

The Creativity of Women in Utilising Local Plants

Nurmi Nonci^a, Harifuddin Halim^b, ^{a,b}Faculty of Social and Politics,
Universitas Bosowa Makassar, Indonesia,

This research reveals the creativity of women using mulberry as a local plant. It is conducted in the Pakkatto village Gowa Regency South Sulawesi Province, using structured interviews related to the creativity of women. There are 15 female participants from mulberry farming families, who were asked questions in the form of free discussions. Other data collection techniques include observation and a literature review. The data obtained was analysed using Three-Flow techniques, including data reduction, data categorisation, and conclusions. The results show that mulberry farmers' wives were creative in utilising the potential of mulberry plants. These forms of creativity include: (1) making herbal concoctions (2) making chilli or scrub powder (3) making medicinal herbs. This fundamental creativity has the potential of being a developmental commodity using modern technology, due to the strengthening of the use of traditional plants as a natural treatment.

Keywords: *Creativity, Local Plants, Mulberry, Women, Cold Powder, Herbal Tea.*

Introduction

Human beings and their environment are interdependent. Both have substantial similarities to various other forms of life and need to maintain life through nutrition and liquid as way of continuing the natural system (Halim dan Zainuddin, 2015). Women as well as men tend to interact with the surrounding environment in this context.

Females have potential and skills that aren't that different from men. This ability is in keeping with women's biological condition. Their capability reflects their environment.

In social reality, women exist and can be creative in various fields while maintaining their status as a housewife. Subair's (2018) research proves how homemakers can support their families through their creativity. Anriani et. al. (2018), Masngudin (2002), and Sucipto (2002) also prove that through creativity, fishermen's wives can do anything to help the

household economy. Based on these two studies it appears that women are indeed embedded in creative ability for survival.

Theoretically, this study's findings affirm the idea of women's 'creativity' as a part or predictor of the environment's 'adaptation.' 'Creativity' from Supriadi's point of view (2001) is the capacity of a person to produce new and different things, both in the form of concrete ideas and object-shaped works.

The concept of 'environmental adaptation' itself is an individual's adjustment to environmental conditions. The biopsychosocial perspective also views human behaviour as an expression of continuing living adaptation (Odum, 1983). This idea shows that creativity is an effort or strategy by women to adapt with their individual characteristics to various environmental conditions.

In his viewpoint regarding the theory of environmental control, Donald L. Hardisty (Susilo, 2012) argues that the physical environment appears to affect human behaviour. This perspective shows that people's attitudes can still adapt.

The above theory's description indicates that humans and their environment are two living beings which have a critical role in the process of life. Both affect and are affected.

In this study, the existence of mulberry plants as local plants is an indirect determinant factor in women's behaviour. They are surrounded by mulberry plants, which has an impact on the emergence of women's capacity to achieve something. They must utilise potential contained by these mulberry plants. These actions include the concept of 'adaptation' on an individual level within the idea of 'creativity' as a type of adaptation.

More specifically, this research reveals various of creativity by women using mulberries as local plants. Although the use of this plant is still simple, it has shown its capabilities at the level of adaptation.

Methodology

The research method consists of descriptive qualitative methodology. In order to reveal the form of women's creativity as the purpose of this study, I interviewed women, especially the wife of mulberry farmers. Not all farmers' wives were participants. Some were interviewed as participants as their husbands had worked as mulberry farmers for more than seven years, and their wives use mulberry in various ways about 10-15 times each week. Based on these considerations, 15 farmers' wives participated in the research project.

Table 1: Short Profile of Research Participants

No.	Name	Age	Profession
1	Dg. Kebo	45	Housewife/Food Stall
2	Tini	54	Housewife
3	Hasriani	51	Housewife /Pulse Seller
4	Dg. Te'ne	49	Housewife /Fruit Juice Seller
5	Dg. Singara	55	Housewife
6	Asrianti	40	Housewife
7	Wahyuni	43	Housewife
8	Yulianti	39	Housewife
9	Dg. Sompa	59	Housewife
10	Dg. Bollo	47	Housewife /Cake Seller
11	Dg. Minne	44	Housewife
12	Fatmawati	51	Housewife
13	Dg. Ngiji	39	Housewife
14	Munawarah	48	Housewife
15	Dg. Bau	45	Housewife/Tailor

Source: Questionnaire, 2019.

Interviews are the primary data collection techniques used in this study. Other methods including observation are also used. In this observation, I display mulberry plant prototypes and the results of their creativity.

Data is collected by conducting structured interviews with participants. All interview data was complete and adequate. If the data was incomplete, I conducted further interviews as needed.

Besides structured interviews, I also made observations in this research. These were made to examine how the creative behaviour of participants made use of mulberry plants. Observations were also made to observe the impact of creativity in the family and community.

To strengthen interview data and observations, I used a literature review and documentation related to research results on adaptation, women's creativity, and the benefits of mulberry plants. In addition, I used data about the profile of the village of Pakkatto obtained from both the Internet and village monographs.

As part of a descriptive qualitative study, the data obtained was analysed using a Three-Step technique (Miles and Huberman, 2000). These Three-Steps include data reduction, data

categorisation and drawing a conclusion. These three concepts are interconnected without hierarchical sequential steps. Data analysis occurred at any time when data was available, without having to wait for the completion of data collection.

there are several steps taken in this study through the process of data analysis: (1) analysis involving interview data transcripts and (2) analysis of data transcripts of each participant. Transcript data from the interview are read carefully by marking each line. The transcript data analysis approach uses model categories, including: (a) selecting relevant data from interviews; (b) sorting materials into categories; (c) drawing conclusions from results. This categorisation process produces in-depth analysis.

It's very important to maintain objectivity in conducting qualitative research. This completed by checking the data collected from interviews with research participants.

Results

A. Profile of Pakkatto Village

Morphologically speaking, this village includes lowland morphology, a stretch of rice fields, and slope plantations between 00 - 100, with altitudes ranging from 25 m above sea level. There are various types of clay and some areas have Litosol soil (soil mixed with stone) with a brownish-red colour, while some are grey—smooth soil texture with soil solum ranging from 20 to 45 cm.

Following its position close to the equator, the climate of this village is tropical with two seasons, dry rainy. The rainy season usually occurs from November to April, and the highest rainfall between December and February. May to October is the dry season, while drought occurs from August to September.

The condition of the settlements is regular and less dense, with an area of 319 hectares or about 28 percent of the village area. Based on type, houses in this village are divided into 740 permanent apartments and 130 non-permanent units. Approximately 90% of homes have a yard which the community uses for growing family medicinal plants, and a life stall for growing fruit and planting ornamental plants.

Figure 1. Map of Pakkatto village as the research location. *Source: Google Map, 2020.*



Regarding the management of mulberry plants, there are currently around 25 mulberry farmer groups of 5 farmers with varying land area management. The farmer group is managed directly by the Forestry Department by providing outreach and routine assistance.

Mulberry farming is not the primary profession. Instead they are rice farmers and make mulberry as an additional activity.

The wives of mulberry farmers as participants are generally housewives. Like women in the village in general, they are also involved in public activities to help the household economy. Some undertake other additional activities which are productive such as opening a food stall or a pulse counter and selling juices.

Little is known about the benefits of mulberry plants amongst the families of mulberry farmers in Pakkatto Village. So far, they only know that these plants are cultivated for silkworm food. These farmers maintain mulberry plants as part of the Forestry Department's program.

Various benefits of mulberry plants become evident through their growth and development. These benefits are obtained through repeated experience from the use of mulberry plant elements.

Women, especially the wives of mulberry farmers have a lot of experience while the men focus more on mulberry crop farming activities. Based on observations in the field and the results of interviews with the wives of mulberry farmers (participants), there are three forms

of creativity incorporated in utilising mulberry plants: making herbal concoctions, cold powder and herbs to treat wounds.

B. Making Herbal Concoctions

Making herbal concoctions has been a part of the culture of rural communities for a long time. Their interaction with the surrounding environment, which is dominated by forest plants, conditions them to utilise a variety of these plants. This condition also occurs at participants' research location.

For the farmer's wife, making herbal concoctions (researchers' term) is one of the forms of internal family prevention of ailments. . Without knowing and using the name 'herbal ingredients,' they only know about boiling mulberry leaves. The participant Dg. Kebo, (45 years old) housewife has a food stall. She stated:

"... people here say 'heat the water' does not mean the same as "giving rise to hot water." 'Heat the water' means you want to make medicine but 'give it hot water' refers to making tea or coffee..."(Interview, September 4th 2019).

The story told by Dg. Kebo above was also revealed by another participant. Bau (45 years old) who usually receives clothing stitch orders:

"... that's what a lot of people here say if you want to make medicine or coffee. Usually there are those who say 'make hot water,' which means to make coffee or tea. There is also a saying 'cook hot water' or 'raise water which means to make concoctions"(Interview, 8 September, 2019)

There are four methods so far in the process of making mulberry herbal concoctions. Firstly, boil the water and pour it into a big glass that has been filled with mulberry leaves, after five minutes the water turns brown, then the mixture is ready to drink. Secondly, boil the water, then add the mulberry leaves and wait until the water turns brown. thirdly, boil the water from the start along with mulberry leaves; finally, for those who want to be realistic, an option is to use a hot gallon of water to make mulberry mixes.

Various experiences are expressed by participated in making these herbal dishes. One participant, FTM (51 years), a housewife, described the following:

"... if I make a potion, usually I want something practical and fast. I just brewed the leaves using a hot gallon water. Even though it's not a hundred degrees, it's pretty good" (Interview, 10 September, 2019).

Other experiences described by participants Dg. Bollo (47 years) a cake seller and Tini (54 years) a housewife who do not only want to make concoctions. They must boil the water and mulberry leaves until the water is brown (Interview, 6 September, 2019).

The cookware uses is also varied, ranging from stainless pans, cups, kettles, water heaters and earthen pots. The use of cooking utensils is situational, depending on the circumstances.. However, there are differences in perception amongst farmers' wives related to the effectiveness and efficacy of herbs. Some claim it to be effective when cooked directly compared to steeping, while others maintain that it's effective using ground instead of stainless pan and so on.

For the people of Pakkatto village whose work mostly relates to agriculture and plantations, this activity requires extra energy. They have to do this work almost every day so that it results in the decreased endurance or stamina of farmers. Therefore, based on their belief and experience, drinking mulberry leaf boiled water can eliminate fatigue after work and increase energy while working. This belief is crucial, considering that good health is has been demonstrated to be influential at work, which they obtain through mulberry plants. Acquisition is passed at times even for free without involving modern medicine.

C. Making Cold Powder

Another creative activity by undertaken by mulberry farmers' wives is to make cold or scrub powder. This body scrub powder is an important part of women's lives, especially in rural areas. This is confirmed by Dg. Te'ne (49 years old), another participant who also sells juice. . She states:

"... Mothers here in Pakkatto still commonly use cold powder. The ingredients are also the kinds they make themselves, including mulberry leaves. The mixture is supplied as needed. However, almost all residents have cold powder which are not sold but may be requested" (Interview, 6 September 2019).

Women's activity during their free time in rural areas such as the research location, is filled with productive things, one of which is to make multi-functional cold powder. This activity is usually completed long before. However, what is different this time is that they made it using ingredients from mulberry plants, including roots and shoots. They also added other elements such as processed rice flour. All ingredients are mashed and then mixed until they become a soft dough, then the money is made into round like marbles and dried.

It's used in a cold powder shaped like marbles taking a few seeds as needed, then crushed using a few glasses of water until slightly runny, then rubbed on the body as a scrub or taped to the face to attain white and smooth skin.

Another exciting aspect in the use of this chilli powder is the function of the treatment of diseases that can be obtained by users. The cold dust which is usually intended to smooth the skin has additional benefits to reduce heat or fever.

D. Making Concoction for Wounds

Making herb concoctions to treat various wounds has been undertaken by women for a long time. However, making herbs from mulberry plants is new.

Based on previous experience, making the concoction was not difficult for participants. Nevertheless, except for a few components that are technically different, they can make adjustments. This was confirmed by HSR (51 years old), a participant who aside from being a housewife also had a business. She maintained:

"... people here have always made a mixture of various kinds of leaves. For now, we also make mulberry leaves. Making it is all the same ..." (Interview, 6 September, 2019).

The experience of making herbs for wound treatment was also shared by another participant called Dg. Singara (55 years) a housewife. Based on her description:

"... we have experience making potions because we see parents make them and we have been involved in them since we were children. The method remains the same today ..." (Interview, 6 September, 2019).

The extensive experience relied on by participants is on based on hereditary knowledge. In addition, they also have their own experience, one of which is the (trial-error) of various plants on less healthy family members. The reaction to these trial results have formed the primary basis and improved several other cases.

Regarding mulberry plants, some create making herbs, such as for a bruise wound or hot fever by preparing a mulberry leaf which is rather extensive, moistened then affixed to the point of the injury or the forehead. Secondly, mulberry shoots and roots are crushed and then placed on the sick body. This method is currently popular. Previously, women did not mash the material but chewed it to pieces and placed them on the ill body part. However, this method is rarely used. Several participants also confirmed this including Dg. Ngiji (39 years old), Dg. Bollo (47 years), Wahyuni (43 years), Dg. Minne (44 years) and Munawarah (48 years) who revealed that their parents used to make a concoction by chewing the material to



pieces and sticking it to the weak limb. However, today they no longer use this method because there is another alternative, which is to pound it using a mortar (Interview, 6 September, 2019).

Making herbs as a form of creativity is just one of their creativity models. This is undertaken because according to the village community, if there is a sick or injured limb, then it must be treated with medicine. Though not always ill or wounded, limbs are given medication in the same place but also through different ways such as through consumption.

In this study, the 'creativity' of rural women reaffirms their focus on domestic tasks. This creativity also shows the tendency for women to begin working on things that are a priority.

Women's imagination is almost always meant as an expression of concern about a state of emergency. In this case, the invention is urgent in the health dimension.

At the same time, creativity indicates an 'adaptive' action or response to the existing environmental situation at the time. When urged to overcome health conditions, the accumulation of knowledge in socio-culture leads them to take quick action. The result is a decision to choose local plants such as mulberries which are available to them.

Individually, the adaptation of women emerges through various processes both in the form of experience, information that develops through internalisation, then becoming established knowledge. Von Glasenapp and Thornton (2011) state that farm households are the most formidable social units in carrying out social and environmental adaptations, and the women within play a dominant role.

The decision of women to use adaptation is also based on the consideration of access to benefits they can obtain from these actions. Weber calls it a rational response, which means that there are both advantages and disadvantages to an effort. Therefore, the selection of mulberry plants is not just an ancestral heritage but has other benefits as stated earlier. These benefits are also evident in the findings of Hafizianor et. al. (2016) about adaptation strategies of forest village communities in Barito Kuala Regency.

Today, science has also proven the benefits of mulberry plants. Various research results show that these benefits cannot be explained by villagers. These studies found that mulberry plants can overcome elevated blood sugar (Efendi et. al., 2010 and Miladiyah et. al., 2003). They also lower cholesterol, blood pressure, and help in overcoming digestive disorders (Dalimartha, 2000). Therefore, mulberry is a multi-function plant (2015).



The above description above confirms that the adaptive actions of women are based on knowledge about the plant in the form of experience. This means that the creative potential is more evident in the development or expansion of variations of the main ingredients of mulberry into various models (boiled tea, cold powder and medicinal herbs).

Conclusion

In general, women are inherently creative. They can do anything that has productive value for themselves and their families. Apart from being intended to fill leisure time, these creative efforts can extend to making raw or scrub powder even though this is limited to self and family consumption.

Creativity as a form of adaptation is a response or decision in a situation but still based on the knowledge and experience of individuals and society. Such knowledge generally has the potential for creating profit and loss.

Such creativity has commodity values that can be developed in a modern way so that they have added value for themselves and their families. Considering this creativity, concrete steps are needed in the form of training related to mulberry processing.

Acknowledgement

Thanks to all participant who support this research, especially the families of mulberry farmers who provided extensive information and for the Pakkatto village staff for its administration service. Overall, , thanks to the Ministry of Research and Technology/National Research and Innovation Agency of Indonesia for funding this research.

REFERENCES

- Andari, S. (2005). Pengkajian Tentang Strategi Kehidupan Keluarga Buruh Miskin: Studi Kasus Tentang Buruh Tani di Desa Cibodas Kecamatan Lembang Kabupaten Bandung. *Jurnal Informasi dan Kajian Permasalahan Sosial dan Usaha Kesejahteraan Sosial (Socio Informa)*. 10(3), 63-71.
- Anriani, H. B., Halim, H., Zainuddin, R., Abdullah, A., Wekke, I. S. (2018). Fisherman's Wife Role in Extending Household Income in Palu Gulf. *IOP Conf. Series: Earth and Environmental Science* 156. 169-172.
- Dalimartha, S. (2000). *Atlas Tumbuhan Obat Indonesia*. 1st Edition. Jakarta: Trubus Agriwidya.
- Dermawan, A.M. (2016). Pemberdayaan perempuan melalui kegiatan ekonomi kreatif. *RAHEEMA: Jurnal Studi Gender dan Anak*. 3(2), 159-172.
- Efendi, R., Damayanthi, E., Kustiyah R., Kusumorini, L. (2010). Pengendalian kadar glukosa darah oleh teh hijau dan atau teh daun murbei pada tikus diabetes. *Jurnal Gizi dan Pangan*, 5(2), 87-94.
- Foilyani, F.H. (2009). Pemberdayaan Perempuan Perdesaan Dalam Pembangunan (Studi Kasus Perempuan Di Desa Samboja Kuala, Kecamatan Samboja, Kabupaten Kutai Kertanegara). *WACANA*, 12(3), 692-608.
- Hafizianor, Rezekiah, A.A., Rahmadi, A. (2016). Strategi Adaptasi Masyarakat Desa Hutan Dalam Menghadapi Perubahan Dan Alih Guna Kawasan Hutan Rawa Gambut Menjadi Kawasan Perkebunan Kelapa Sawit Di Kabupaten Barito Kuala. *Prosiding Seminar Nasional Lahan Basah 2016*, 3rd Edition, 961-967.
- Halim, H, Zainuddin, R. (2015). Transcendental-Theosophy Perspective on Environmental-Degradation (The Urgency of Knowledge in Relations of Man-Nature). *In The 7th International Graduate Students and Scholars Conference in Indonesia* (pp. 372–401). Yogyakarta, Indonesia: The Graduate School Universitas Gadjah Mada.
- Isnain, W., dan Muin, N. (2015). “Tanaman Murbei” Sumber Daya Hutan Multi-Manfaat. *Info Teknis Eboni*, 12(2), 111-119.
- Masngudin, H.M.S. (2002). Strategi Ketahanan Hidup Istri Nelayan Miskin (Studi Kasus di Desa Segara Jaya dan Samudra Jaya Kabupaten Bekasi). *Jurnal Informasi dan Kajian Permasalahan Sosial dan Usaha Kesejahteraan Sosial (Socio Informa)*. 7(2), 87-98.



- Miladiyah, I., Purwono, S. dan Mustofa. (2003). Efek Ekstrak Eter (*Physalis Minima Linn*) setelah pemberian jangka panjang terhadap kadar gula darah tikus diabetes. *Majalah Obat Tradisional*, 8(23). Retrieved from Yogyakarta. <https://prisma.lppm.ugm.ac.id/publication/3298>, February 12nd 2020.
- Miles, M. B, dan Huberman, M.A. (2000). *Analisis Data Kualitatif*. Jakarta: Universitas Indonesia Press.
- Odum, E. P. (1983). *Basic Ecology*. Philadelphia: Saunders.
- Subair, N. (2018). *Pergulatan Hidup Perempuan*. Kebumen: Pena Indies.
- Sucipto. (2002). Upaya Wanita Kepala Rumah Tangga Dalam Peningkatan Kesejahteraan Keluarga di Kabupaten dan Kotamadya Malang. *Jurnal Informasi dan Kajian Permasalahan Sosial dan Usaha Kesejahteraan Sosial (Sosio Informa)*. 7(2), 75-86.
- Supriadi, D. (2001). *Kreativitas, Kebudayaan, dan Perkembangan Iptek*. Bandung: Alfabeta.
- Suryani, B. S. D. (2018). *Peran Perempuan Dalam Meningkatkan Kesejahteraan Keluarga Berbasis Ekonomi Kreatif (Studi di Desa Loyok, Kecamatan Sikur, Kabupaten Lombok Timur)*. Undergraduate (S1) thesis, University of Muhammadiyah Malang. Retrieved from [http://eprints.umm.ac.id/43523/February 5th2020](http://eprints.umm.ac.id/43523/February%205th2020).
- Susilo, R. K. D. (2012). *Sosiologi Lingkungan*. Jakarta: Raja Grafindo Persada.
- Von Glasenapp, M. & Thornton, T.F. (2011). Traditional Ecological Knowledge of Swiss Alpine Farmers and Their Resilience to Socioecological Change. *Hum Ecol* 39, 769-781.