrooming of coffee shops among coffee start-ups provides positive and beneficial employment for the people of Indonesia. The management of conversion forests into productive forests for Aren sugar and coffee is very conventional, so the end result is very cheap and has not been able to improve the welfare of Aren and coffee farmers in various provinces in Indonesia.

II. METHODS

Methods Used to Overcome Problems

The method used in the implementation of community service activities is an approach method (direct observation) with Focus Group Discussions, discussions (interviews with business owners), briefings (developing offline and online marketing strategy concepts), and providing direct assistance. The training participants are community members, farmers and business owners as follows: Aren Farmers in Kutalimbaru District, Deli Serdang, Aren Farmers in Sibolangait District, Deli Serdang Coffee Farmers in Karo Regency,

Coffee Farmers in Siamalungun Regency, Aren Manufacturing Industry in Deli Serdang, Aren Manufacturing Industry in Medan, Coffee Roasting Industry in Medan City, Coffee Roasting Industry in Deli Serdang, Coffee Shop Mamiku Coffee Medan, Coffee Shop Zawan Coffee Medan, Coffee Shop Lubuk Pakam, Prima Indonesia University, Department of Industry and Trade of the Government of Deli Serdang Regency and UKM Sugar Semut Deli Serdang (MBR Production Partner) This community service activity will be carried out in Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency. The activities for implementing the Utilization of Conservation Forest Management program to become Productive Aren and Coffee Forests in Creating Non-Alcoholic Wine-Flavored Aren Coffee in the 2022 Matching Fund which will be carried out in Deli Serdang district, North Sumatra, there are several stages or methods that must be carried out, namely: the Preparation Stage, Implementation Stage, Evaluation Stage and Reporting Stage.

Preparation phase; In the preparation stage several activities are carried out, namely: (a) Location Survey, in this case the research team conducted a site survey in Deli Serdang district, North Sumatra. (b) Interview, the research team conducted interviews about the condition of partners, namely Ms. Zuliana as Director of Mitra Zuniman Berkah Bersama. (c) Preparation of Activity Schedules, this is done to ensure that each activity can run well and regularly. (d) Preparation of Materials and training/assistance. The team compiles any material that will be used during the training process so that it can make it easier to understand the material during the training process. Implementation Stage; In this stage there are several activities carried out such as: (a) Bring in resource persons to provide an understanding of the importance of forest governance and the process of planting sugar Aren and coffee seedlings into productive forests. (b) Provide training on the process of utilizing sugar Aren and coffee products. (c) Procurement of facilities and infrastructure in the processing of Aren and coffee crops. (d) Carry out the mentoring process in the manufacture of nonalcoholic Wine-flavored Aren Coffee with a Roasting system. Evaluation Stage; This stage is the stage of the research team to be able to determine the level of success of the activities carried out so that if there are deficiencies during the activity process, improvements can be made. This evaluation was carried out using direct observation and interview methods. And Results Report; The preparation of this research was carried out in 2 stages, namely the progress report and the final report.

III. RESULT AND DISCUSSION

Socialization of the Utilization of Conservation Forest Management to Become Productive Forests for Aren and Coffee Arens in Creating Non-Alcoholic Wine-Flavoured Aren Coffee

The socialization of forest area management by utilizing coffee and sugar Aren plants to produce a new product of non-alcoholic wine-flavoured Aren coffee was presented at community service activities in Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency. Processing of coffee and Aren sugar can be utilized as a new material of choice for a new beverage product for coffee fans. So, it is deemed necessary to socialize the processing of non-alcoholic wine flavored Aren coffee. The production of non-alcoholic wine-flavoured Aren coffee can encourage the people of Suka Makmur Village to actively develop the coffee and sugar Aren plants.

The active role of the community is very important because it can meet the basic needs of these products so that they can be sold/marketed. One of the objectives of this Community Service activity is to increase public awareness and participation in supporting the non-alcoholic wine-flavoured Aren coffee production program in Suka Makmur Village. In this activity, both lecturers, students, partners, the community of sugar and coffee farmers and the local community jointly planted 10,000 polybag seedlings in the conversion forest of Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency. This planting is a momentum point for the declaration of conversion forest into productive forest and for the next few years will become an educational forest for sugar Aren and coffee researchers in North Sumatra. Besides that, the sustainability of this forest will provide great benefits from the natural rain regulation system. Considering that aren plants are very good at storing the volume of water in the soil [7].





Fig 1. Socialization of the Utilization of Conservation Forest Management to Become Productive Forests for Aren and Coffee Arens in Creating Non-Alcoholic Wine-Flavoured Aren Coffee.

Various positive responses emerged from the community in response to this program. From the results of initial observations on the socialization of the use of coffee and Aren sugar to become non-alcoholic wine-flavored Aren coffee in Suka Makmur village, therefore, preliminary observations were made, especially in the first week, namely counseling regarding: (1) community knowledge about coffee and sugar Aren plants, (2) coffee and Aren as a solution/alternative for consumption of new products, (3) public interest in producing Non-Alcoholic Wine-flavored Aren Coffee and (4) constraints in implementing Non-Alcoholic Wine-flavored Aren Coffee, through group discussions and distributing 20 questionnaires to the public in Suka Makmur Village to find out the response from the community (Figure 1). Based on the results of the socialization carried out, it is known that the community responds well to this program because considering that Suka Makmur Village is very suitable to be used as a center for the development of coffee and sugar Aren plants as raw materials for types of non-alcoholic wine-flavored coffee Aren coffee.

The Process of Making Non-Alcoholic Wine-Flavoured Aren Coffee

The team's first step was taking coffee beans that had been declared ripe or old. Old ripe coffee bean fruit is characterized by a red skin of the fruit flesh, for the green skin of the fruit flesh it is not yet possible to pick or harvest coffee. Harvested coffee beans that were ripe or said to be cherries, the team soaked them in a plastic container filled with clear water.





Fig 2. Old Ripe Coffee Beans and The Coffee Bean Soaking Process

Soaking is done in order to determine which series beans can be used in the wine coffee making process, which series beans should be discarded or rejected which are indicated by the coffee beans floating on the surface of the water. These are coffee beans that cannot be used in the process of making wine coffee, meaning the coffee beans are damaged, rotten or young. Coffee beans that have been submerged are soaked for an additional longer time for up to 1 hour, after 1 hour the coffee beans that have been soaked in pure water are dried or dried.





Fig 3. Drying Coffee Beans

The coffee beans are dried in a drying area made of stainless or a drying area that should not be contaminated with chemicals such as paint, rust and so on. This drying is carried out for approximately 1 to 2 hours until the coffee beans are completely dry from the water attached to the outside of the fruit skin. During the 1-hour process, the coffee beans are dried (turned over) to dry using the sun's heat evenly. After that, the coffee beans are put into a clean and clear plastic bag so that they are easily visible or easy to observe for several days.





Fig 4. Drying with stainless steel containers and plastic containers as a place to store the results of drying coffee beans

In a plastic bag each research team filled approximately 10 to 20 kilos of cherry coffee beans that had been soaked and dried in the sun. There were 5 plastic bag containers, the first plastic bag containing 20 kilos of natural cherry coffee beans each, meaning that only soaking was carried out with fermentation in water, the second bag contained 20 kg of wine coffee with pineapple flesh filled, the third plastic container containing 20 kg of series coffee beans are filled with papaya skin, the fourth is fermented with orange peel, the fifth is fermented with banana peel. In the five containers, 20 kg of cherry coffee beans have been put into them and each fruit peel has been added, used for organic decay or fermentation with the fruit. Then the plastic container is then tied, so that it is impermeable from the outside air, it cannot be contaminated by outside air, and insects cannot enter it. That's why the plastic bag must be clean and clear and tightly tied so that it is airtight. The plastic bags the research team put into Tupperware and closed tightly and tied with solasiban so that absolutely no contamination from outside parties, insects or dust and dirt. For the first fermentation stage, fermentation is carried out every 5 days, meaning that after 5 days later we will dry the coffee beans, preferably drying them in the morning before 11 o'clock, meaning starting at 8,9,10,11 three hours per day. It is done under the hot sun so that the steam contained in the plastic bag for 5 days really comes out and has been dried naturally by the sun.

The drying is carried out for 3 hours by turning it back and forth every half hour, every half hour the coffee on top of the 2x1 meter drying container made of stainless is turned back and forth, so that the fermentation in the sun is really carried out evenly. That's the treatment of 5 natural good fermentation, with pineapple peel, banana peel, orange peel and papaya peel. After the research team made sure that 3 hours of drying had taken place, each treatment was put back in a plastic bag, tied tightly, put in a Tupperware container and stored in a room that was not exposed to direct sunlight. On the 10th day, the research team again dried it like the 5th day as well as the 15th, 20th, 25th and on the 30th day, there was the end of the drying process for 5 days 10 days 15 days 20 days 25 to 30 days. We do this process for 30 days, so we can already see the changes occurring in the skin of the coffee berry flesh, you could almost say that the change has occurred from a red color on the first day and will become a dark brown color, dry, wrinkled and has a distinctive aroma. This indicates that the fermentation was successful. In the second treatment process the same as the first treatment, the second method that the research team used was the 25-day fermentation method, meaning that for 25 days 5 plastic coffee bean containers in 5 plastic bags or 5 plastic Tupperware, for 25 days did not open the containers, but on day 25 26 27 28 29 30 31 32 33 34 and day 35 every day they are dried for 3 hours and turned over for 30 minutes once.

After 35 days, the second method of fermentation has been declared over. This is done for coffee beans originating from Arabica Aceh Takengon. Likewise with the coffee beans that we get, namely Arabica from Simalungun. The research team also carried out the same treatment for both the 5-day method and the

25-day method, for 30 days for the 5-day method, 35 days for the 25-day method. These treatments still use 5 methods, the first is the natural method, the second is pineapple peel, papaya peel, banana peel and orange peel, this is the process of making coffee wine using the coffee decay (fermentation) method organically using fruits. Then in making non-alcoholic wine-flavoured Aren coffee, mix Aren Sugar (Aren sugar) which is already in the form of ant sugar into the coffee wine.

Formation of the Marketing Team & "IT" Team Making Video Tutorials on How to Product Aren Coffee with Non-Alcoholic Wine Flavor

The IT team making video tutorials in Suka Makmur Village consisted of students participating in community service activities, namely Cut Diah Paramita, Dzulfa Khairuna, Widya Sari, Sandra Laksmita, Sahri Maulana Hadi, Heni Madana Murfita and Derry Alamsyah Lubis who were students of the Management Department at Prima Indonesia University with assistance by a lecturer from Batanghari University, Jambi, Mrs. Hasminidiarty. This technical team was established with the aim of making a documentary film and video tutorial on making Non-Alcoholic Wine-flavored Aren Coffee in Suka Makmur Village, where the results of the video can be used by the village community and the general public to gain knowledge and skills about: (1) tutorials on how to make coffee Aren Flavored Non-Alcoholic Wine, and (2) education on how to cultivate coffee and sugar Aren (Figure 5).

The Marketing Team in Suka Makmur Village consists of lecturers and is assisted by students participating in community service activities. As lecturers from the Faculty of Economics, Prima Indonesia University, Mr. Deni Faisal Mirza and Mrs. Devi Alvionita Alindra provided understanding and knowledge on how to market non-alcoholic wine-flavored Aren Coffee products, both through online and offline marketing strategies. This activity was assisted by students namely Alvira Azzahra, Agusti Rahma Devi Damanik, Nia Syahputri, Heni Madana Murfita and Vira Fidellia. Online marketing is a marketing communication activity using social media/internet [8]. According to its development, online marketing does not only use website media, but also e-mail and other applications that run on the internet protocol [9]. For sellers, implementing a system like this means cutting expenses that were normally incurred in the old system.





Fig 5. Marketing and IT Team

If in the old system we had to open new branches to expand our business, this is not the case with the online system. Because with this system sellers can introduce their products through the website [10]. Where every consumer is not only in one location can access to find information on the product needed, and the seller does not need to open a new branch or marketing office [11. Online marketing strategies are more effective, have a wider reach so that they can be accessed by customers in various regions [12]. For consumers, this system is very helpful, because consumers do not need to come directly to the location to buy non-alcoholic wine-flavoured Aren coffee products. Benefits of the online sales system: No need to open many branch offices in terms of marketing; Reducing the level of expenditure for the producer, and Facilitating consumers in purchasing an item. Activities in Suka Makmur Village as MSME actors are given knowledge and understanding so they can utilize digital media as an effort to market their products so that consumers are more familiar with the products produced by these MSMEs. MSMEs that have online access, are involved in social media, and develop their e-commerce capabilities, will usually enjoy significant business benefits in terms of income, employment opportunities, innovation, and competitiveness. However,

there are still many MSMEs that have not implemented information technology, especially using digital media and do not understand how big the benefits and roles of using digital media are [13].

So, this community service is important for the people of Suka Makmur Village to be able to take advantage of one of the digital marketing media that is often used, namely Google Business. Google Business is a free application that can be used to help MSME players' businesses be found in various Google products, such as on Maps and search. If the UMKM of Suka Makmur Village runs a business that serves customers in certain locations, or serves customers in specified service areas, it will be easier. GoogleBisnis can help other people find these MSME businesses [14]. The dedication team also helped introduce several of the newest online sales platforms or marketplaces. However, business owners and workers are experiencing difficulties. The results of the considerations and discussions, marketing only uses Whatsapp and Meta. In order for owners to familiarize themselves with social media posts to use online sales platforms or marketplaces. This consideration adjusts to the ability of the business owner so that there are no marketing mistakes that can reduce the reputation of the business. Understanding customer-based brand equity in MSME products is important to improve in order to create customer loyalty. Products that comply with the promise of product quality offered are in accordance with the expectations offered by advertisements from digital media as a way of marketing Non-Alcoholic Wine Flavored Coffee Aren products in Suka Makmur Village, is the key to creating trust as the right way in making purchasing decisions by customers. 15].

The elements that determine a sustainable business are determined by a marketing strategy as an effort to influence or attract consumer interest and as an action to maximize market opportunities. The offline marketing strategy is usually in the form of flyers, catalogs and making name banners in the business environment [16]. While the use of offline marketing media with business cards, flyers, and catalogs. All design, manufacture and printing are assisted by the Community Service team. The three media can be shared and can be shown to consumers. Not all SMEs have intense product production interested in online marketing. But offline marketing, should not be too prioritized. Then offline marketing is the process of selling goods and services directly where producers and consumers meet and the process of buying and selling transactions occurs [17]. The tools or media used for offline sales are pamphlets, brochures, banners or banners. Offline marketing will be difficult if it is to be widely marketed, which lies in transportation costs, for example if you want to open a branch of non-alcoholic wine-flavored Aren coffee in several cities, you need to think about it in terms of cost, because it will be relatively expensive. The advantage of offline marketing of non-alcoholic wine-flavoured Aren coffee is that consumers can directly choose the nonalcoholic wine-flavoured Aren coffee products with good and appropriate product quality. In addition, sellers can directly promote non-alcoholic wine-flavored Aren coffee directly to consumers, so that consumers can immediately hear about the benefits and deliciousness of non-alcoholic wine-flavoured Aren coffee directly from the seller/manufacturer.

This activity also focuses on product innovation from two commodities, namely coffee and Aren sugar which will produce non-alcoholic wine-flavored Aren coffee with the right composition and taste. For non-alcoholic wine-flavoured Aren coffee products, packaging is carried out in various variants, namely 20 grams, 100 grams, 250 grams, 500 grams and 1000 grams.

Provision of Coffee and Aren Seeds to the Community as Production Plant Materials

In the community service activity, he gave 1,000 coffee and sugar Aren seeds to the community and farmers in Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency and several farmers from Tanah Karo Regency and Simalungun Regency. The activity was started by symbolically planting seeds by the Head of Kutalimbaru District, then the coffee and sugar Aren plant seeds were distributed to farmers to be planted in their respective areas.



Fig 6. Location of Planting of Coffee and Aren Seeds and Symbolic Planting

The Deli Serdang Regency Government welcomed the community service activities from the University for farmer groups in Deli Serdang Regency. At a glance, the vision of Deli Serdang Regency is explained, namely the realization of a prosperous and dignified Deli Serdang community in the economy, health, and education. He also hopes that through this activity of providing coffee and Aren seeds, prosperity can be achieved and the economic dignity of society will be raised. Concluding his remarks, on behalf of the community and the Government of Deli Serdang Regency, he expressed his gratitude to Prima Indonesia University for the assistance provided and hoped that the cooperation could be continued on broader matters in terms of coffee and Aren farming in the future.

IV. CONCLUSION

This Community Service Program is the implementation of the 2022 Matching Fund Program from the Ministry of Education and Culture through the utilization of Coffee and Aren in Coffee Innovation as raw materials for local functional non-alcoholic Wine Taste Aren Coffee in Suka Makmur Village, Kutalimbaru District, Deli Serdang Regency, North Sumatra. positive. This condition can be seen from the results achieved in this activity, namely: 1) The perception of the people of Suka Makmur Village is that many agree and are enthusiastic about becoming a coffee development center area to be processed into Non-Alcoholic Wine-Flavoured Aren Coffee products. 2) Formation of a technical team for making Non-Alcoholic Wine-flavored Aren Coffee and how to cultivate coffee and sugar Aren plants. 4)

Formation of a sales and marketing team for Non-Alcoholic Wine-flavored Coffee Aren products offline and online and 5) Availability of 1,000 coffee and sugar Aren seeds for the people of Suka Makmur Village as raw material for Non-Alcoholic Wine-Flavoured Aren Coffee in their yards and forests in the village area. The result of this service activity is an increase in partners' skills and knowledge. As well as partners can take advantage of all media such as business cards, flyers, catalogs, posts on Whatsapp and posts on Meta and Google accounts to market Coffee and Aren products and new products from Aren Coffee with Non-Alcoholic Wine Flavor. This dedication activity with mentoring received a positive response and high enthusiasm. This is evident from the attitude and feedback of partners in activities.

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REFERENCES

- [1] Kementerian Pertanian Republik Indonesia (2022). "*Budidaya Kopi*". Berita Pusat Perpustakaan dan Penyebaran Teknologi Pertanian. Diakses pada 18 September 2022. https://pustaka.setjen.pertanian.go.id/index-berita/budidaya-kopi.
- [2] Ilham (2018) Strategi Pengembangan Tanaman Kopi Robusta (Coffea Canephora) Dikecamatan Sinjai Borong Kabupaten Sinjai. *Skrispi*. Program Studi Agroteknologi Departemen Budidaya Pertanian, Fakultas Pertanian, Universitas Hasanuddin, Makassar.
- [3] Junaidi, Y. dan M. Yamin. (2010). Faktor-Faktor Yang Mempengaruhi Adopsi Pola Usahatani Diversifikasi Dan Hubungannya Dengan Pendapatan Usahatani Kopi di Sumatera Selatan. *Jurnal Pembangunan Manusia* (4): 1-9.
- [4] AKG FKM UI (2016). "Aren (Arenga pinnata)". Info Gizi AKG. Akademi Kesehatan Masyarakat, Fakultas Kesehatan Gizi, Universitas Indonesia, Diakses pada 18 September 2022. https://akg.fkm.ui.ac.id/aren-arenga-pinnata/
- [5] Hasyim Asy'ari et al., (2020). Kadar Alkohol Pada Air Aren Aberdasarkan Penambahan Susu Dan Tanpa Penambahan Susu. *Islamic Manajemen*, 3(2), 40–46.
- [6] BPS Deli Serdang (2019). Kecamatan Kutalimbaru Dalam Angka 2019. https://deliserdangkab.bps.go.id/publication/2019/09/26/0675162cad5578afe48f8af9/kecamatan-kutalimbaru-dalam-angka-2019.html
- [7] Effendi DS (2010). Prospek Pengembangan Tanaman Aren (Arenga Pinnata) Mendukung Kebutuhan Bioetanol di Indonesia. **Perspektif**, Vol. 9 No. 1. Hal 36 46. https://media.neliti.com/media/publications/156818-ID-prospek-pengembangan-tanaman-aren-arenga.pdf
- [8] Chaffey, Dave, et.al. (2000). *Internet Marketing: Strategy, Implementation and Practice*. Prentice Hall Inc.
- [9] Hanson, W. (2000). *Pemasaran Internet*. Jakarta: Salemba Empat
- [10] Indrajit, R. (2002). Konsep dan Aplikasi e-Business. Jakarta: ANDI.
- [11] Nugroho, A. (2006). e-Commerce: Memahami Perdagangan Modern di Dunia Maya. Bandung: Informatika.
- [12] Zaki, A. dan S. C. (2008). 7CMS Pilihan untuk Internet Marketing. Jakarta: Gramedia.
- [13] Wardana, Aditya. (2018). Strategi Digital marketing Dan Implikasinya Pada Keunggulan Bersaing UKM Di Indonesia. *Prosiding Seminar Nasional: Forum Keuangan dan Bisnis* IV, Th 2015. ISBN: 978-602-17225-4-1
- [14] Ridwan, Iwan Muhammad. Dkk. (2019). Penerapan Digital marketing Sebagai Peningkatan Pemasaran Pada UKM Warung Angkringan "WAGE" Bandung. *Jurnal Abdimas Bsi (Jurnal Pengabdian Kepada Masyarakat*) Vol. 2 No. 1 Februari 2019, Hal. 137-142. E-ISSN: 2614-6711.
- [15] Suwarno, B. (2022). An Analysis of Purchase Decisions on Customer Satisfaction Through Customer-Based Brand Equity and Product Innovation: Concequences for Air Conditioner Panasonic in Medan. *International Journal of Science, Technology & Management*, 3(3), 605-620. https://doi.org/10.46729/ijstm.v3i3.515
- [16] Nurhayaty, E., Pramularso, E. Y., Marginingsih, R., & Susilowati, I. H. (2022). Pelatihan Membuat Media Promosi Sederhana dengan Aplikasi Canva di Yayasan Desa Hijau. *Jurnal Abdimas BSI: Jurnal Pengabdian Kepada Masyarakat*, 5(1), 69–77. https://doi.org/10.31294/jabdimas.v5i1.10522
- [17] Saleh M. Yusuf dan Miah Said. (2019). Konsep Dan Strategi Pemasaran. Makasar: Sah Media.