

## Empowerment of Family Medicinal Plants (TOGA) as an Investment in Public Health in Sojomerto Village

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**Abstract.** *Can be planted in narrow land, TOGA (Family Medicinal Plant) or what is often called a live pharmacy can be one of the traditional solutions to keep public health when the flu and cough attack. Not only is it planting and caring for toga plants also tends to be easy. In this dedication the activities carried out are planting together with the villagers of Sojomerto while explaining the benefits of plants in the area. This planting is also intended as a medium of awareness related to land use, therefore activities are carried out in the land adjacent to the village hall in order to make it easier for citizens to care for, maintain and use plants.*

**Keywords:** *Sojomerto, TOGA, Planting.*

**Abstrak.** Bisa ditanam di lahan sempit, TOGA (Tanaman Obat Keluarga) atau yang sering disebut apotek hidup ini bisa menjadi salah satu solusi tradisional untuk menjaga kesehatan masyarakat saat flu dan batuk menyerang. Tidak hanya itu menanam dan merawat tanaman toga juga cenderung mudah. Dalam pengabdian kali ini kegiatan yang dilakukan adalah menanam bersama dengan warga desa Sojomerto sambil menjelaskan manfaat tanaman yang ada di daerah tersebut. Penanaman ini juga dimaksudkan sebagai media penyadaran terkait pemanfaatan lahan, oleh karena itu kegiatan dilakukan di lahan yang berdekatan dengan balai desa agar memudahkan warga dalam merawat, menjaga dan memanfaatkan tanaman.

**Kata kunci:** Sojomerto, TOGA, Penanaman.

### 1. BACKGROUNDS

Indonesia has a wide variety of medicinal plants that can be developed and utilized for traditional medicine and maintaining body immunity. Family medicinal plants or TOGA are also known as live pharmacies. Family medicinal plants are gardens or fields that are used to cultivate plants with medicinal properties. Kartasapoetra (1992) stated that medicinal plants are materials from simple, pure plants that have not been mixed or processed. Kartasapoetra also mentioned that there are several types of medicinal plants including ginger, galangal, bitter ginger, turmeric, curcuma zanthorrhiza, sweet flag/calamus, pea eggplant/turkey berry, bangle, ginseng, lemongrass, bitter grape, guava and there are many more. The existence of medicinal plants around the house is very important for first aid or traditional medicine such as herbal medicine.

Family medicinal plants are utilized as high-quality and safe traditional medicines and have scientifically proven benefits. In addition to medicine, family medicinal plants are used as nutritional enhancers, seasonings or spices (Harjono, 2017). Family medicinal plants contain

active substances or compounds that are efficacious for health. Plants from family medicinal plants are often consumed by Indonesian citizens, because the price is affordable or relatively cheap and easily available (Susanto, 2017). Sojomerto Village is one of the villages in Gemuh District, Kendal, Central Java. Sojomerto village is famous for its teak wood and tobacco products. The majority of Sojomerto villagers work as farmers. Sojomerto village has petroleum wells and produces agricultural commodities such as tobacco, shallots, corn, and rice. Sojomerto Village has fertile soil that is very suitable for farming, which is one of the benefits obtained by the local community. The geographical location of Sojomerto village is fairly far from urban areas and has fertile soil and is suitable for planting various types of plants including family medicinal plants as a companion to the village community. Family medicinal plants can be planted in fields, gardens, and home yards.

Based on the observations we have made, there are several things that become problems in Sojomlerto village, including the lack of utilization of herbal plants in the surrounding environment to be used as herbal medicines. Plants that can be cultivated around the home environment such as kencur, ginger, lemongrass and others. There is still a lot of empty land in Sojomerto village that can be utilized as a place to plant family medicinal plants. These plants can be used as medicine and spices for the local community. In addition to medicine, the provision of herbal plants can also minimize the consumption of chemical drugs. Karo-Karo, (2010) states that people are more reluctant to take medicine from herbal plants, this is because the side effects are low, have continuity between other traditional medicines, herbal plants are more suitable for overcoming various metabolic and degerative diseases.

One of the objectives of this activity is to increase understanding and cultivate family medicinal plants or live pharmacy, as well as the utilization of vacant land in Sojomerto village. So that these family medicinal plants have benefits for the Sojomerjo village community as herbal medicines and cooking spices. In addition, this activity aims to empower family medicinal plants as a family companion, namely herbal plants that can be used as medicine, immune guardians and early treatment when sick. Family medicinal plants have no side effects, so they are safe for consumption. Therefore, the empowerment of herbal medicines is very possible for the Sojomerto village community because the fertile soil conditions make it easy to grow plants. However, local people rarely utilize their vacant land to plant family medicinal plants. Therefore, planting and empowering toga plants requires increasing knowledge to the community and utilizing and cultivating medicinal plants around the home environment or vacant land to become a living pharmacy.

## **2. METHOD**

In July 2024, the MIT 57 KKN team with 15 participants, carried out community service activities in Sojomerto Village. This activity involved the participation of village officials and several villagers. The main purpose of this community service is to provide education about the benefits and properties of medicinal plants for health. Prior to the implementation of the activities, a preliminary study was conducted which included identification and field observations. This process involves surveying, licensing, and preparing the necessary facilities and infrastructure. The methods used in this service consisted of discussions and hands-on practical demonstrations. The team utilized the yard at Sojomerto Village Hall to plant Family Medicinal Plants (TOGA) for easy supervision and maintenance. Thus, the community can utilize the plants that have been planted for their daily needs, thus supporting their health and welfare.

## **3. RESULT AND DISCUSSION**

The initial stage of the activity was the delivery of the design of the TOGA Garden program to village officials and the local village head as an effort to optimize land and increase community immunity. The next stage begins the preparation and cleaning of the land that has been provided. Then make planting media on the land using fertile soil that has been mixed, manure, and rice husks where the ratio between the 3 ingredients is 1: 1: 1. Then the prepared seeds will be planted into the garden hole 7cm deep and covered with soil again. If it's finished, don't forget to water the garden with water. For TOGA garden maintenance, it is watered twice a day at 06.00 and 17.30 with enough water capacity for the soil to wet the plant soil. In addition, pegs are installed that are printed with paper with a description of each plant name on the front of the garden to make it easier for people to know the name of the plant.



**Gambar 1.** Land before Clearing



**Gambar 2.** Land after Clearing



**Gambar 3.** Planting Process of TOGA Seedlings



**Gambar 4.** Final Result TOGA Garden

The final stage is to periodically check the development of the TOGA garden by watering the plants every morning and evening to avoid wilting and cleaning weeds in the plantation area. Basically, medicinal plants are wild plants that do not require special care. You only need to water them regularly to prevent them from drying out and dying. However, with the various types of medicinal plants, they require different treatments. This is due to the different environmental conditions in each region. Each medicinal plant requires an air temperature that matches its parameters so that the metabolic process in the plant can run smoothly, and soil

temperature affects the seed germination process. Soil temperatures that are too cold can inhibit the germination process, while soil temperatures that are too warm can kill the embryo in plant seeds. Here are tips on caring for medicinal plants, including:

- a. Make sure there is enough manure available, as it is rich in macro and micro nutrients that plants need.
- b. Use organic fertilizer. This is because organic fertilizers can improve soil structure and serve as a source of nutrients for plants.
- c. When planting or when the plants are young, make sure to water them regularly and periodically. Larger plants do not need watering. If there are concerns about moisture levels, soaking the beds can be an effective method of watering.

This type of plant serves as a source of medicinal benefits and as an attractive addition to the garden, thus beautifying the yard. Toga can support preventive health initiatives (disease prevention), improve overall well-being (health enhancement), aid healing (treatment of illness), and aid rehabilitation (restoration of health). In addition, Toga serves to improve family well-being by contributing to better nutritional conditions, promoting a healthier living environment, and preserving medicinal plants and national traditions.

The next section outlines the health benefits associated with various types of TOGA plants, including the following:

- a. Lemongrass offers therapeutic properties that relieve stress, acts as an antipyretic to lower fever and help prevent throat infections, and provides relief from various types of pain, including stomachaches, headaches, joint pain, muscle pain, gastrointestinal tract cramps, and muscle cramps.
- b. Ginger is beneficial for coughs and rheumatism, improving blood circulation, relieving bloating, managing migraines, treating flatulence, and lowering blood pressure.
- c. Turmeric is a type of toga plant that can be easily maintained at home. The turmeric plant offers benefits such as relieving appendicitis and reducing inflammation in the uterus. In addition, a mixture of turmeric, egg yolk and lime juice can effectively treat tonsillitis.

#### **4. CONCLUSION**

Looking at the results of the service that has been carried out, it can be concluded that this activity is very beneficial for the surrounding community. One of the benefits is that people become more aware of the benefits of medicinal plants so that they can maximize their benefits as herbal medicines. Not only that, the purpose of planting medicinal plants is so that the community can utilize empty land. Land that was previously empty and only overgrown with wild plants is utilized into a land full of toga plants that can be processed into traditional medicines. The benefits of this activity also make the community and the team more familiar with maintenance after planting.

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