Local Wisdom on Farming Activities and Its Benefits to Agriculture in Enrekeng District, Indonesia

Yusriadi¹, Irmayani¹, Ida Rosada², Mais Ilsan², Wahyuni¹, Muhdiar¹
¹Muhammadiyah University of Parepare, Indonesia
²Universitas Muslim Indonesia

Correspondence: Irmayani (irmaumpar@yahoo.co.id)

Abstract

This study was aimed to determine the identification of local wisdom types on rice farming activities in Rossoan Village, Enrekang Sub-district, Enrekang District and the efforts to preserve local wisdom carried out by the community in Rossoan Village, Enrekang Sub-district, Enrekang District. This study used a qualitative descriptive approach as a case of meaningful phenomenology of agricultural action. Key informants were determined as respondents in this study and sample collection was performed by snowball sampling with data triangulation techniques. The results showed that there were 4 types of local wisdom that were still often carried out by the farmers in Rossoan Village, namely the massimatan tradition carried out before nursery, the mabanne-banne tradition carried out at the time of planting, the majappi tradition carried out at the time of maintenance of rice farming and the menongankumande tradition carried out at harvest time. Such action is a local wisdom that contains values of kindness and wisdom which are used as a philosophy of life for rural farmers.

Key words: local wisdom, farming activity, tradition, agricultural action

Introduction

Enrekang District is one of the Level II regions in South Sulawesi Province, Indonesia and the capital city is located in Enrekang City. In terms of socio-culture, the community of Enrekang District have their own peculiarities. This is due to the Enrekang culture (massenrempulu) which means to move the mountain or to walk down the mountain, while the Enrekang designation comes from Endek which means to go up, where the Enrekang District consists of linked mountains and hills which take ± 85% of the total area approximately 1,786.01 Km². The culture is between the Bugis, the Mandar and Toraja lands culture. The regional language used in Enrekang District is broadly divided into three languages namely Duri, Enrekang and Maiwa. In addition, majority of the agricultural culture in Enrekang is generally still subsistence or traditional. Similarly, majority of the Enrekang community in conducting agricultural businesses still rely on the knowledge they have. This knowledge is derived from generation to generation through tradition or verbal communication. There are still many farmers in Enrekang Village who have special knowledge, good and wise habits or traditions in running their agriculture, one of which is rice farming activities. Due to its normative or unwritten nature, many of the local wisdoms of Enrekang District have not been known by many people regarding their agricultural business activities, especially in the scientific context. In fact, local wisdom that once
existed has begun to disappear or is no longer applied by the community due to the rapid shifts and changes in social, cultural, economic and political value systems.

Rossoan Village, Enrekang Sub-district, Enrekang District is one area that can be considered to have good cultural resilience (local wisdom). This is evidenced by the existence of several traditional values and customs that are often carried out by traditional leaders and members of the local community. There are a number of local wisdoms that are often carried out by the Rossoan Village community on rice farming activities, namely in the stage of pre-planting, maintenance and harvesting. Local wisdom that has been existed up to now is believed to have become the habit of its people and they believe that local wisdom may increase the productivity of their agricultural products. This is one reason that causes people not to hesitate to maintain the local wisdom. This is an interesting and strong reason for conducting the study. This is also one of the ways to preserve cultural wealth in the form of local wisdom of the farming community in carrying out rice farming activities. In Rossoan Village, rice farming is a knowledge system that lives and supports its owner. Almost all rice production in Rossoan Village is consumed by the community itself. Selling culture is only done when they are forced and pressed.

Rice seeds produced by farmers in Rossoan Village are seeds produced by themselves. Farmers usually have to separate between the rice that will be stored as food and seeds that will be used in the next planting season. The rice that will be used as seeds is chosen carefully where usually the selected rice grains are fat, big and good, and mature. Rice used as seeds is not mixed with other rice. The rice is then stored in a non-humid room for example at home.

**Literature Reviews**

According to Ridwan (2007), local wisdom is local knowledge based on local cultural values. Puspawardoyo cited by Sirait (2005) states that local wisdom is realized through separate and unique ways that are regulated in cultural norms in the form of rituals and traditions of the community. This wisdom is inherited by their ancestors which influences the pattern of knowledge (understanding), attitude and behavior of the community, and is binding on all components of society. Local wisdom can be felt through people’s daily lives because the end of sedimentation of local wisdom is tradition. Local wisdom can be a potential energy for environmental wisdom or local community wisdom that has existed in people’s lives since ancient times from pre-historic times to the present. Local wisdom is a positive human behavior in dealing with nature and the surrounding environment that can be derived from religious values, customs, traditions of the ancestors or local culture, which are naturally built in a community to adapt to the surrounding environment, this behavior develops become a culture in an area and will develop for generations. In general, local culture is interpreted as a culture that develops in an area where the elements are the culture of ethnic groups living in such area.

According to Darusman in Suharjito (2005), local wisdom or traditional wisdom contains the resultant meaning and optimum balance in accordance with existing conditions. Local wisdom is one of the manifestations of culture as a system that tends to hold tightly to tradition as a means to solve problems often faced by local people. Local wisdom has a strong socio-cultural dimension because it is born from human behavior activities in community life. The local knowledge system is one of the systems that dominates the behavior of rural farmers. The development of the village knowledge system is the result of the study on the history of the community itself as a result of internal developments and incoming external influences. A study conducted by Irmayani (2016) found that for farmers, farming is not just working on the land and taking the results, but also maintaining existing traditions such as rituals that initiate the rice harvest, choosing a good day for pre-nursery, planting, and harvesting. Therefore, traditional leaders have an important role to determine the good day or the right time because they are considered to have a knowledge of that matter. This knowledge is a result of the trial process and the mistakes made by the previous farmers that are still applied today.

Previous research on local wisdom has also been carried out by Susi Yuliani Hidayat (2015). This research focuses on local wisdom, the socio-cultural dynamics of the indigenous people of Kampung
Naga, and alternative forest management strategies. The results of this study report that: Community wisdom in managing land to preserve its sustainability is the use of organic fertilizers to plant and prohibition of the use of chemicals for pest control. In addition, the wisdom of the community in felling trees on private land is the last alternative to get money. The wisdom is proven by the realization of logging on land that does not exceed the established rules, so that the condition is sustainable.

Jamal Hussein (2018) with the title of research on Local Wisdom Studies in Farming in Warembungan Village, Pineleng Sub-district, Minahasa District, identified and described thoroughly the local wisdom applied by the farmers in each farming stage in Warembungan Village. This study used primary data and secondary data. The first primary data were obtained through field observation with a participant observatory in which the researchers went directly to the field and saw the application of local wisdom by the farming community in Warembungan Village. Whereas the second primary data were obtained through in-depth interviews with predetermined key informants, namely the traditional leaders commonly called tonaaas, as well as the farming community in Warembungan Village through Focus Group Discussion (FGD). Furthermore, secondary data for completeness of information regarding village profiles was obtained from the Warembungan Village office. The data processing method used in this study was to use a qualitative study method, while the final results of the study were presented in a descriptive narrative.

Subsequently, Mulyadi (2011) also conducted a study entitled The Influence of Local Wisdom, Locus of control, and Motivation to Preserve the Environment towards the Environmental Behavior of Farmers in Managing Agricultural Land in Soppeng District. The results of the study proved that the motivation to preserve the environment and the environmentally sound behavior of farmers is directly influenced positively by local wisdom and locus of control. Both of these exogenous variables also have an indirect effect on the environmental behavior of farmers through the motivation to preserve the environment. This finding shows that the variables of local wisdom, locus control and the motivation to preserve the environment are factors that determine the realization of farmers’ environmental insight.

Methodology

This research was conducted in Rossoan Village, Enrekang Sub-district, Enrekang District. This research was conducted for 2 months from June to July 2018 which included field data collection, data processing and data analysis. The research targets were rice farmers and traditional leaders in Rossoan Village, Enrekang Sub-district, Enrekang District. The variables studied in this study are local wisdom (locus of control) and rice farming activities. The research location was determined purposively by selecting the research location based on the suitability of the characteristics of the prospective sample/respondent with certain criteria set by the researcher in accordance with the research objectives. Mardikanto in Irmayani (2016) conducted a study in Rossoan Village where in this village still had some local wisdom that was still often carried out in rice farming. Determination of the sample was performed by determining key informants and continued with snowball sampling technique in triangulation to find data saturation. Selected respondents included traditional leaders and farming communities who carry out rice farming activities.

The type of research used in this study was descriptive, with a qualitative approach that aims to understand the object studied deeply. Sources of data collected in this study included primary and secondary data. Primary data were obtained through in-depth interviews using questionnaires. In addition, direct observation was also carried out in the field by being directly involved in the rice farming activities. The data obtained in this research were data about the types and forms of local wisdom in agricultural activities such as the process of planting to harvesting in Rossoan Village. While secondary data as supporting data were obtained from relevant agencies and literature studies in the study. In order for all data or information needed to be collected properly, it is necessary to first determine the information needed. Snowball sampling technique was carried out to obtain data from the initial respondents for the interview then the researcher continued the interview based on information from the respondents who had been interviewed (to show the level of information
satisfaction) according to the data needed. Determination of informants was done using triangulation technique which is a method of synthesizing data on the truth by using other data collection methods. Data that are declared as valid (credible) through triangulation would give confidence to researchers about the validity of the data so that they do not hesitate in drawing conclusions from the research.

Results and Discussion

Local wisdom has 4 (four) forms of perspective approaches: First, Ecological Politics, this approach is based on the thought of the diversity of interest groups, different perceptions and plans for the environment that creates a conflict, so that raises various issues about environmental issues. Second, the Anthropological Perspective, derived from the Greek language of *anthropos* (human) and *logos* (science). Anthropology in an effort to find an explanatory model of human ecology with an anthropological perspective describes humans through social science knowledge, Tasrifin Tahara (2017) explains that geographical determinism assumes the geographical and physical environmental factors of nature as an absolute determinant of the types of community culture, cultural ecology method makes variables of the natural environment in explaining certain aspects of human culture. Third, the Ecological Perspective, derived from the Greek language of *oikos* (habitat) and *logos* (science) which is defined as the science that studies the interaction or behavior of humans with their environment. Through this aspect, God has granted reason to humans, thus God brings down religion for that reason. Logically, if humans are given sense they will certainly develop their culture. Religion is the basis for guidance to regulate how humans relate to the Creator, and relate to other human beings or relate to the universe as a place to live. Fourth, the Action and Consequence Approach (Progressive Constituency explanation model), this model is more applicable to explain and understand the phenomena that are the subject matter. The advantage of this approach is to have an empirical assumption and explanation model, providing places and opportunities for the adoption of certain assumptions and concepts that are appropriate. Furthermore, Vayda in Ritohardoyo (2006) explained that a progressive contextual approach emphasizes more on the study objects about:

i. Human activity in relation to the environment

ii. Causes of activity

iii. The consequences of activities both on the environment and humans as the actors of activities

Identification of local wisdom in rice farming that is applied by the farming community in Rossoan Village is a wise knowledge which is the result of learning from past experiences applied by farmers from the nursery, planting, to harvesting stages, where the knowledge has taken root into local culture and traditions which is typical for farmers in Rossoan Village. According to Keraf (2010) in his book entitled Environmental Ethics that what is meant by traditional local wisdom here are all forms of knowledge, beliefs, understanding or insight as well as customs or ethics that guide human behavior in life in ecological communities. Thus, this local wisdom is not only about the knowledge and understanding of indigenous people about humans, but also about habits. All of this local wisdom is lived, practiced, taught and passed on from one generation to another, which at the same time forms the pattern of everyday human behavior, both towards fellow human beings and towards nature. This theory is a reference in research to find out social or cultural knowledge of agricultural farming activities. Culture as a system of meaning that gives meaning to life and human behavior, which is quoted by Max Weber that humans are creatures trapped in the web of their own interests so that culture is such web. Geertz then elaborated on the understanding of local wisdom as a culture in the pattern of inherited meaning. Therefore, the study of culture and humans in the anthropological tradition does not attempt to find laws such as natural science yet interpretive studies to search for meaning.

Identification of Local Wisdom on Rice Farming Activities

Results of the study found several actions of local wisdom identified in farming activities as illustrated in Table 1.
Table 1: Types of local wisdom on rice farming activities that currently still exist and are still applied by farmers in Rossoan Village

<table>
<thead>
<tr>
<th>No</th>
<th>Description of local wisdom in Rossoan Village</th>
<th>Stages in rice farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Massimatana</td>
<td>Pre-nursery</td>
</tr>
<tr>
<td>2</td>
<td>Mabanne-banne</td>
<td>Planting</td>
</tr>
<tr>
<td>3</td>
<td>Majappi</td>
<td>Maintenance</td>
</tr>
<tr>
<td>4</td>
<td>Menongan kumande</td>
<td>Harvesting</td>
</tr>
</tbody>
</table>

*Source: Primary Data from Rossoan Village, 2018*

Table 1 shows that there are 4 types of local wisdom of the community in Rossoan Village that are still applied in rice farming, namely in the pre-nursery stage (*massimatana*), planting stage (*mabanne-banne*), maintenance stage (*majappi*), and harvesting stage (*menongan kumande*). These traditions are still carried out by the local community because the people of Rossoan Village believe that by doing this tradition they will benefit, not only in agricultural produce but also for themselves. Actions in Applying Local Wisdom on Farming Activities include:

**Tradition in the Pre-Nursery Stage of Rice Farming**

The *massimatana* tradition is generally carried out by farmers in Rossoan Village. The term *massimatana* can be interpreted as a way that is carried out by the community before carrying out rice nurseries, where this tradition by the peasant community to submit requests and prayers to God to be allowed to start rice farming and ask for blessings so that they will get good results. After doing the ritual, Rossoan farmers do the nursery. According to interviews from some Rossoan farmers, they do rice nurseries by soaking the seeds in a basin for 2-3 days, the rice seeds are then drained and put in a sack to reduce the water content. The seeds are put under the house column and covered as much as possible with the aim of accelerating root growth in seedlings. This process is carried out for 4-5 days, the seeds are then ready to sow on rice fields. Seed sowing is performed by the owner of the rice field and assisted by family members so that the seed sowing process is completed quickly. After that, farmers wait for around 25 days. Seeds that are 25 days old are ready to be revoked. The process of revoking the seedlings is also carried out by the owner of the rice field with the help of family members or other farmers around his rice field.

**Techniques and Meanings in Rice Farming**

The time that is believed to be very bad to start rice farming is when entering the new moon, the end of the dead month and the full moon. The reason for the Rossoan farming community to avoid planting at these times is because these times are believed to be a drastic breeding period of pests and insects, especially in the new month which is the time to hatch eggs of pests and insects that can attack plants. According to the experience of farmers in such area, the calculation and determination of a good planting day with the calculation of the month has an effect on the farming, the good day for planting depends on the suitability of the farming community regarding the good day, yet they first ask the traditional leader about a good day to plant that is on Monday and Friday with the reason that they believe planting on those days have safety and blessing on the plants. Farmers also say that prayer and supplication to God as the Giver of Fortune are more important. This planting is an activity to put the seedlings into the soil in one time for at most three plants. According to Jr. (50 yrs), “all the traditions that have been carried out have become the habit of the current upi that is still practiced by most farmers in Rossoan Village so that we not only focus on that tradition but hope, prayer and effort are also done to protect and maintain rice plants to produce good productivity. All the farming done is not free from hope in God as the Giver of Fortune.”
Techniques in Rice Farming Maintenance

Maintenance is an activity carried out by farmers to care for and maintain paddy plants to produce good rice. Maintenance activities include weeding and fertilizing. In the maintenance of rice, the Rossoan community has local wisdom carried out by living farmers. First, the maintenance of rice plants includes weeding, the weeding process carried out by farmers here is using traditional tools such as sickles to clean the grass that grows around rice plants, while for fertilization, the Rossoan community has used chemical pesticides. In addition, there is local wisdom that has become a tradition in the maintenance of 2-month-old rice plants called the majappi because this ritual has become a philosophy of life for farmers in Rossoan Village to eradicate pests by binding ginger to rice plants. The Rossoan community also set aside time every morning and evening to maintain rice, monitor the presence of pests and diseases that often attack rice plants because according to the Rossoan community, the maintenance of rice plants is an obligation and a sense of responsibility which is a mandate to care for and maintain them well. In addition, the Rossoan community has a way to get rid of the birds that eat rice grain, which is by using used plastic or making scarecrows placed in the rice fields to prevent the birds from eating the seeds.

Techniques in Harvesting Rice Farming

Before harvesting, the Rossoan community first determines a good day for harvesting. After an agreement was made on that day, the owner of the rice field immediately informed the community to help, yet it is prioritized for the communities who are considered not to have rice fields or did not have a family head in meeting their daily needs. This unique tradition is carried out by the Rossoan farmers when they enter the harvest season where they help each other to make a quick harvest known as menongan kumande, which means dividing the harvest in the community that helps in the harvesting process. The tools used in harvesting are still traditional. In the harvesting process, the people of Rossoan Village still use traditional tools such as sickles. Threshing of grain using traditional tools called “passambakan”, this tool is shaped like a rectangular table, usually made of wood. This tool serves as a container for shedding rice into grain.

Gratitude is addressed to God for the sustenance that has been given. The Rossoan community also performs a tradition known as menongan kumande or interpreted as meal sharing (people who have rice fields or other crops sourced from the soil such as corn, onions and other plants are obliged to follow this tradition. Meal sharing is usually done in the rice field area. According to the interview from Ls (30 years), he said that everything produced or eaten is sourced from the soil which we should always be grateful for, the results of these crops that can continue to meet our daily needs. The Rossoan community said that a successful production of plants starting from planting, maintenance to harvesting is a gift from God to the Community of Rossoan Village. This strengthens the community to do good to nature and its surroundings as a form of gratitude to the Creator.

Preservation of Local Wisdom in Rice Farming

Local wisdom in rice farming is a result of the extraction of many years of life experience from ancestors and past farmers that were completed by each generation to form a knowledge passed down from generation to generation. The meaning of these traditions is believed to be of good value to the development of agricultural enterprises, particularly rice farming where local wisdom is a form of community realization in order to achieve harmonious and balanced relationships with nature. Local wisdom is used as a philosophy of life for people to make wise and good-value decisions, not only for humans individually, but also among humans and between humans and the natural surroundings. The benefits of local wisdom in rice farming are really felt by the farmers of Rossoan Village, causing farmers to maintain and apply local wisdom even though there have been many instantizations and modernization in this era of globalization. The application of culture in rice farming is not just a routine or just continuing the tradition, but because of the inherent life of the community with existing traditions that are difficult to release. Farmers also learn a lot from the experiences of other farmers who refuse to apply the existing local wisdom, yet the results of rice farming obtained are not as good as the results by applying local wisdom. Existing local wisdom is a cultural heritage of ancestors that
has been tested since ancient times as useful knowledge so that it is used as a way to survive and meet the needs of life.

Preservation efforts are carried out by the customary leader and the Rossoan community by carrying out the traditions mentioned above once a year. Farmers consider that the preservation of local wisdom is a shared responsibility, so that the peasant community does not depend on all issues to the local adat leader, even the peasant community does an independent effort to explore and develop local wisdom that still exists today.

**Conclusion and Recommendations**

Results of this study indicate that there are 4 forms of local wisdom that are still often carried out by the farmers of Rossoan Village, namely the *massimatan* tradition carried out before nursery, the *mabanne-banne* tradition carried out at the time of planting, the *majappi* tradition carried out when maintaining rice farming and the *menongankumande* tradition carried out at the time of harvesting. The local wisdom is knowledge that comes from the experience of previous farmers who experienced a shift in each generation and passed down from generation to generation to be maintained until now. The local wisdom contains values of kindness and wisdom which are used as a philosophy of life for farmers in Rossoan Village. Local wisdom in rice farming is maintained because it has proven the direct benefits felt by farmers who apply it so that the implementation is never left by farmers.

It is necessary to develop an integrated cultural preservation technique so that local wisdom which is a cultural wealth can survive from the effects of globalization and modernization. An active role is needed from the community of Rossoan Village to jointly care about culture to participate in developing and maintaining local wisdom that already exists today. Similar research needs to be conducted in other locations to study local wisdom as an effort to explore and publish Indonesian cultural wealth in a scientific scope.

**References**


