

**FISH CONSERVATION THROUGH *TAGAL* BY SABAHAN PEOPLE:
CASE STUDY IN KG. LUANTI, RANAU**

Aisah Hossin

Faculty of Development and Multicultural Studies

University College Sabah Foundation, Kota Kinabalu, Sabah, Malaysia

Email: aisahhossin.ucsfmalaysia@gmail.com

Abstract

Tagal is the local knowledge that been implemented by Sabahan people in Sabah. The conservation can be apply in various way to conserve many thing and it became a one of the community movement strategic to make the world be a better place for our next generation. In Sabah, *tagal* has been used widely with the first movement is to conserve fish through the river. This movement was accepted and become one of the tourism attraction and give economic benefit to local community. *Tagal* is term that been using by Dusun community and also be called as *bombon* in Kadazandusun that share the same meaning which is 'no'. This paper work will discover the potential of *tagal* concept as a traditional knowledge and its function to conserve the fish in Kg. Luanti Baru, Ranau Sabah. The data collection are collected through in-depth interview with the local community, observation and literature review. The data will be analyzed through the thematic analysis. The findings show, the *tagal* concept really help in fish conservation and can be one of the solution for the resource conservation especially in Sabah.

Key words: local community, traditional knowledge, *tagal* concept and conservation

Introduction

Conservation issues in the context of sustainable development have been given serious attention from all over the world. The conservation can be a one of the solution in solving the problem regarding the nature and resources issue. In developing country especially in Malaysia, spread the awareness of the conservation is a one of the goal by government and NGOs. Government and NGOs were collaborated in supporting each other to find the best solution for community development in term of make Malaysia a better place for the next generation. Sustainable development tends to boots the community to used their knowledge and inspire all the community together in protected their area. Global conservation priority in many aspect of community life and sustainable resources. Broadly speaking, the conservation can be done by the awareness and participation of local community (United Nation, 2013).

Conservation of environment and natural resources is a very important aspect that every human being on this earth needs to emphasize. This is because the effects of human neglect in marginalizing the environment and natural resources have now become felt, especially when there is a lack of resources, increasing the temperature of the earth and pollution. Impressed by this situation, many parties such as the Government, private and Non-Government Organizations (NGOs) began to act jointly and holistically in the control of human activities and actions that could destroy and spoil nature and natural resources. Apart from maintaining existing environment, emphasis on environmental preservation and conservation activities and natural resources has started globally. One of the activities is advocacy for the community to be aware of the importance and roles that need to be done (Er *et al.*, 2015).

In addition to advocacy activities such as campaigns, advertising, training and so on are also being used and applied to the community to always be aware and sensitive to the importance of preservation and conservation of the environment and natural resources that are around them. According to Er and Catherine (2012), the scope of environmental management needs to be expanded to cover all available resources to preserve the present and future generations. It shows that cooperation has to be done by various parties to play a role in fulfilling the mission of this conservation and conservation.

Local community can be a part of the development project not only by the top down approach but also can be done by the bottom up line. The involvement of the community in various

environmental management activities is a necessary effort to ensure that the development of government and NGOs continues and reaches the grassroots. Emphasis on environmental care is important to ensure that all levels of society, especially the younger generation, can better understand and safeguard the environment. Various studies have been conducted by scholars such as M. Rezaul (2012); Er *et al.* (2015) and Haliza (2010) which emphasize that community involvement in development activities does not matter whether it is a small or large scale, it is able to succeed in the absence of involvement from the community.

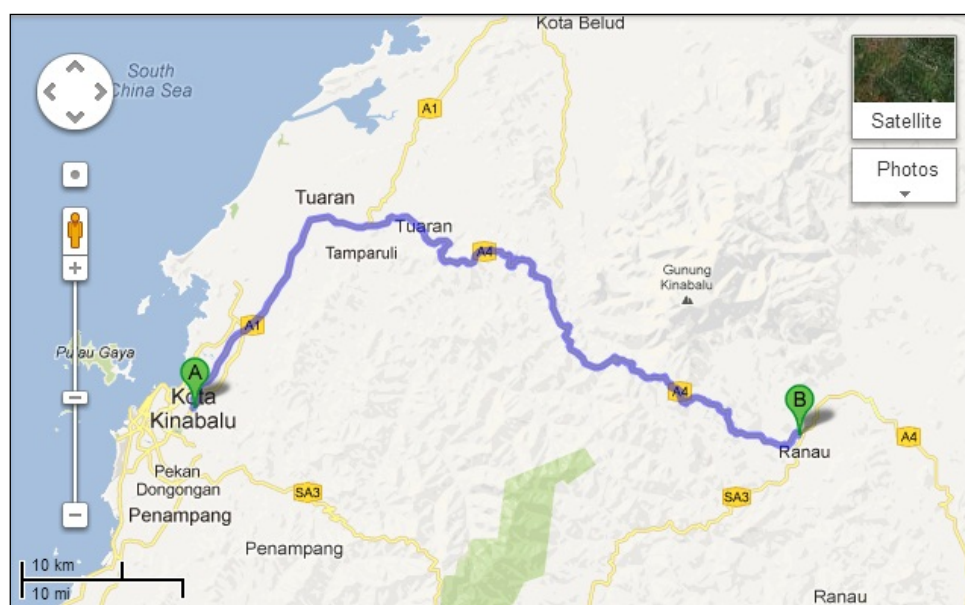
Through conservation, community can learn in how to manage their resources itself and sustained. Without realizing the involvement and willingness of the community to engage in every development activity is a dash of knowledge that they have also known as local knowledge. Local or indigenous knowledge can be defined as the understandings, skills and philosophies that been developed by community. This knowledge comes with long histories of interaction with their natural surroundings. Based on the knowledge and understanding, the society will be expand and used it as a fundamental for the day to day life (UNESCO, 2017). This paper will discover a potential of local knowledge that been apply by Dusun community in Sabah, Malaysia in term of the conservation of fish by the *tagal* system.

Research Method

This research was carry out in the Kg. Luanti, Ranau and the location were chosen because this area are one of the potential and successful community development that using *tagal* concept for the fish conservation in Sabah. In depth interview and field observation were conducted in order to collect the data. A total of ten informants were choose based on purposive sampling that consider on their participation in *tagal* concept. They are from the local community. Other than that, literature review also been used in this paper for the supportive and guideline. The data will be analyzed through the thematic analysis and three themes were derived from it. Community movement based traditional knowledge was identified after the thematic analysis and its implications to the community in the area. Community movements are implemented in Kg. Luanti Ranau as follows: (i) *Tagal* is a new community movement through traditional knowledge of fish conservation in Sabah; (ii) Process of learning on new traditional knowledge in conservation by *tagal* concept; (iii) Capacity building through community awareness to boots up the motivation of the community.

Research location

Kg Luanti, Ranau was located in Sabah and be one of the potential areas of tourism and development. This area is about 131 km from the city of Kota Kinabalu at 1,176 m above sea level (see Map 1.1). Most of the community in this area is ethnic Dusun who embrace Islam and Christianity. The main occupation of the community are farmers, small and medium sized business, workers in private and public sectors (Jurry, 2011). Based on the *tagal* system, Kg. Luati, Ranau become a one of the tourism attraction and be one of the conservation model through local knowledge.



Map 1.1: Location of Ranau, Sabah

Source: Google Maps (2018)

Research Findings:

***Tagal* is a New Community Movement through Local Knowledge of Fish Conservation in Sabah**

The *tagal* system is a traditional biosphere management that has been integrated by communities in Kg, Luanti, Ranau. This period system has benefited from a more systematic and sustainable environment management, economic development and community social development. According to Jephirin (2009), the *tagal* system was originally used to conserve the forests by the local community, before being adapted to the conservation and management of rivers. According to him, this system has been practiced by the riverfront community before the *tagal* system is formally implemented. Generally this tagging system can be recognized as

a community conservation system to ensure that their resources are available and persistent from time to time.

While there are many ways and environmental management systems that can be implemented, however, the system of durability is seen as a more conducive and easy system applied by all generations but at the same time strives to provide substantial benefits. The community in Kg. Luanti, Ranau used Sg. Moroli as a suitable way to start their *tagal*. At first, the concept of *tagal* are using for the conservation of fresh water fish in controlling community to not over catch the fish. Considering on the resource that might be reduce and gone, the community especially the old people try to protect what they have by educated their community to participate in *tagal*. This effort can be a new movement through local knowledge of fish conservation in Sabah. Fish *tagal* carry the meaning of no catching the fish in the river until the *tagal* opened (Jephrin, 2009). This concept is one of the traditional concept of local community which is ethnic Dusun is the main ethnic and became a leader for the project. This project was stated in 2002.

Tagal can be considered as new movement through local knowledge because the system is develop and be done from bottom up to top down approach and it was founded by the community itself. Community movement is a community agenda in effect significant of social and the way of the surrounding especially their own community to be more proactive and alert about the problem that been faced by them. In this research, the data and observation showed that, the implementation of the *tagal* system in Kg. Luanti, Ranau give new perspective to new generation and people in their surroundings to more aware about the nature and their resources sustainable.

From the awareness and the action by the community, since 2013, the Sabah Fisheries Department (DOF) has expanded the *tagal* system as a formal river management system that been fully undertaken by the community under the DOF (Smart-partnership). The monitoring of the system will be handle by the village regulations which are then under the Customs Law and Fisheries Enactment Land and aquaculture. However, in the level of community, the system *tagal* already done and implemented not only in Ranau but also Tuaran and Kota Belud area.

This system become an environmental movement to the community in enhance their knowledge in conserve the fish especially in river. Through the *tagal* system, community comes

together and do collaboration with the head of villagers and Sabah Fisheries. From there, the community become more discipline and only catch the fish when the *tagal* system was open. Until then, the fish will sustain and getting bigger. In Kg. Luanti, Ranau, we can see that the community movement through local knowledge of *tagal* system as a successful system because all the community getting together and protect their resource and from the local knowledge, their expand it as a tourism attraction for their village.

Process of Learning on Local Knowledge in Conservation by *Tagal* System

Capacity building in enhance community to be more care and changing their attitude in a way of conserve the fish can be implemented by the bottom up approach. The bottom up approach in this paper was highlight by the participation of local community in Kg. Luanti, Ranau. Generally, the *tagal* system involves zoning zone where the zoning processes will taking source of rivers, to ensure conservation areas and community-use areas. Usually, the *tagal* system will be involved three kilometers of river where the river will be divided by one kilometer per zone. Every zone have their one colour and represented the level of the zoning of *tagal* system. The green zone area was presented of usable area, where fishing is permitted, but only to members of the community. The yellow zone is the area that will only carry fishing activities together, depending on the local *tagal* committee's decision while the red zone is a fishing area restricted.

The implementation of *tagal* system began to develop at the community level when the Dusun community in one area felt that the fishes in the river were decreasing due to unsystematic fishing and using illegal fishing gear such as fish bombs and electric shock. Implementation of the *tagal* System in Kg. Luanti, Ranau is due to the three main factors. Maintaining environmental sustainability is the most important factor considered by the *tagal* committee to initiate this system. Furthermore, this system is also used as an asset to strengthen brotherhood ties between communities in this area. At the same time, another reason for the implementation of this system is to distribute river produce equally among the villagers involved with the *tagal* community in the village.

The process of learning on local knowledge in conservation by *tagal* system are given by the older to young generations. For the implementation of the *tagal* system in Kg. Luanti, Ranau, the initial stage of the formation of the *tagal* area is to convene meetings to reach the villagers' co-operation to see the prospect of the feasibility of the system. Once a consensus is reached and the support of the population has been reached, then a general meeting will be held to form

a member of the Legal Committee who has a specific duty of specialization to smooth the implementation of the *tagal*. Once the *tagal* committee is established, *tagal* law is also created. The law has been registered under the Native Courts (KAN) which is the highest institution in resolving cases related to customs in Sabah. The legal formulation of this *tagal* is to prevent the *tagal* area from being infringed and negligent without strict supervision.

Conclusion

It can be seen that the real system can actually benefit not only the members of the community but also the surrounding communities. This conservation is not just a long-term nature but at the same time can give young people the opportunity to appreciate and appreciate the local knowledge that their community has. Awareness and action from the community actually helps the community to better prepare and control the reductions of their resources. In this study, it can be seen that local knowledge is important and useful in conducting a more sustainable development process or program. Furthermore, local knowledge if not well-developed and developed will result in a small scale and cannot be fully implemented. Hence, the dissemination and cooperation of community members in the success of this system is key to the effectiveness of this system.

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