# BUSINESS PROSPECTS OF AGLONEMA CULTIVATION IN PERIURBAN AGRICULTURE

# Nabila Balqis Yudharini\*

Faculty of Science and Technology, Universitas Terbuka (INDONESIA)

\*Corresponding author: nabilabalgisyudharini@gmail.com

### **Abstract**

The development of Information and Communication Technology (ICT) is currently experiencing a very rapid acceleration, with the information technology or social media that is increasingly advanced, any need can be obtained through social media, for example ornamental plants, Big cities in Indonesia are now increasing infrastructure development towards smart cities, even so not all residents of big cities in Indonesia can utilize social media technology optimally. In the context of an economic society, economic competitiveness is very high, the utilization of technology is a necessity for empowering the community towards an independent and advanced society. The purpose and benefit of the existence of social media is to describe what influences the acceleration of ICT utilization in empowering the use of technology for the use of social media for the sustainability of buying and selling ornamental plants. The subject of the research is the business of ornamental plants in social media. The conclusion of this research, studied using four main elements namely innovation, communication channels, social systems. and time periods on diffusion and innovation theory.

Keywords: Technology, Social Media, Diffusion of Innovation, Ornamental Plants.

#### 1 INTRODUCTION

Ornamental plants are becoming a favorite. Not just for display, ornamental plants are also a promising business. There are many types of ornamental plants that are not only beautiful but have fantastic value. One of the most sought-after is the aglonema. Gardening activities, planting various ornamental plants are activities that are of great interest to the public when the corona virus (Covid-19) pandemic takes place. Of

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the many ornamental plants that have gone viral and become a trend, aglonema or Aglaonema is one of them. In Indonesia, aglonema has the nickname Sri Rejeki, which means the bearer of sustenance and goodness for its owner [1].

Believe it or not, the perception of aglonema is believed by not a few people. However, whether or not it is true depends on each person. Reporting from The Spruce, Wednesday (4/11/2020), aglonema is also known as Chinese Evergreen [2]. This plant is very decorative and comes in many varieties. What is most strikingly noticeable is the variety of colors, ranging from dark gray to silver, and some tinges of red. Generally, aglonemas have pinnate leaves. Because they are alluring, a wide variety of aglonemas have been developed with very attractive plant appearances. Today, aglonemas come in a variety of leaf colors, shapes, and sizes, making them much different from their natural species.

The beautiful and varied graded light leaf color is a magnet for people to want to plant and care for aglonema. In Indonesia, there are 12 types of aglonema, including Aglonema Bidadari, Pride of Sumatra, Moonlight, Adelia, Legacy and Claudia. Furthermore, there are also Aglonema Lipstick, Widuri, Cinta, Red Kochin, Tiara and Red Ruby. Aglonema itself is one type of plant that likes water. If the aglonema planting medium is moist, it makes the leaves lush. Even so, placing aglonema plants must be really considered. This is because plants that grow wild in the rainforests of Southeast Asia cannot be exposed to direct sunlight.

Aglonema is an ornamental plant of the taro-talasan type that resides in tropical rainforests. Launching from sidolitkaji.litbang.pertanian.go.id, the name "aglonema" is taken from Greek. The word Aglo means light and Nema means thread. In Indonesia, this plant is also often referred to as the sri rezeki plant. Characteristics of Aglonema Although there are many species, the sri rezeki plant is actually easy to recognize. Quoting from the thesis entitled Cultivation of Aglaonema Ornamental Plants at Deni Nursery and Garedening by Anita Tri Puspitasari, the morphological characteristics of sri rezeki plants are as follows:

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 Roots This plant belongs to a group of monocotyledonous plants with fibrous roots. Healthy roots have a white color and are filled while unhealthy roots are brown.

- 2. Sri rezeki stem has a soft and juicy base stem. The stem size is short and covered with leaves. The color of the stem is generally white, light green, or pink depending on the type of species.
- 3. Leaves The attraction of this plant is in its leaves. The shape of the leaves of sri rezeki varies greatly, some are egg-shaped, oval to delta-shaped. The leaf surface is smooth, hairless, and has flat edges. The leaves of this plant are arranged alternately and face each other covering the plant stem. The leaves of the sri rezeki plant are generally patterned and beautifully colored to form gradations that are interesting to look at.
- 4. Aglonema flowers have a spikelet shape and grow in the leaf axillary area. This flower is included in compound flowers. The flowers are covered by flower cells or spatha whose function is to attract and trap insects. Indirectly this flower also functions for self-defense.

Types of Aglonema Aglonema or aglaonema has various types with their respective characteristics. The types are as follows:

# a. Aglonema Red Anjamani

Aglonema red anjamani This one is also sold at a relatively cheap price. Unlike the other types, this suksom aglaonema has no pattern. The leaves are plain but have a red color and oval shape. The leaves of this plant do not have much chlorophyll. The market price is around 50,000/stem.

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Figure 1. Aglaonema Red Anjamani

The Aglonema red anjamani type can be characterized by its upper leaves, which are bright red in color, which are outstanding with some dark green spots and rims. While the specs are medium in size, with a green color that supports the leaves in a rounded shape with a tapered tip and further complements its charm.

# b. Aglaonema Lipstick

Aglaonema Lipstick is called aglaonema lipstick because the edges of this plant have a bright red color that resembles lips wearing lipstick. Although it is a favorite of many people, the price is still more affordable than other types. The price for the market is around 10,000/stems. Aglonema lipstick is one of the cheapest aglaonema, which is 10,000/stem. How to care for Aglonema is very easy compared to other types of Aglonema.



Figure 2. Aglaonema Lipstick

# c. Aglaonema Red Ruby

Another aglaonema ornamental plant with beautiful leaves is the aglaonema red ruby type. This type has a ruby red and slightly green colour. This long-lived plant will continue to maintain the freshness of its leaves for years. Your home space will be perfect with the addition of this red ruby aglaonema. The market price is around 60,000/stem. The difference between red anjamani and red ruby is in the shape of the leaves. If red ruby leaves are more oval while red anjamani leaves are oval. Aglonema red ruby is one of the most popular types of ruby aglonema. The sharp leaf shape is a feature that distinguishes it from other types of aglonema.

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Figure 3. Aglaonema Red Ruby (Tokopedia)

Aglonema Price The price of aglonema plants is actually very varied. Prices are determined by the type of plant, the stock on the market, and the number of cultivators for certain types. For the type of aglonema lipstick (Siamese aurora) for example, the price at the consumer level is in the range of Rp. 10 thousand - Rp. 20 thousand. This is because this type of plant is relatively stubborn, easy to cultivate, and fast to sprout. This is why lipstick aglonema is cheap. On the other hand, the types of aglonema that are hundreds of thousands to millions, in its cultivation require special treatment, slower growth, so the production cost is higher.

#### 2 METHODOLOGY

In April, precisely on the 13th, he informed me that the community service proposal that I worked on in January was accepted or passed from LPPM - UT. After that, he asked for the full address of my shop to be able to directly observe my shop in the context of UT's abdimas ISST 2022 - FST Universitas Terbuka, Indonesia 359

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activities. Not long after Mrs. Dwi told me that my proposal passed, she immediately stepped on the gas to immediately design the community service that I would do. I began to list the friends I invited to participate in community service, there were 4 friends who I invited to do community service, namely:

- 1 Ilham Faizuddin
- 2. Indra Surva Purnama
- 3 Sutra Mardianto
- 4. Mochammad Zurgoni

A week later the arrangement of the community service program began to be sent to me. I began to open and read the arrangement of the series of events starting from remarks and the official opening of the event by the head of UPBJJ - UT Surabaya Mrs. Dr. Suparti, M.P.d, followed by remarks from the Head of Agriculture Department FST - UT Mrs. Dr. Rinda Noviyanti, M.Si, then an introduction from the head of the PKM activity implementation team Mrs. Dr. Dwi Iriyani M.Pd. The presentation of material provided during the community service event by Mr. Agus Sujiwo, S.P is very innovative starting from the cultivation of ornamental plants, updates on demand trends and prices, how to sell ornamental plants with offline media (shops) and online (facebook, instagram, shopee, etc.), tips on how to pack safely to export opportunities for ornamental plants. After the material is given, participants will be given time to ask questions if there are things they want to ask from the results of the material exposure.

Not only the material but Mrs. Dwi Iriani also designed this event with packing practices and also the practice of making indoor and outdoor mini plants with the supervisor Drs. Dwi Sambada, M.Pd assisted also by other colleagues. This community service was held at the UT Surabaya office on Sunday, June 19, 2022, at 09.00 WIB until 15.00 WIB.

Not only that, I was also given ornamental plants to add to my store collection such as the following ornamental plants:

- Rhinoceros betel.
- Paperomia watermelon.
- Calathea white.

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- Coboi cactus.
- 5. Aglonema love painting.
- 6. Philo moonlight.
- Monstera.
- 8 Ftc

And, there are some materials for making indoor \ outdoor gardens such as:

- Decorative stones
- 2. Lioness statue
- 3. Bromelia ornamental plant

All ornamental plants and materials to make the garden Mrs. Dwi and several other lecturers who delivered and gave directly to me. Community empowerment seminar wich took place at the University Surabaya on June 19 2022. The seminar was very beneficial for the development of agriculture in era digital. The total number of plants given is approximately 20 plants. Not only plants but we are also given fertilizzer so that these plants reproduce well.



Figure 4. Community empowerment seminar documentation



**Figure 5.** This prize giving includes many ornamental plants to be reproduced



Figure 6. The various plants

# 3 RESULT

Based on the abstraction above, the author chose to cultivate aglaonema species in the price class of IDR 50,000. In this class there are several plants such as red anjamani, pink catrina, lady valentine,

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red stardust. etc.

# 3.1 Selection of cultivated species

In this cultivation, the author chose aglonema red anjamani and pink catrina, with the following considerations:

- 1. The market price is stable
- 2. There are still many enthusiasts
- 3. The capital required is relatively small
- 4. Relatively large profits

## 3.2 Cultivation technique

The author uses stem-cut cultivation with a planting technique using a lid. With this technique, the risk of failure is small. The hood stage takes 45 days - 60 days. After that, the plants are moved to shelves with a height of 120 cm, 3 meters long, in two rows. One shelf can fit up to 200 plants, with polybags of size 20.

# 3.3 BEP Calculation and Profit Projection

Table 1. Calculation and Profit Projection

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Material	quantity	Price	Total
Bamboo	5 units	20.000	100.000
Characteristic:			
Tall 120 cm			
Long 3 meters			
Wide 40 cm			
Paranet (15 meters)	15 meters	10.000	150.000
Polybag Size 20 in	10 packs	30.000	300.000
10 packs			
Planting Media	30 sacks	15.000	450.000
30 sacks			
Seedling Purchase	1 seedling	35.000	35.000
	purchase		

From the thousand seedlings we bought, the stems were cut. That way we will get two types of seedlings:

- One thousand scions with rootless leaves.
- 2. One thousand rootstocks with roots without leaves

That way we have 2,000 seedlings. We keep the two types of seedlings under cover for 45 to 60 days. The scion seedlings already have roots, while the rootstock seedlings have sprouted. The next step is to open

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the lid. The scion seedlings are nurtured for one month and are ready to be sold. Let's say it takes us time to sell a thousand aglonema red anjamani / pink catrina stems at a price of Rp. 40 thousand / stem, it means that within 4 months we have already returned capital. Meanwhile, the rootstock seedlings, to reach a price of Rp. 50,000 - Rp. 60,000, we treat for 8 months.

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