

## Indigenous Knowledge in Lamalera Village and Preservation Tools in the Society

<sup>1,2</sup>Putrisetyati Hasanah and <sup>2</sup>Tamara Adriani Susetyo-Salim

<sup>1</sup>Department of Library and Information Science,

<sup>2</sup>Department of Library and Information Science, Faculty of Humanities,  
Universitas Indonesia, 16424 Depok, Indonesia

---

**Abstract:** Lamalera society has a tradition of whale hunting which has been going on from hundreds years ago. This tradition has been implemented to be living fulfillment of the society to overcome the dry season and fulfill the villager's food. Local knowledge preservation was required to preserve the tradition so it can be used by generation to generation and can be accessed by the public. Knowledge preservation performed by story telling from generation to generation until the controlling of access level to maintain the tradition. Access level in the society is needed to observe the level of influential people to deliver this tradition. Observing the nature makes Lamalera society which basically live in barren area has another alternative to maintain their life using whale hunting. It also is used to create innovation on fulfilling the needs of fuel as life support from the whale processing. The application of local knowledge preservation, the clan chief's or traditional leader's role on whale flesh distribution, the determination of ritual beginning, until then the action of whale hunting and the basic aim of the hunting were performed and reproduced by the knowledge of traditional leader to the next generation of Lamafa. Knowledge delivery of Lamafa from generation to generation constitutes control tool from the Lamalera society to preserve their tradition.

**Key word:** Indigenous knowledge, whale hunter, preservation, tradition, Lamalera

---

### INTRODUCTION

Local preservation at the early was cultivated through their own way as stated by (Battiste and Henderson, 2000) that traditional society have their own tools to preserve and spread their traditional knowledge, through oral story through traditional teaching of certain society, such by means of ceremonial and practical tradition and by the ecosystem existing from the origin of knowledge system. Local knowledge is a knowledge which refers to the unity of knowlege, known, practiced and maintained by the society which usually occurs in village area that develops through interaction between humans and natural environment this is often reffered as Indigenous knowledge. This knowledge has been understood and interpreted then given meaning as a part of complex culture which encompass language, labelling and classification system trained as a source becomes ritual and spirituality, into a worldview. Traditional knowlege can enhance the development of social economics and almost 80% of world population still using traditional knowledge as alternative solution on facing their life problems (Anwar, 2016). So, the local knowledge

becomes flesh and blood of local wisdom of the society and cling in the life and environment, so the usage becomes own function in the life order.

On particular months, in the region of Nusa Tenggara Timur, there is a ritual which had been going on hundreds years in an area of Lamalera Village, Lembata District, Nusa Tenggara Timur. This ritual is whale hunter taking place from May to October. This whale hunter is not similar with a whale hunter in Japan or other countries in Europe which utilize advanced tool by using large ship and modern equipment BUT it is simple by using wooden boat that they call as Paledang (Tempo, 21th July 2003). On his hunting event, lamafa, the name of person who has duty to transfix a spear to the head of whale must have special ritual before he goes to sea to perfor his duty. In this event, the succeed of a lamafa performing his duty is depend on strong determination and early ritual that he performed before. Basically, people who will perform whale hunting will act as usual and have more time to live on land in daily activities, until the hunting months come, the lamafa will does fasting and clean himself from the sin by avoiding worldly activities during the period before hunting (interview with origin person of Lambata Island,

EP who works in Central Government of Kupang Region and translator for the language). On that interview, there was a unique case which can be explored, that the whale hunting usually does not choose a lamafa randomly but actually the chosen one. The figure of lamafa constitutes a person who will carry the fate of entire boat members into success or tragic death. The lamafa also has an important duty to seek a whale which will be hunted and the whale is not an ordinary whale but a sperm whale which has a protrusion from its head, not in a pregnant condition, not productive and not too small.

On this discussion, there is a tradition which is very strong and preserved hereditarily in a Lamalera district that has strong cultural elements of Nusa Tenggara Timur. From several parts which had been explained, this study will discuss about how a region preserves the tradition in its region and what kind of tools that they utilize to preserve its local knowledge.

**Literature review:** On this scientific study, researchers observed from various information sources which discussed about local knowledge. According to an article titled "A Different Way of Knowing: Tools and strategies for Managing Indigenous Knowledge" authored by Stevens (2008) discussed about how a local knowledge was needed by the society, then finally can be useful if it was recorded or preserved. The researcher explained about what kind of tools utilized in the society to perform preservation of local knowledge on that society. Another characteristic which is unique from local knowledge is that the knowledge has been communicated orally through story or observation and in the form of experience in an origin ecosystem of the knowledge. The preservation method must be corresponded with the oral delivery process as much as possible. Fortunately, digital technology facilitates the oral model preservation rather than the previous period. Audiovisual digital recorder can be utilized to capture oral story from original indigenous language, then technique, practice, song and dance has been usually performed in the context which is tightened in daily life. Photo, manuscript and physical artifact can be strongly represented using scanner and scanner 3D. Connection between knowledge and ecosystem is able to be increased through the utilization of map and GIS technology (Hunter, 2005). In the other hand, traditional society often has complex regulation in law aspect which arranges whose individual or group can access several types of knowledge (Hunter, 2005). Analysis of Jane Hunter about ethical law in traditional society found that there are common terms of limitations in the society covering certain clan or ethnic membership, status on the clan, roles on the clan, gender, relation from people to

people, animal or object are described in a representation of people's death that documented in a representation and in the context where the resources will be re-used or reproduced. Therefore when deciding how the knowledge must be preserved and accessed, the tool must be selected to enable the society to control and build access level for different people.

Furthermore on the book titled "The Knowledge Management Toolkit: Orchestrating IT, Strategy and Knowledge Platforms (Second Ed.)", Tiwana (2002) explained that there are some steps on how the knowledge is processed, start from knowledge acquisition, then development and creation process of knowledge, skill and relation, knowledge utilization, learning process which is integrated until it enters the organization and knowledge sharing process, how the process has been spread until the knowledge is known by the public. In previous research explained about the purposes of sea hunter in Lamalera. Brummer on the article titled Sea Hunter of Lamalera, explained about whaling is based on in Lamalera village because in this village can only grow some corn and manioc and no other industry, it is not hardly surprising that the hunt is the center of life. Each May, after the priest has blessed the fleet and prayers have been offered to Kotekema, the spirit of the sperm whale, the hunting season begins. It will last until October. They hunt not for pleasure but to support the people in the village to live. This is not only the tradition derived from ancestors but it is a defence for people to live. Other than that in another study, David A. Nolin explained about life sharing food in Lamalera. In this study the writer describes about society in Lamalera and motivation of hunting whale and food sharing regulation. Share rights in prey called *uma* are allocated according to a complex system of norms based around the roles of share-right holders and the anatomy of the prey species. Share-right holders in *téna* come from three main groups: members of the boat-owning corporation, the crewmen who participated in the hunt and the craftsmen who built the boat and maintain its gear. Shares in *jonson* are allocated similarly but with special shares allocated to the owner of the outboard motor and the buyer of the fuel (Nolin, 2010).

At this journal writing the researchers used the tool above to describe local knowledge of Lembata society which has been preserved until it has a sustainable impact for life sustainability of the society and for their lives.

**Should local knowledge be preserved or recorded?** On a local knowledge study in the society whether knowledge preservation is required or not can be spelled out by the aim of the knowledge itself. The necessity of the local knowledge preservation and documentation in the society

is to maintain the culture on the society to be not vanished. As discussed on scientific journal titled "A Different Way of Knowing: Tolls and Strategies for managing Indigenous Knowledge" authored by Stevens (2008), there was a discussion about the necessity of knowledge preservation. Local knowledge has usually been performed only on oral process or inheritance from generation to generation without documentation, as argued by Boven dan Morohashi. In the case of Aborigines, the young people did not have daily access for experiential learning on their environment so they experienced reduction of fluency level on speaking Aboriginal language which will keep them able to communicate with parents and they will spend more time at educational institution which is socialized without using Aboriginal language. So there is a real threat that parents must keep traditional and spiritual knowledge and understand the original context of Aborigines where the knowledge must be processed empirically, until it can be evaluated become sustainable knowledge from the ancestors and prevent the ignorance of knowledge in the future for the next generation (Castellano, 2000). The necessity of information preservation can be performed using information transformation. This transformation can be in the form of digital content. When we will preserve the local knowledge we must observe the entire aspects from its knowledge, not only preservation tool and process but also the nature of knowledge itself (all of knowledge) so it will generates a way on how this knowledge can be preserved and regenerated (Christie, 2004). At the end, local knowledge is necessary to be documented and preserved to maintain the tradition and culture of certain society.

#### **MATERIALS AND METHODS**

In this study, the researchers used qualitative method to process and analyze the data. The qualitative research according to Moleong (2007) is a research which has aim to understand phenomenon about what has been experienced by the research subject for example behavior, perception, motivation, action and so on, holistically and in the form of words and language description in the certain natural context and using several scientific method. According to Moleong (2007) qualitative method is a research procedure which produce descriptive data in the form of written or verbal words from the people whom the behavior were observed. On this study, the qualitative method had aim to observe a complete portray of something based on the human perception whom was studied. The qualitative research

had relation with idea, perception, opinion or believe of people whom were studied and all of those can not be measured by numbers.

In this research was conducted observations with the people behavior with the purposive sampling. Purposive sampling is anon-probability sampling method and it occurs when "elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment which will result in saving time and money" (Black, 2009). This research make the criteria for the sampling such as the origin people and have a influence in the society. so in this research was made head of the village, lamafa and EP (translator) to be a sampling. Research was conducted from May to September with the arrival of one or two times each month.

#### **RESULTS AND DISCUSSION**

**Local knowledge preservation of Lamalera society:** On the recent process, whale hunting tradition did not has any literature which documented in detail about the process of procession from the beginning until finished. From the lamafa is selected, performing ritual before the hunting, when the whale is observed, until it is caught and the meat was distributed to all villagers. In Lamalera society, this whale hunting is performed by the Lamalera men who are mature and regarded have ability (usually each family deputes one of its member). Before hunting, they were praying to the God in order to be given of succeed on the whale hunting event. The presentage of success of this whaling can not be regarded as high because the hunting method is really traditional that is by transfixing a spear to the whale's body. The whale hunting is usually started on May, using wooden boat that they called as "Paledang". A person who has duty to pierce the whale named "Lama fa". Lamafa then will stand up on the tip of the boat and when piercing the whale, he will jump and transfix the spear "tempuling" on the whale.

The meat of this hunted whale then will be distributed to all people based on the contribution of their family member on the whale hunting process. Beside the flesh, people also used its oil as massage oil and fuel of light or oil lamp. Local knowledge in Lamalera region has been going hereditary and has become tradition verbally and also derivative ritual formed as experience from generation to generation. Observing the nature makes Lamalera society which basically live in barren area, has another alternative to maintain their life using whale hunting. It also is used to create innovation on fulfilling the needs of fuel as life support from the whale processing (the result

of discussion with EP). As mentioned by Hunter (2005) another unique characteristic of local knowledge is that the knowledge has been communicated orally through story or observation and in the form of experience in the ecosystem from the knowledge origin. The preservation method must be corresponded with oral delivery as much as possible. Lamalera society and the government of Nusa Tenggara Timur has been performing preservation through verbal and digital recording. It is aimed to show the public that whale hunting has power in the tradition process not only for certain ritual hunting but also to supply the food in dry season on which then the whale will be processed become medicine and fuel for the life of Lamalera society. It is appropriate with the preservation process stated by Hunter (2005) about the growth of digital technology on facilitating oral model preservation rather than the previous period. Audiovisual digital recorder can be utilized to capture oral story on the original indigeonus language also technique, practice, song and dance which has been usually performed in the context of tightened daily living. Photo, manuscript and physical artifact can be strongly represented through scanner and scanner 3D. The connection between knowledge and ecosystem can be enhanced by the usage of map and GIS technology so then there will be development of local knowledge mapping which can be delivered from generation to generation and also the public to be studied further for innovation and survival process in the barren area.

Based on interview with EP, it was mentioned that the distribution of whale flesh is depend on class of society. Once a household receives its share from a primary distribution, it is taken home where it is further divided into smaller portions. Some portions are hung on the household's drying rack for later consumption or trade. However, some are given away to other households as *befana*, gifts of food from one household to another. Transferred portions of meat or fish vary in size depending on prey species (David, 2008) but typically provide the meat for a single meal for a household. For example, *befana* from sperm whale consists of one portion of blubber weighing about 0.25 kg and one portion of flesh weighing about 0.15 kg. *Befana* from manta ray typically consists of one portion of flesh weighing about 0.29 kg along with a slightly smaller portion of liver or cartilage. From most prey types, a household will typically give *befana* to three or four other households (Nolin, 2010) or more from sperm whale.

Analysis of Jane Hunter about ethnical law in traditional society found that there are common terms of limitations in the society covering certain clan or ethnical membership, status on the clan, roles on the clan,

gender, relation from people to people, animal or object are described in a representation, people's death that documented in a representation and in the context where the resources will be re-used or reproduced. Therefore, when deciding how the knowledge must be preserved and accessed, the tool must be selected to enable the society to control and build access level for different people (Hunter, 2005) so in the application of local knowledge preservation, the clan chief's or traditional leader's role on whale flesh distribution, the determination of ritual beginning, until then the action of whale hunting and the basic aim of the hunting were performed and reproduced by the knowledge of traditional leader to the next generation of Lamafa. Knowledge delivery of Lamafa from generation to generation constitutes control tool from the Lamalera society to preserve their tradition. It occurs in the selection of new Lamafa. The new Lamafa must pass the traditional process and religious ritual so the knowledge transfer from the previous successor to the next generation will not be disconnected. This information delivery is also performed with the high appreciation from the society to the success Lamafa so the process in detail of whale hunting steps becomes something which is expected and awaited by people. It has benefit to provide right understanding about the whale hunting tradition which makes the basic components of it will not be vanished (according to the interview with EP). Tiwana on the book titled the knowledge management toolkit: Orchestrating IT, Strategy and Knowledge Platforms (Second ed.) explained that there are some steps on how the knowledge is processing, start from knowledge acquisition, then development and creation process of knowledge, skill and relation, knowledge utilization, learning process which is integrated until it enters the organization and knowledge sharing process, how the process has been spread until the knowledge is known by the public (Tiwana, 2002).

Based on this step, in the traditional culture of Lamalera, there must be identified early the main components of the Lamafa, a person who has great role on whale hunting. One of the requirements is a man who has an ability to handle the duty on the society and have brave soul. The man himself must be strong to avoid the prohibition before performing the hunting so the man soul must be pure and spiritually connected to the nature. On his preparation, the Lamafa will do fasting first to obtain inner peace and soul purity. The duration of the fasting is depend on the Lamafa himself. After the early ritual of the hunting, Lamafa has formidable task on the sea. The Lamafa has responsibility to all people's souls on his boat so the accuration is strongly needed on this hunting, not only instinct of the hunting but also knowledge which

was delivered from the elders about the distinction of the whale which will be killed such as having water outburst precisely on its head and above its forehead. Perhaps for common people, the distinction is not significant but it is a sign which distinguish sperm whale to the other whales. In this context, the knowledge must be preserved and also we can not let this whale hunting becomes commercial and damage the ecosystem (interview with the head of village) so the process of identification tool preservation above can be used to explore the context of selection of good lamafa candidate and can be documented using books or other medias.

The exist knowledge has benefit when it can be preserved and the content is transformed. The transformation can be a digital content. When we will preserve the local knowledge we must observe the entire aspects from its knowledge, not only preservation tool and process but also the nature of knowledge itself (all of knowledge) so it will generates a way on how this knowledge can be preserved and regenerated (Christie, 2004). On local knowledge preservation we must access more profound from the elements of its knowledge because it aims observe the knowledge which comes from human that has a lot of factors as the background. When we would like to transform the knowledge content to be digital or printed, this aspect behind should not be vanished. If the knowledge content still has oral form, it can be written and then the knowledge can be delivered until the value of the knowledge sustainably inherited in an unlimited time, so the content will always spread in the society, even people who are outside the Timor Island also can access it.

### **CONCLUSION**

Lamalera has unique traditional culture or Indigenous knowledge and must be preserved. In the process of delivery from generation to generation, Lamalera had been using oral as the tool and also the access level on determination process of tradition delivery from traditional media to the society. Traditional media in the society is including traditional figure, gender and age also as knowledge preservation determination has been going in the society. The knowledge transfer from generation to generation will be more influenced if it is delivered by the traditional figure so the tradition will becomes a unity inside the society and will not be vanished. Identification

process of preservation is also needed to observe what kind of aspects which must be included into knowledge preservation, such as Lamafa (whale hunter) regulation until the process has finished entirely. On reality, the knowledge in Lamalera can be preserved by transforming the context to be printed or digital media to introduce its tradition, so then it will spread into the public and can add commercial value and all time learning for its region.

### **REFERENCES**

- Anwar, M.A., 2016. Role of information management in the preservation of indigenous knowledge. *Pak. J. Inf. Manage. Libraries*, 11: 1-10.
- Battiste, M.A. and J.Y. Henderson, 2000. *Protecting Indigenous Knowledge and Heritage: A Global Challenge*. Purich Publishing Ltd, Saskatoon, Saskatchewan, ISBN:9781895830156, Pages: 324.
- Black, K., 2009. *Business Statistics: Contemporary Decision Making*. 6th Edn., John Wiley & Sons, New York, USA.,.
- Castellano, M.B., 2000. Updating Aboriginal Traditions of Knowledge. In: *Indigenous Knowledges in Global Contexts: Multiple Readings of Our World*, Sefa, G.J., B.L. Hall and D.G. Rosenberg (Eds.). University of Toronto, Toronto, Ontario, pp: 21-36.
- Christie, M.J., 2004. Computer databases and aboriginal knowledge. *Learning Communities Int. J. Learn. Soc. Contexts*, 1: 4-12.
- David, N.A., 2008. Food-sharing networks in Lamalera, Indonesia: Tests of adaptive hypotheses. Ph.D Thesis, University of Washington, Seattle, Washington,
- Hunter, J., 2005. The role of information technologies in indigenous knowledge management. *Aust. Acad. Res. Libraries*, 36: 109-124.
- Moleong, L., 2007. *Metode Qualitative Research*. Remaja Rosdakarya, Bandung, Indonesia.,
- Nolin, D.A., 2010. Food-sharing networks in Lamalera, Indonesia. *Hum. Nat.*, 21: 243-268.
- Stevens, A., 2008. A different way of knowing: Tools and strategies for managing indigenous knowledge. *Libri*, 58: 25-33.
- Tiwana, A., 2002. *The Knowledge Management Toolkit: Orchestrating IT, Strategy and Knowledge Platforms*. 2nd Edn., Prentice Hall, New Jersey, USA., Pages: 366.