Entrepreneurship: Problems and Opportunities for Satoimo Taro Cultivation at Ummul Ayman Islamic Boarding School, Pidie Jaya

Arinal Rahmati\textsuperscript{1*}, Indrayani\textsuperscript{2}, Razif\textsuperscript{3}

\textsuperscript{1}STIS Ummul Ayman, Pidie Jaya
\textsuperscript{2}Universitas Malikussaleh, Lhokseumawe

*Correspondence Email: arinalrahmati@gmail.com

ABSTRACT
This study aims to examine the problems and opportunities of satoimo taro cultivation at the Ummul Ayman Islamic boarding school, Pidie Jaya. This research is a qualitative descriptive study with primary data. The informants in this study were the leaders of the Ummul Ayman Islamic boarding school and students who were engaged in satoimo taro cultivation. The results showed that the problems in satoimo taro cultivation were caused by the inability of good management by the students, narrow product marketing space, lack of product reliability, lack of innovation and creativity, lack of cooperation, lack of government assistance. Meanwhile, in terms of opportunities, this plant has the potential to become an export commodity in China, the vast amount of vacant land within the Ummul Ayman Islamic Boarding School that is provided, as well as the specific time allocation for Islamic boarding school students to grow crops and do entrepreneurship.

Keywords: Boarding School, Entrepreneur, Import Export, Santri, Satoimo Taro

INTRODUCTION
One of the educational institutions that has developed in Indonesia is the Islamic boarding school, which has contributed a lot to education and preaching in the field of religion. But along with the times, the institution began to transform and expand its role to the economic realm. This is indicated by the existence of education since high school...
or equivalent in the extracurricular field with an educational focus related to the attitude of independence in all students. Basically, self-reliance is the first step to create a generation with an entrepreneurial spirit in a boarding school environment.

In Indonesia in general, there is a significant positive trend every year for the number of entrepreneur-based Islamic boarding schools, including the el-Bayan Islamic boarding school in Cilacap, then the al-Qurthuby Islamic boarding school in the Bondowoso area, East Java and the al-Nadhlah Islamic boarding school located in Depok. (Hermansyah Karir, 2018). This condition then becomes an added value for educational institutions based on Islamic boarding schools compared to other types of educational institutions, including the Ummul Ayman Islamic boarding school.

Entrepreneurship education at the Ummul Ayman Islamic Boarding School was developed by opening extracurricular classes in agriculture, fisheries and animal husbandry, cooperatives, canteens and convenience stores (Waserda) for students in the Islamic boarding school with the aim of molding students to have mental and economic independence. In this study, the authors only focused on examining the satoimo taro cultivation entrepreneurship developed by students of the Ummul Ayman College of Islamic Studies (STIS), Pidie Jaya, Aceh.

This is interesting because of the support from the local regional government in the form of providing plant seeds through a related institution, namely the Saree Agricultural Center. Through this institution, the government provides business capital in the form of satoimo taro seeds to students who are in the Ummul Ayman Islamic Boarding School. Taro cultivation is not accompanied by good management skills by the students.

For the 2016-2017 period, selling taro is easy and there is already a market share for juice sellers. The demand for taro continues to increase, while the yields are insufficient to meet market needs, thereby reducing consumer confidence, which then turns to looking for other alternatives. In the following year, namely 2019 when the amount of harvest is available in sufficient quantities but consumers are no longer willing to buy. The absence of supply guarantees (product reliability) is the main reason for consumers to switch to alternative products. This has implications for the neglect of the 2019 harvest which has caused losses to the students of taro farmers.

The problems above illustrate the problem points faced by students in cultivating satoimo taro at Ummul Ayman Islamic boarding school, Pidie Jaya encouraging researchers to examine more deeply regarding (1) the problem points of satoimo taro cultivation at Ummul Ayman Islamic boarding school, Pidie Jaya (2) cultivation opportunities taro satoimo at the Ummul Ayman Islamic boarding school, Pidie Jaya. This research is very useful considering that in Aceh there is not much research focus on entrepreneurship, especially satoimo taro as well as the development of scientific treasures.

Pesantren

In theory, Islamic boarding schools are interpreted as shelters for students who want to gain knowledge in these institutions (Aini, 2021). Islamic boarding school itself means a place for students (Ghofirin & DKK, 2019) originating from two languages (Ali & Daud, 1995). From the above understanding, the authors argue that Islamic boarding schools are Islamic communities in the world of education that have their own characteristics, then (Zulhimma, 2013) also argues that Islamic boarding schools are an environment where life is based on religious norms and values as a reference in society. The ultimate goal is for each of these young generations to inherit religious knowledge
so that they can continue to spread and develop it and this demands and awareness of the obligation of da'wah Islamiyah. (Hasbullah, 2011). Because pesantren is the oldest religious education institution in Indonesia and the presence of pesantren is considered the result of Indonesian cultural products which are referred to as indigenous. Then the rapid development took the initiative for kiai to provide accommodation for students who were located far from their homes (Anshari et al., 2021).

**Entrepreneurship**

Entrepreneurship is the formation of a creative and innovative character for resources to manage a business (Suryana, 2006). In the context of social entrepreneurship, entrepreneurs are seen as drivers to create superior value for society (Sofia, 2015). Furthermore, the broader meaning is analogous to someone who understands entrepreneurship, then is faced with a number of problems to solve by making social changes to achieve welfare, education and health care. The same understanding was also put forward by Santoso, according to him Entrepreneurship can be said as an agent of change who is able to carry out his duties to improve and change social values and continue to create innovations that are able to replace the old system. (Santoso & Setyanto, 2007).

**Satoimo Taro**

Taro Satoimo is a plant that belongs to the Araceae family which is also classified as a food plant that can be used for its tubers and leaves. In Indonesia, for the commodity category of tubers, sweet potatoes and cassava are at the top, while taro is in third place (Delvi Maretta, Dwi Pnagesti Handayani, Henti Rosdayanti, 2016). Since the Joumon Period, estimated to be 14,000 BC to 300 AD, satoimo taro has been cultivated in Japan and was known as a staple food long before rice was introduced. The Japanese people at this time have a designation for this type of plant, namely as "potato of the homeland". This title is given because of the high content of hydrounic acid which plays an important role in cell regeneration (Produce Satoimo Root Taro, 2018).

The Latin name for this type of plant is *Arcticum Lappa* which means burdock root. This plant does not take up too much space, because its growth size ranges from 1 m or more (Purnamawati, 2007). Sotoimo taro has many different types, shapes and textures, some are oval and round, in terms of shape some are oval and round, white round, while oval there are two types of red and slightly gray (Anonim, n.d.).

In addition, taro can grow continuously throughout the year in tropical and subtropical regions, usually in humid or flooded conditions. The average temperature suitable for taro growth ranges between 210C and 27 0C. Taro plants can grow in various types of soil, ranging from clay like for rice fields, to fertile soil, and with various land conditions, both muddy and dry land (Anonim, 2011a).

**METHODS**

The research model used is descriptive research, namely research that is based on phenomena, events that are described systematically (Moleong, 2008) about the problems and opportunities of satoimo taro cultivation at STIS Ummul Ayman with a qualitative approach. Because this research is included in field research, data can be obtained directly by interviewing the leadership of the STIS Ummul Ayman Islamic Boarding School and Ummul Ayman students who cultivate satoimo taro plants.

The supporting data are in the form of books, journals, articles, websites and other research results related to the satoimo taro problem at the Ummul Ayman Islamic
boarding school as well as other relevant documents to help answer the problem formulation through the data. In addition, the authors also analyze the data that the authors obtain from the internal data of the Ummul Ayman Islamic boarding school. The technique that the writer uses to collect all the data is the technique of observation, interviews, and documentation (M, 2005). The concrete steps that the writer will take in collecting data are first looking for and finding data related to the subject matter, then reviewing the data so that it can be analyzed, then it will be recorded according to the needs of the research.

RESULTS AND DISCUSSION

Problems of Satoimo Taro Cultivation at Ummul Ayman Islamic Boarding School, Pidie Jaya

1. Narrow Product Marketing Space

Competition in the business world in the current decade is very tight and requires a variety of innovations, creativity so that it has its own characteristics so that it can highlight the advantages of its products and the most crucial role is being able to attract consumers. The inability to sell goods results in loss of profits and what is even more fatal is the bankruptcy of the business. Therefore to get profit is not easy, special strategies are needed to win the competition. The business strategy itself is an action to achieve the output to be achieved by a business, the strategy must be able to compete with the business world.

By understanding the strategies that exist in the business, it can be known what will happen in the future, this strategy must be right on target and increase profits for the business, and vice versa if the strategy is wrong, the business that is being involved will be on the verge of collapse and suffer losses (Imsar, 2018). There are several steps that need to be taken by young entrepreneurs, including as formulated by the 3rd World Entrepreneurial Forum which was held in Lyon, France, in November 2010 resulting in several recommendations from the theme Shaping The World of 2050: the Entrepreneurial Impact, including accelerating the development of innovative and high growth companies and changing the mindset of the poor with the support of government policies and environmental promotion that can encourage entrepreneurship in areas that have the potential to process natural products by providing education for young entrepreneurs. Basically, a newly started business is not required to have large capital, strategic location, adequate number of employees, adequate service, but can be developed with adequate capital and develop science and technology, this is as stated by Rhenald Kasali, who is a business consultant, according to him, beginners are advised to keep it small and simple, which is shortened to KISS (Kasali, 2010).

The results of the study show that so far the marketing of this product has not been carried out in a coordinated and modern way. So far, the students have only depended on consumers who sell juice, so that when market conditions change to an unfavorable condition, the students have no other alternative.

2. Lack of Product Reliability

Another visible condition is the low ability of the santri to maintain product continuity so that consumers cannot be sure of the reliability of supply which in turn causes a lack of trust (customer trust). The results showed that the students did not yet have a planting strategy that could produce products continuously so that there was no shortage at a certain time. For the 2016-2017 period, selling taro is easy and there is already a market share for juice sellers. In 2018 the demand for taro continued to
increase, while the yields were insufficient to meet market needs, thereby reducing consumer confidence, which then turned to looking for other alternatives. When the amount of harvest available in sufficient quantities consumers are no longer willing to buy. The absence of supply guarantees (product reliability) is the main reason for consumers to switch to alternative products. This has implications for the neglect of the 2018 harvest which caused losses to the students of taro farmers.

3. Lack of Innovation and Creativity

The lack of innovation and creativity by combining local wisdom to prepare snacks with the basic ingredients of satoimo taro from the students has led to neglect of ready-to-harvest taro. So far, the students have only relied on consumers who sell juice, even though the taro at Ummul Ayman Islamic Boarding School is harvested twice a year which is then sold to traders in the Saree, Sigli and Beureunuen areas at a selling price of 50 thousand rupiah per kilo. In reality, satoimo taro can be produced into various types of ready-to-eat and raw foods that offer new variants of taro-based ingredients, such as taro flour, taro cake, dodol, taro chips, taro sticks, other pastries, and various types of food. Another lighter ingredient is taro (www.sulsellitbang.pertanian.go.id). Therefore taro is used as a type of food that is highly admired in Japan, because the content in it is very high in nutrients which are known to be very good for health, therefore it is not surprising that Satoimo is the type of ingredient most often used in Japanese cuisine (Osaka, 2014).

4. Lack of Cooperation

In addition to processing various types of food as described above, students can also collaborate with the surrounding community, especially housewives to process taro into various types of food. This can revive the home industry which has an impact on improving the community’s economy. Then it also opens jobs for the local community and can have a positive influence on the surrounding community and is able to increase economic growth, especially in Aceh. Because basically by developing satoimo taro the students also have a promising business that can even be sustainable in that way, creating economic independence for the students at the Ummul Ayman Islamic boarding school, Pidie Jaya, Aceh.

5. Lack of Government Assistance

Provision of taro seeds by the government should be appreciated as a first step in helping students to become independent. Same with the research conducted by (Rahmati et al., 2020) who stated that the seeds provided by the agricultural service acting as the government were real support in making the students at the Ummul Ayman boarding school become entrepreneurs. However, with minimal agricultural knowledge, product marketing insights that are not broad, and limited networks, the santri should be given regular assistance so that they do not seem left to work alone with very limited abilities.

Opportunities for Satoimo Taro Cultivation at Ummul Ayman Islamic Boarding School, Pidie Jaya

1. Taro Satoimo is Environmentally Friendly

Environmentally friendly taro opens opportunities for tropical regions such as Aceh to take part in cultivating these plants, especially among Islamic boarding school students who have specific time allocations. In addition, the Satoimo type of taro has great prospects for development because it can be cultivated for both low and high lands up to 1400 meters above sea level throughout the season (Princess, 2019). Then this Taro can be cultivated in tropical and subtropical regions, with temperatures
usually ranging between 210°C and 27°C in humid or flooded conditions and regardless of seasonality, growing all year round with all soil conditions such as for paddy fields, muddy or dry land (Anonim, 2011a). Seeing this prospect, Aceh is one area that is very suitable for cultivating this type of taro.

2. Land Potential

The land potential for satoimo taro cultivation in the Ummul Ayman Islamic Boarding School complex in Pidie Jaya is very wide. This award was based on the large area of vacant land in the Ummul Ayman Islamic Boarding School environment which was provided for the students to grow crops. The land area is 1 hectare, but because of the lack of taro seeds, the students only use 2000 meters for planting the seeds. The rest is used to grow other types of crops. This condition benefits the students because the land is provided free of charge by the Ummul Ayman Islamic Boarding School and there is also no profit-sharing system with the pesantren so that the profits received purely belong to the students who manage it. In addition, taro plant management is relatively easy and very efficient, no special care is needed. Even this condition is very suitable for the condition of the students at STIS Ummul Ayman, considering that the students must be able to divide their time to study in the morning, recite the Koran in the afternoon, and use the remaining time after asr for entrepreneurial activities, namely managing taro plants.

3. High Demand for Satoimo Taro Commodities

According to data from Biotrop (2013), it is known that the largest Satoimo consumer country in the world is Japan for the category of staple food. Fifty percent of the Japanese population consumes Satoimo as a staple food besides rice. The large majority of people who consume taro have an effect on the high availability of goods in the country. The need for taro reaches approximately 360,000 tons per year, while the capacity for production in the country continues to decrease to 250,000 tons per year. (Talas Jepang (Sotoimo) Tissue Culture-Service Laboratory SEAMOE Biotrop, 3023). The high demand for this commodity can be used as an opportunity for students who are very promising to improve the welfare of the students and surrounding farmers who need to be continuously developed (Taufik, 2015).

4. Rare Commodity

In Japan itself, this plant is used as a staple food because it contains less carbohydrates and sugar. So that most people in Japan began to consume this plant. Due to the high demand for taro in Japan, it has an impact on the scarcity or shortage of taro supply. Based on data from the Economic Review (2010), the shortage of this plant is estimated at 130,000 tons.

It is estimated that 50% of the people in Japan who consume this type of food, or around 120 million people, need this to increase, causing the Japanese state to still have a shortage of Satoimo supplies of around 40,000 tons to 50,000 tons per year. Therefore, Indonesia, which is an agricultural country that has two seasons, has the potential to meet the shortage in plant supply and is influenced by a climate that can support farming throughout the year (Biotrop, 2019).

The amount of Satoimo Taro yields in Japan has indeed decreased in recent years, for example from 2006 to 2017 it shows a negative trend, if the accumulated total decline from that year to 2017 decreased by 14.9%. This decrease was not only in terms of total harvest, but also in terms of land area which also decreased by 16.7% (https://japancrops.com).

5. Exportable Commodities
Basically, this plant has started to be developed in Indonesia, because besides being able to be used as a food commodity, it can also be used as a commodity for export because it has the most important and valuable essence as well as pretty good economic prospects. Therefore, the cultivation of this type of plant has begun to be encouraged in various regions. This condition opens opportunities for tropical regions such as Indonesia to take part in cultivating these plants, especially among Islamic boarding school students who have specific time allocations.

Seeing this prospect, in Indonesia itself, such as the Mentawai (West Sumatra) and Sorong (West Papua) regions, taro is used as a substitute for rice. But the taro of the Colacasia taro species. Meanwhile, the central region for Satoimo taro production in Indonesia is Bogor, with an annual harvest of more than 57 thousand tons, 25 tons have been successfully exported to Japan. The average population in Japan consumes taro by 100 grams per person / day. The average taro tuber weight is 30 g/tuber, it is estimated that each person consumes three tubers/day. So every day in Japan will spend as much as 6000 tons of taro and if accumulated per year as much as 2,160,000 tons. The size of the majority of people who consume taro has an effect on the high availability of goods in the country, whereas in Japan itself it is only capable of producing around 150 thousand tons of taro per year. Interestingly, more than half is supplied from China, the rest by other countries including Indonesia. Uniquely taro exported from Indonesia is more chewy and delicious, seeing this opportunity gives good hope for Indonesia (https://puslitbangpenda.org).

6. Increase in Agricultural Sector Income

In addition, the agricultural sector is a sector that has a sizable share in improving and maintaining the national economy. The agricultural sector functions to maintain stability According to Mochar (Mochar, 2002), the ability to maintain food self-sufficiency as the main basis for maintaining the economic stability of a region. Apart from providing food stocks for a country, satoimo taro is also able to absorb 46.5% of the total workers in Indonesia and is able to contribute 14.7% to GNP (Karo-karo, 2014). Seeing the high demand for taro, there is still a great opportunity to export taro, it is hoped that Indonesia, especially Aceh, will continue to develop this food commodity. Export market share to Japan of more than 50 thousand tons per year is an extraordinary opportunity to lift the farmers’ economy. For now, the export volume of Satoimo taro is mostly supplied by Buleleg district, Bali, but reaches 10 thousand tons, this shows that the opportunity to export this type of commodity, including Aceh and other areas, is still wide open (Taufik, 2015).

CONCLUSIONS

The conclusions in the study showed that taro cultivation was not accompanied by good management skills by the santri so that it had implications for narrow product marketing space, lack of product reliability, lack of innovation and creativity, lack of cooperation, lack of government assistance. The problems above illustrate the problem points faced by students in taro cultivation. On the one hand, the opportunity for cultivating satoimo taro is very promising considering that this plant is an environmentally friendly taro, relatively easy and very efficient, no exclusive care is needed, especially among Islamic boarding school students who have a specific time allocation. This condition is very suitable for the conditions of the students at STIS Ummul Ayman, remembering that the students must be able to divide their time for lectures in the morning, recite the Koran in the afternoon, and use the remaining time after ashar for entrepreneurial activities, namely managing taro plants. In addition, the
high demand for this commodity has made this plant rare, so that it can be used as an export commodity because China's condition, which was hit by the corona outbreak, caused almost all of its taro plants to be destroyed. The influence of the climate in Aceh also supports satoimo taro cultivation throughout the year. Because the Ummul Ayman Islamic Boarding School began to transform and expand its role into the entrepreneurial realm, it provided empty land for entrepreneurial students.

REFERENCES
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