

The Role of Women Farmers In The Utilization Of Crops Medicine In The Kaombo Forest In Lapandewa Village Kaindea District Lapandewa

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Abstract This ethnographic research employed purposive sampling to select informants based on the researcher's objectives and needs, focusing on those capable of providing insights into the studied issues. The informants included traditional leaders (parabela), female farmers, and community members. Data were primarily collected through observation and interviews, supplemented by literature searches. Qualitative data analysis revealed that knowledge about medicinal plant usage in Lapandewa Kaindea Village was derived from family, traditional leaders, and the experiential insights of female farmers. The study identified 53 medicinal plant types across 21 nations and 31 tribes, categorized into herbs (42%), shrubs (26.41%), and vines (8%). Notably, the dominant use of leaves reflects local wisdom emphasizing conservation values. This sustainable approach aligns with the ancestors' practices, ensuring minimal impact on plant regeneration. The community predominantly prepares these plants by boiling them, creating remedies to address health issues such as lowering blood pressure and managing diabetes. The research sheds light on the local wisdom of women farmers in Lapandewa Kaindea Village, showcasing their valuable contributions to medicinal plant knowledge and sustainable practices.

Keywords: Women Farmers, Use of Medicinal Plants, Local Wisdom.

1 Introduction

In 1893, Hars Berg began using the term ethnobotany, which was later defined as the science that studies the traditional use of plants by primitive or backward ethnic groups (Soekarman and Riswan, 1992). Medicinal plants which include ethnomedicine in ethnic communities in certain areas are the use of various medicinal plants ranging from roots, stems, leaves, flowers, fruit and seeds as well as the excretions and properties they have and are believed to be able to cure various diseases and are used by the community for daily needs. days in terms of traditional medicine.

The use of medicinal plants is very necessary for various medical needs of mankind. Apart from being an ingredient for traditional medicine, this medicinal plant also plays a big role in maintaining local wisdom in the community. One of the areas that has and maintains local wisdom in the use of medicinal plants is Lapandewa Kaindea Village, Lapandewa District, South Buton Regency, Southeast Sulawesi.

The increasing price of modern medicines and the higher side effects caused by the use of these medicines have caused people to switch to using traditional medicines as ingredients for the treatment process. The provision of health facilities such as community health centers that have been provided by the government in various regions, even in remote villages, has not lost people's confidence in the efficacy of plants as traditional medicine. It is proven that people use plants as traditional medicine to cure diseases, such as the people who live in Lapandewa Kaindea Village, Lapandewa District, South Buton Regency. This region has a high diversity of medicinal plants and is often used by the community for traditional medicinal purposes.

Based on observations, female farmers in Lapandewa Kaindea Village, Lapandewa District, South Buton Regency, use various types of plants as medicine to cure various types of diseases. These plants have not been presented in scientific data. Scientific data is needed to know these types of plants. This is what underlies researchers to conduct research in this area with the title "Women Farmers in the Use of Medicinal Plants in Lapandewa Kaindea Village, Lapandewa District, South Buton Regency".

2 Literature Review

2.1 Medicinal plants

Sandra and Kemala, (1994) define medicinal plants as all plants, both cultivated and uncultivated, that can be used as medicine. Meanwhile, Zuhud et al, (1994) stated that medicinal plants are all species of medicinal plants that are known and believed to have medicinal properties. These medicinal plants are grouped into:

1. Traditional medicinal plants, namely plant species that are known and believed to have medicinal properties and have been used as raw materials for traditional medicine.
2. Modern medicinal plants, namely plant species that have been scientifically proven to contain bioactive compounds/ingredients that have medicinal properties and whose use can be medically justified.
3. Potential medicinal plants, namely plant species that are thought to contain bioactive compounds/ingredients that have medicinal properties, but have not been proven scientifically and medically or their use as traditional ingredients is difficult to trace.

2.2 Prospects for Medicinal Plants

Medicinal plants with a variety of species, habitus and properties have great opportunities and contribute to the development and development of forests. The

characteristics of various medicinal plants that produce useful products for the community provide opportunities for them to be built and developed together in forests in certain areas. The various benefits generated by their role Medicinal plants in the forest are income, welfare, conservation of various resources, non-formal education, business sustainability and employment and national security. In Indonesia, the use and marketing of medicinal plant materials can be classified into the form of herbal medicine, modern packaged herbal medicine and phytopharmaceuticals (Sangat, 2000). Sangat, (2000) said that the development of herbal medicine began with the existence of the jamu carrying business, namely herbal medicine that was mixed and marketed in slings which is a legacy from ancient times which is still popular with Indonesian people, especially Javanese. Modern packaged herbal medicine is an impact on changing the image carrying herbal medicine by providing good packaging in the form of powder, capsules or pills. Modern herbal packaging has given rise to the existence of herbal medicine industries, both on a small and large scale.

The herbal medicine industry is growing along with the increasing use of medicinal plants. The existence of this industry requires the continuous presence of raw materials. Likewise, the manufacturing process requires experts and labor. Improving the quality of producer resources, namely farmers producing medicinal plants must follow developments in science and technology, such as the use of superior seeds. The appropriate cultivation method for medicinal plants is organic cultivation without using pesticides, considering that many medicinal plants are consumed directly without being processed first (Hoesen, 2000).

2.3 Medicinal Plant Processing

Medicinal plant processing technology consists of several stages, namely sorting, washing, slicing or drying, storage and processing. Sorting is carried out after harvesting medicinal plant commodities. Medicinal plants whose leaves, rhizomes or tubers are taken are cleaned of dirt. The parts of the plant that have been harvested are then separated. From rotten parts, soil, sand and weeds that are attached must be cleaned. There are several plants that are produced through tubers such as ginger, turmeric, galangal and rat taro. (Zuhud, 2012)

According to Farhatul, (2012) the method of processing the leaves is easier, compared to other parts of the plant. Each type of plant has its own processing method and uses. Processing methods include boiling, roasting, steaming, pounding, soaking and frying. There are types of plants that are used alone and there are those that are mixed with other plants.

The resulting medicinal concoction can be used by smearing it, sticking it on, drinking it, gargling it, washing it, bathing it and tying it up. The most widely used processing method is boiling, and the least used method is evaporation.

2.4 Understanding Gender

Gender is differences in roles, status, division of labor made by a society based on sex. Gender is different from sex (sex). Gender is a human formation, not nature, which means it can change at any time. Meanwhile, gender according to Presidential Instruction No. 9 of 2000 in the working group, Convention Watch is

a concept that refers to the roles and responsibilities of men and women which occur as a result of and can change by the social and cultural conditions of society. Gender Mainstreaming is a strategy built to integrate gender into an integral dimension of planning, preparation, implementation, monitoring and evaluation of national development policies and programs. Gender equality is equal conditions for men and women to obtain opportunities and rights as human beings, to be able to play a role and participate in political, economic, socio-cultural, defense and national security activities, and equality in enjoying the results of this development (Simatauw et al. all, 2001).

Gender analysis is a process that is built systematically to identify and understand the division of labor/roles of men and women, access and control over development resources, participation in the development process and the benefits they enjoy, patterns of relationships between men and women which is unequal, which in its implementation takes into account other factors such as social class, race and ethnicity. In all strata, it is indicated that the role and status of women in managing household continuity is higher than that of men (heads of the family). The dominance of this role and status shows the high potential of women to control and direct their household, for better or for worse (Puspitawati, 2007). This is reinforced by the fact that in reality more than 50 percent of the total population of Indonesia are women (BPS 1990-2006) Gender Equality and Justice (KKG) is a condition that is equal and balanced between men and women in obtaining opportunities, participation, control and benefits of educational development to fully realize the rights and obstacles that play a role for both women and men - male (Puspitawati, 2007).

3 Method

The research was carried out in Lapandewa Kaindea Village, Lapandewa District, South Buton Regency, Southeast Sulawesi, which is 68 km from Bau-bau City with the consideration that in Lapandewa Village women farmers still maintain traditional healing methods by using plants they plant in their yards and fields.

The research was carried out using an ethnographic approach. The determination of informants in this research was carried out using purposive sampling (intentionally) meaning that the informants were determined based on the objectives and needs of the researcher, taking into account that the informants were able to provide information on the problems being studied. The informants are community groups consisting of: traditional leaders (parabela), female farmers and the community itself.

The data sources were obtained both primarily through observation and interviews and secondarily through literature searches for documents related to the problem under study. And by using qualitative data types.

In accordance with research that uses a qualitative approach, the data collection techniques in this research are: participant observation, ethnographic interviews and literature study. In this research, qualitative data analysis is used, namely by trying to describe and analyze the images or texts obtained through interviews.

The data analysis technique used in this research is qualitative descriptive analysis which refers to identification books. The data analyzed is in the form of morphological characteristics, parts used, how to use them and their properties.

4 Findings and Discussion

Kaombo land comes from the word kaombo which means role, protect, sanctuary, supervise, control, because in this land area there are valuable resources. Kombo land in kadie is protected land which is under joint supervision by the community and contains various plants useful for communities such as teak, bamboo, reed, candlenut, kapok, tamarind, mango, sapodilla and so on. Kaombo land according to its type consists of three types, namely as follows:

- a. Kaombo land owned by the community is specially selected kadie land and contains useful forests such as wood for building needs.
- b. Kaombo land owned by individuals is kaombo which contains useful plants, but is planted and maintained by certain people.
- c. Kaombo land owned by an official is kaombo land maintained by a person or community with a source of financing from an official. (Zahari, 1977)

Protected forests or Kaombo in the Buton area, among others, can be found in the Rongi, Lawele, Sampolawa areas. There is a Kaombo that is only for poor widows. Kaombo is in the form of a bamboo forest where the products from this forest can be used by poor widows for household needs and making handicrafts which can be a source of income.

There is also kaombo which is intended for forests which consists of several types of rattan, the types of rattan are, stem rattan, jermasin rattan, umbul rattan, tohiti rattan.

Apart from the types of rattan found in kaombo, there are also kaombos which are intended for various types of animals, for example Anoa animals, so Buton Island is often referred to as the Earth of Anoa. Considering that this area is the last stronghold of Anoa's life. In this world, Anoa is only found in Sulawesi, the population is estimated to be less than 300 individuals, of which a third are in the Lambusango Forest. It is truly heartbreaking that Anoa are continuously hunted and slaughtered mercilessly, for a piece of meat and a rupiah on their own earth. Recently, uncontrolled destruction of protected forests has begun to occur, which is an environmental disaster that threatens the preservation of life on Buton Island. Damage to Kaomu has an impact on the destruction of the water absorption function which threatens the survival and life of the Buton Island ecosystem, considering that living creatures cannot live without water. Kaombo damage also has an impact on increasing rates of erosion, sedimentation and flooding which will threaten the sustainability of the land and sea ecosystems around Buton Island. Human life cannot be separated from the existence of forests as a producer of wood and non-timber (in addition to environmental services). Forest products are closely related to human needs from birth to death. One of Parabela's many roles is to protect protected forests (Kaomu). Buton Regency consists of several sub-districts/villages which are usually called "Kadie-kadie". There are several kadie-kadie who have protected forests or known as "Kaombo". In this protected forest or

Kaombo, there is a concept of balance, that is, there are rules where the local community is not allowed to take contents of the forest and when the forest is cleared, the cleaning must be carried out again together, led directly by Parabela.

The continued existence of this Parabela institution in the lives of the people of Buton in general has been able to make the Kadie community have an esprit de corp, the existence of this leader makes them a fairly strong community unit, as if they have one direction or direction in all the problems they face, resulting in clashes in between them as far as possible can be avoided. By obeying Parabela's orders, including when to start planting. The community (the people) believe that their crops will be safe from pests and harassment and destruction from wild boars and monkeys. Parabela not only plays a role when planting but also during harvest, because when the so-called harvest is carried out Parabela directly leads the "stroking" (starting) of the harvest.

Parabela, in leading both when planting and when harvesting the results of the community's farming business, always says "Batata" or sayings that contain good luck. For example, Parabela said when he started planting "I will move these animals into the protected forest (Kaomu)". Apart from the time to start planting and harvesting, parabella also determines when to start pounding the harvested rice. If there is no sign from Parabela then their rice will not dare to be pounded and will only be stored in the barn. Their obedience to various rules also occurred when the rompua (deliberation) event for the sara in Baruga was over, where it was decided when to start carrying out their annual series of events called sampua galampa, after the decision was distributed by two "akanamia" people going around the village and shouting at At every village road intersection, this also means that the community opens its rice barn to start pounding. Parabela is also the "guardian" or "protector" of their kadie from various undesirable things such as natural disasters, epidemics, riots and so on. A parabella must be able to maintain physical and social balance. A good harvest, a safe environment without disasters and riots shows the success of a parabela's leadership. All of this cannot be separated from various parabela rituals to always "guard" or "secure" the kadie from various things that are detrimental to the community. Some of these rituals are carried out personally by parabela in their homes and these are carried out every day and some are carried out periodically every year, such as: pikoela liwu (cleaning the village), tuturangi lipu morikana, utterangi kalampa, etc. All of these rituals are carried out as a form of a parabela's responsibility as a leader in providing a sense of security for his citizens.

4.1 Sources of knowledge on the use of medicinal plants are obtained through: (1) family, (2) traditional leaders, (3) experience and trial and error. The detailed explanation is as follows:

(1) Family

The source of knowledge about the use of plants as medicinal ingredients in the Lapandewa Kaindea Village community has been obtained from families for generations. The family is the most appropriate and good place to pass on knowledge in utilizing plants that have food potential. Rike, et al., (2018) said that knowledge about the use of local plants (food) was obtained through inheritance

from parents. Rohyani, et al., (2015) also stated that people's knowledge about food plants usually comes from knowledge passed down from generation to generation. Families pass on this knowledge from generation to generation with the aim of preserving this traditional knowledge. The process of transferring knowledge about the use of potential food plants given by parents to their children should be given in stages and have appropriate steps so that their children (successors) can absorb and implement this knowledge in their daily lives. The transfer process from parents to children must be ensured to run well so that all knowledge transferred can be fully received (Cabrera-Suarez, et al., 2001; Trevinyo-Rodriguez & Tapies, 2006; Chirico, 2008).

(2) Traditional leaders

The source of knowledge for the people of Lapandewa Kaindea Village regarding the use of plants as medicine was obtained from traditional leaders through oral communication and passed down from generation to generation. The traditional leader, in this case Parabola, transfers knowledge about the use of plants for medicine orally because local knowledge is usually only stored in a person's mind and is passed down from generation to generation. The results of this research are in line with Sithole's (2007) statement which states that most original knowledge is stored in a person's mind and passed down from generation to generation orally. A community group through traditional leaders/leaders or myths circulating in society will allow its citizens to eat food that is allowed to be consumed and eaten (Budianto, 2004). This permit becomes a kind of validation that appears in various regulations which are normative in nature and the public will comply with them (Fadhilah, 2009).

(3) Experience and trial and error from female farmers

The source of knowledge in using food plants in the Lapandewa Kaindea Village community is obtained from the experience and trial and error of female farmers. The people of Lapandewa Kaindea Village are close to the forest and their daily activities are carried out in fields or gardens located in the forest. This activity resulted in female farmers in the Lapandewa Kaindea Village often experiencing wounds and coughs and were simply treated with plants in the forest. So people think that plants in the forest can also be used as medicine for wounds and illnesses. This continues to be done to this day. Zikri, et al., (2016) said that knowledge about plants is obtained due to life experience.

4.2 Local Wisdom of Women Farmers in Lapandewa Kaindea Village in Using Plants as Medicine

Local wisdom is the legacy of ancestors in a system of life values that are integrated in the form of religion, culture and customs. In its development, society adapts to its environment by developing wisdom in the form of knowledge or ideas, equipment, combined with traditional norms, cultural values, environmental management activities to meet their living needs (Suhartini, 2009). The diversity of forms of adaptation to the environment that exist in one community is a legacy

passed down from generation to generation which then becomes a guideline in utilizing natural resources and the environment. This form of adaptation has become known as local wisdom. The importance of studying local wisdom is a form of respect for previous ancestors as well as maintaining balance and environmental sustainability.

In particular, the Cia-cia tribe community in Lapandewa Kaindea Village, local traditions/wisdom still adhere to traditional rituals that have been passed down from generation to generation. These local customs/wisdom include agricultural systems, medicinal plant utilization activities and conservation efforts. Lapandewa Village still uses plants as traditional medicine. Traditional medicine is a concoction of natural ingredients derived from plants, animals, minerals or a mixture of these ingredients which have traditionally been used for treatment for generations. Based on the research findings, the types of medicinal plants found in Lapandewa Kaindea village, Lapandewa sub-district, South Buton district, which were used through interviews conducted with 10 informants, it is known that many of the medicinal plants frequently used by the people of Lapandewa Kaindea are listed in 2 classes. which consists of 21 nations, 31 tribes and 53 types. Based on habitus diversity, the habitus with the largest number is herbs, namely 21 types (40%). Some examples of medicinal plants that have a herbaceous habit are ginger (*Zingiber officinale* Roscoe), turmeric (*Curcuma domestica* L.), banana (*Musa paradisiaca* Linn.), shallots (*Allium ascalonicum* L.). These types are plants from Zingiberaceae, Musaceae, and Liliaceae. This is as stated by Mackinnon et al. (2000) that many plant families contribute to the herbaceous layer, including monocotyledons such as ginger, wild banana, begonia, Gesneriaceae, Melastomataceae, Rubiaceae, various species of ferns and orchids. Herbaceous species have high adaptability. This is as explained by Hutasuhut (2011) that herbaceous species have strong competitiveness and high adaptation to surrounding plants (such as bushes, shrubs, even trees) so that they are able to grow in empty places. Herbs function as a ground cover which plays an important role in preventing rainwater from falling directly onto the surface of the soil, thus preventing the loss of humus by water.

Based on the results of interviews, it was found that there were 22 nations divided into 31 tribes and consisting of 53 types of plants which were used by the people of Lapandewa Kaindea Village as traditional medicine and all types of plants could be identified at the species level. These types can be grouped based on their taxonomic level. It is recorded that there are 31 tribes consisting of 53 types of medicinal plants that are used by the people of Lapandewa Kaindea Village. 25 families are the Dicotyledoneae plant group and 6 families are Monocotyledoneae plants. Medicinal plants used as medicine by the people of Lapandewa Kaindea Village are grouped into 5 habitus, namely herbs, shrubs, trees, bushes and lianas. The habitus most widely used by the community is herbs as much as 42% (22 types) while the second most used is shrubs as much as 26.41% (14 types) and the least is lianas as much as 8% (1 type). The most widely used part, namely the dominant part of the leaf, is a sign that the local wisdom of the ancestors of the people in Lapandewa Village has upheld conservation values. This is because seen from a sustainability aspect, the use of medicinal plant species in the leaves does not have much impact on plant regeneration. It is different if excessive use of these medicinal plant species in the roots and stems is feared to have an impact on

subsequent plant regeneration, especially those with a tree habit. The use of this part of the leaf is proof that local wisdom can be explained scientifically because the leaves contain various kinds of mineral substances. Leaves are an important plant organ, because they contain components and are also the place where the processes of photosynthesis, respiration and transpiration take place (Santoso and Hariyadi, 2008). An example of a plant whose leaves can be used as medicine is sirkaya (*Annona squamosa* L.).

There are no less than 11 types of plants used by residents in Lapandewa Kaindea Village to treat diseases that originate from digestive tract disorders. Based on the most common processing method, it is boiled. How to boil can be seen during postnatal treatment. In treating postpartum, the people of this village usually use turmeric rhizomes (*Curcuma domestica* L.), ginger (*Zingiber officinale* Roscoe), pepper (*Piper nigrum* L.), tamarind (*Tamarindus indica* L.). Apart from that, betel leaves (*Piper betle* L.) are also used to treat vomiting of blood by boiling them. In processing medicinal plants, generally the measurements used for pounded and boiled ingredients are plant parts in multiples of 3, such as leaves. This is because the people in Lapandewa Kaindea Village believe that multiples of 3 are a good number for treatment and they believe that the Creator likes numbers in multiples of 3. The dosage used when boiling water is generally from three glasses of water until there is approximately one left. glass. This boiled medicinal plant can be used two to three times a day, namely morning and evening or morning, afternoon and evening. The use of medicinal plant species by drinking is the method most widely used by the community (41 types). The medicine taken by mouth is obtained by boiling, squeezing, pounding, brewing, or a combination of several processing methods. An example of a boiled plant is cat's whiskers (*Orthosiphon spicatus* (Bl) Miq.). All of these plant preparations are boiled and then drunk to lower blood pressure and diabetes.

5 Conclusion and Recommendation

5.1 Conclusion

The conclusion of this research is that the source of knowledge on the use of medicinal plants by female farmers in Lapandewa Kaindea is obtained through: (1) family, (2) traditional leaders, (3) experience and trial and error from female farmers. b. Local Wisdom of Women Farmers in Lapandewa Kaindea Village in Using Plants as Medicine. The types of medicinal plants found in Lapandewa Kaindea village were recorded as 2 classes consisting of 21 nations, 31 tribes and 53 types. The most widely used part, namely the dominant part of the leaf, is a sign that the local wisdom of the ancestors of the people in Lapandewa Village has upheld conservation values. This is because seen from a sustainability aspect, the use of medicinal plant species in the leaves does not have much impact on plant regeneration. All of these plant preparations are boiled and then drunk to lower blood pressure and diabetes. When using plants as medicine, female farmers really take care of the sustainability aspect of the plant,

because using the leaves does not have a negative impact on the plants. It is different if excessive use of these medicinal plant species in the roots and stems is feared to have an impact on subsequent plant regeneration, especially those with a tree habit. The use of this part of the leaf is proof that the local wisdom of female farmers is well preserved and protected.

5.2 Recommendation

Based on the discussion above, there are several suggestions that can be given:

1. Increased Environmental Awareness and Conservation: The public needs to be given a deeper understanding of the importance of protecting and preserving protected forests (Kaombo). Environmental awareness and conservation campaigns can be carried out through education and training programs.
2. Strengthening the Role of Parabela: It is important to continue to strengthen the role of the Parabela institution in protecting protected forests. This includes training, mentoring, and skill development to ensure they can effectively lead conservation efforts.
3. Wise Management of Plant Resources: Communities should continue to develop and adhere to the principles of sustainable plant management. This includes regulations on the use of various types of plants in protected forests.

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