LOCAL WISDOM OF PADANG PARIAMAN PEOPLE IN MANAGING OF “BANNED FISH” IN NAGARI SIKUCUR

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ABSTRACT

One of the unique local wisdoms implemented by the local community in Nagari Sikucur, Padang Pariaman West Sumatera is “banned fish”. However, changes and shifts in people's lifestyles affect the pattern and values adopted by the local community, including the local wisdom of the community in that area. In order to describe the local wisdom in that area, a qualitative study was conducted. This study was aimed to answer some research questions figuring social phenomena related to local wisdom in West Sumatera people. The results showed that management of banned fish in Nagari Sikucur has been implemented as informal public policy in order to preserve fish population in their rivers. Such agreement has successfully conserved the ecosystem while another impact also attracted people in seeing such ecotourist system. Management of such local wisdom is applied in well practice, accepted and bind to the whole society member. People are benefited with such local wisdom by having clean water in the river that can be used for their agricultural activities.

A. Background

BPS (Biro Pusat Statistik) (2013) has predicted that in 2035 Indonesian population will reach 305.6 billion people. Those population growth will certainly increase food and other various demands (Suhartini, 2009), that in turn has to increase agricultural production. Such necessity has to be facilitated by modernization of agricultural system for instance green revolution which has been practiced since late of 1960s (Hazel and
Peter, 2009). The green revolution program has succeeded in developing superior seeds, chemical fertilizers, pest control with insecticides, massive irrigation channel construction for irrigation and agricultural technology use with tractors to speed up agricultural cultivation (Suhartini, 2009). The results has successfully improved public income, but however in another side also affected people life style and shifted their culture including their local wisdom.

Local wisdom as stated in article 30 of UUPPLH (Environmental Protection and Management Law) 2009 is all noble values prevailing in the life order of society to protect and manage the environment in a sustainable way. Furthermore, in article 31 stated, that indigenous and tribal peoples are hereditary groups living in certain geographical areas due to ties to ancestral origins, strong relationships with the environment, and a value system that determines economic, political, social and legal order. Meaning that local wisdom has particular role in the management of natural resources and local environment where people are living. Conserving social values based on adapted local culture will help natural resources and environment conservation.

People in Nagari Sikucur, District Padang Pariaman West Sumatera is one of among local tribals implementing local wisdom to manage their natural resources and environment. One of their such local wisdom practiced since their ancient is banned fish. Banned fish is purposed to manage fish population living in certain location found in their natural rivers. Only in special time, banned fishes can be taken for special purposes. This activity is purposed to manage and control fish population so they can conserve and prevent fish population from destructive activities. However, modernization has shifted peoples life style and culture that also impacted in the management of the banned fish.

Based on above background, a study entitled: Local Wisdom of Padang Pariaman People In Managing of “Banned Fish” In Nagari Sikucur was conducted.

METHODOLOGY

This study used a qualitative method. The decision of to use this qualitative method was based that this study was focused on searching of social phenomena constructed from opinions, descriptions and patterns living in the local community (Herdiansyah, 2010). Meaning that this research is purposed to understand the phenomenon in the social context naturally by promoting the process of interaction and deep communication between researchers with the phenomenon studied. In this context, the process of interaction and communication was observed in order to understand the social phenomenon in depth. The research observation was done on natural condition where the natural condition is the condition as it is, not manipulated by the researchers. The researchers only show the object of research as it is (Creswell, 2009).

Sampling was taken from local leaders involving niniak mamak, custom leader, and the local government in nagari level. The local leader and custom leader having authority in managing fish population in Nagari Sikucur. Data was collected from interview with local leader including Wali Nagari, documented and described descriptively.
RESULTS AND DISCUSSION

Five aspects involved in managing of banned fish were collected during this study (see Table 1). Those five aspects covering: 1) improvement of knowledge about forestry, river and land, 2) people trust that management of the forest has positive impact on the development of nagari from good management of rivers and land, 3) awareness that management of forest, river, and land will have a positive impact on the development of nagari, 4) people customs in managing of forests, rivers and lands and 5) the influence of local wisdom on environmental development of nagari.

Table 1. Description of 5 categories studied in the study.

| No | Category | Description of Qualitative Data |
|----|----------|---------------------------------|
| 1  | Improvement of knowledge about forestry, river and land, | Management of improving knowledge through listening radio, viewing TV, reading newspapers and coaching conducted by the Forest Service of the Agricultural Office on how to exploit the environment |
| 2  | People trust on forest management. | The community believes that properly managing forests, rivers and lands produces benefits for the community. The Nagari Sikucur government already owned HKM (Community Forest), allowing the community to manage and take the available natural products from his own field. They are allowed to manage their natural product with exception to exploit trees. In case their family (child niece) need trees to build a house, they have to get permission from their niniak mamak prior cutting the tress. In that case, the allowable trees to be cut are not less than 50 meters in the distance from the riverside. There is also condition applied for such purpose, that if they cut 1 tree, they have to plant four trees prior time of cutting. Trees growing the protected forest are not allowed to be exploited et all. They also have to do reforestation activities in the forest, by planting the riverside with economic trees for example: durian, coconut, avocado etc. |
| 3  | Awareness that management of nature have positive impact on the development of nagari | The community understood, after gaining the knowledge from the training and counseling conducted by government of Nagari Sikucur and practice it, for example planting chocolate that is resistant to fruit blight, or getting information shown in the television, for example success story of farmers planting ginger and able to go to Mecca for Hajj. They understand how to plant ginger well, so they can produce a lot of yield. Such understanding they get by themselves. They get also from TV understanding to protect their environment. They believe that, they are dependent on their nature, so they have to protect their forests, rivers and land. If they destroy the nature, they will get destructive answer from |
| No | Category                                                                 | Description of Qualitative Data                                                                                                                                                                                                                                                                                                                                 |
|----|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | Role of local leader in maintaining people customs to manage forests,    | Wali Nagari as local leader always remind people to take care their environment and prevent them from destruction.                                                                                                                                                                                                                                                                                             |
|    | rivers and lands                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5  | The influence of local wisdom on environmental development of nagari     | Traditional values implemented by local peoples has influence to the way of life of people in Nagari Sikucur. Among of them is management of banned fish. One of the agreement bound to the peoples in nagari is banned fish management where people can harvest the banned fish in by paying fee in total Rp 50.000, - to Rp 100.000, -. No special prize will be awarded to the winner in that fishing competition, but they may take caught fishes for their own self. For the people in the community who does not have money to pay the fee, they are also allowed to take part in the fishing competition. This is because they have princip of “togetherness” for people from Nagari Sikucur. The money collected from fee of fishing competition will be used for repairing of their Mosque, Mushaala or improving the existing facilities in Nagari. Keeping together their fish also will bring other benefits for the community such the availability of clean water that can be used to flow their rice fields . |

No particular formal education system exposed to the people in Nagari Sikucur to improve their knowledge regarding environmental issues. The improvement of their knowledge about forestry, river and land issue is due to informal education system. Informations created by the Forest Service of Agricultural Department were distributed and broadcasted through television channel, radios, as well as newspaper by local government. In some cases, people from forest service performed coaching specific issue related with environmental conservation. This was based on the information obtained during interview with the local leader (pemuka adat) named Mr. “BH”

*Mandangaan siaran radio, caliak di tv, mambaco koran jo pambinaan nan dillakuan dek dinaih kahutanan, dinaih pertanian tantang caro maolah lingkuangan iduik* (Interview, September 11, 2016).

Such informal education helped the local people to be well informed and updated on all informations related to the local environmental management. This in turn will guide people in the community to rationally co-maintain especially in the case of rivers quality. The local community maintain their rivers not only in term of “banned fish policy” implementation but also they use the rivers for water power source ie: micro hydro power for their electricity in their nagari (village), irrigation facilities for their rice paddy.
Benefiting from this facility make people in the Nagari Sikucur to be having more responsibility in maintaining of rivers in their Nagari.

Local people of Minangkabau are convinced that the management of forests, rivers and land will bring positive impact to the development of the nagari environment. Since ancient time, they believe that good ethics in managing their environment, through togetherness and cohesiveness will bring benefit to the community, that in turn improve the development of the environment. This trust was reflected from the interviews with Mr. DT. SH:

Ambo yakin, kalau lingkuangan diolah sacaro elok mako manghasilan untuang bagi masyarakat. Nagari Sikucur alah dapek HKM (Hutan Kemasyarakat an), artie masyarakat alah buliah maolah atau maambiak hasil hutan nan ado di lading punyo inyo, bebah maolaha asal indak manabang kayue, jarak manabang kayu dek sungai indak buliah kughang dari 50 meter. Di dalam HKM manabang kayu sabatang dulu, iko dilakuan dalam palak masyarakat, indak di hutan linduang. Kalau dihutan linduang indak buliah ciek alahe manabangkayu. Panghijauan alah dilakuan mode ka babuah mode durian, kayu sengon, meranti, dan lain-lain nyo (Interview on October 13, 2016).

Meaning: I am sure if the environment like rivers and land well managed, they will generate benefits for the people in the community. Nagari Sikucur already obtained HKM (Community Forest), meaning that people are allowed to use the existing natural product on his own field, with exception in cutting of trees. In case their family (child niece) need trees to build a house, they have to get permission from their niniak mamak prior cutting the tress. In that case, the allowable trees to be cut are not less than 50 meters in the distance from the riverside. There is also condition applied for such purpose, that if they cut 1 tree, they have to plant four trees prior time of cutting. Trees growing in the protected forest are not allowed to be exploited et all. They also have to do reforestation activities in the forest, by planting the riverside with economic trees for example: durian, coconut, avocado etc.

Local people from Nagari Sikucur in Minangkabau understand that good management of forests, rivers and land will have a positive impact on nagari development, after they have put their own practice into practice. Most people also learn from nature, so they understand it, based on an interview with Mr. DT. SH:

Awak paham dekalah ado pangatahuan nan ditarimo dari sakolah, palatiahan jo panyuluahan jo kito cuboan. Dicaliak dari tv ado urang nan bias naiak aji mako e kito lakukan sampai bahasil, dijawa mangumpuean sarok bias naiak aji mako e dicontoh nan susuai dek anak Nagai. Contoh lainnya ado patani nan bahasil dek panen supadeh sakaluarga pai ka makah mako dek pake dek dicontoh untook dicuboaan dek masyarakat. Awak paham susadah awak cuboan surang, mode indak mambuang sarok ka batang aie, sudah tua wak paham kalau awak indak ado mauskal amak mako e alam maagiah manpaaik, umpamonyo jikok hutan awak rusak mako akan tajadi longsor atau banjia, paham sarupo ko awak dek dai acara televise yang acok manayangkan tantang bencana longsor jo banjia (Interview, October 13, 2016).

It means: we understand it after getting the knowledge of the training and counseling held by Nagari Sikucur and we practiced it. Seen from television, a family could go to Mecca only from collecting garbage. Another example, successfull farmers in Java who planted ginger also could go to Mecca for doing Hajj, people here would like
to do what they already done. We understand such activity, like not to throw garbages to 
the river will be good for our nature. We really understand, that if we do not destruct our 
nature, it will give us benefit for our life. If we destruct our nature, for example the forest, 
our nature will bring landslide or flood to us. Such understanding was obtained from tv, 
which often broadcast about landslide and flood (Interview, October 13, 2016).

The above mentioned situation described from the interview with one of the local 
people leader indicated that, there is an awareness from the local people in the community 
to have good habit in managing their environment like forests, rivers and land. This habit 
given from their ancient people and inherited from old generation to new generation 
and become a local wisdom implemented in their daily activities as described by wali 
nagari Mr “SY”.

Awaka lah tabiaso maolah lingkuangan iduik karano awak sabagai walinagai nan 
haruih mambarian pangarahan ka masyarakat untuak taruih maolah 
lingkuangan (Interview, dated 08 October 2016).
Meaning: I have been used to manage our environment, because as Wali Nagari, I must 
provide direction to the people in community to continue to preserve our 
environment.

Habit and customs practiced by a local people will form their culture. The local 
culture or well known as local wisdom always comes from human life activities. When 
human life changes, then the local wisdom will also change. Local wisdom also can be 
regarded as a process and product of human culture, used to survive by local community. 
This definition is in line with the idea described by Geertz (1973):

"Local wisdom is part of culture. Local wisdom is a cultural culture element that 
is related to human resources, source of culture, economic, security and laws. 
Local wisdom can be viewed as a tradition that related with farming activities, 
livestock, build house etc"

With another word, local wisdom is part of the culture, an element of traditional 
culture rooted in human life and society related to human resources, cultural, economic, 
security and legal resources. Local wisdom can be seen as a tradition associated with 
farming activities, building houses and so on. In a community where their live depend 
most on the nature, the sustainability of their natural resources definitely affected with 
their commitment to preserve the environment. Meaning that, rules, regulations and 
informal agreement implemented in the society will determine the sustainability of their 
natural resources. As stated by Mr. “SY”:

Dek karano iduik masyarakat sajaik tagantuang ka utan, sungai mako e 
masyarakat haruih maolah lingkuangan iduik (Interview, September 12, 2016).
Meaning: since the sustainability of people’s life is very dependent on the forest and 
rivers, therefore people in the community have to manage their environment.

Most of local leader realized that local wisdom implemented in their community 
significantly influence the development of their environment. This also involve, number 
of people having such environmental awareness. Normally, local people in the village 
community have spirit of togetherness in maintaining their natural resources. This also 
involve, in maintaining and managing the banned fish (Figure 1A-1B), since people realize that banned fish can also keep thier water in the river stay clean that in turn also
can be used to support people's lives. Such activity also bind people to maintain their forest so that they can expect the sustainability of their soil to be fertile, which is very important for the most people in Nagari working in agricultural sector. Such situation is reflected from the interview with Mr. “BH”

Ado pangarauhnyo, mode adoe nilai-nilai nan balaku pado kahidupan masyarakat di Nagari Sikucua ko. Diantaronyo masyarakat patuah dalam maolah lauak larangan jo basamo-samo, sahinggo pado wakatu nan disapakai san basamo untuak panen lauak masyarakat maadoan acara lomba mamanciang. Mamanciang untuak masyarakat satampaik jo untuak pangunjuang mambayie pitih masuak sabanyak Rp 50.000 sampai Rp 100.000, tapi ado wakatue diagiah kan masyarakat jo pangunjuang untuak mamanciang lauak larangan indak ado pakai uang masuak, tapi indak diagiah hadiah, lauak nan dapek e nan dijadian hadiahnyo, dari pitih masuak nan dikumpuean digunoan untuak kaparaluan musajik, surau jo maelokan sarana nan ado di nagai. Basamo-samo manjago lauak larangan mandapekan manfaat nan lain dek masyakaik antaronyo tasadio batang aia nan barasiah jo digunoan untuak maaliri sawah jo iduik masyarakat Nagai (Interview, October 14, 2016).

Meaning: There is influence in form of values that applied to the life of people in this Nagari Sikucur. Among of them is the compliance of the community in managing the banned fish. At the decided time to harvest the banned fish, the community held a fishing event, with inset Rp 50,000 to Rp 100,000, No special prize for this fishing competition, but they may bring home fishes they catch during the competition. People who do not have ability to pay such fee for the competition are allowed also to be taking part in the competition, reflecting a value of togetherness implemented in Nagari Sikucur. The collected money usually is used for repairing their mosque or mushalla or improving the existing facilities in Nagari. Keeping together their banned fish also bring other benefits for the community such the availability of clean water from the river that can be used to watering their rice fields and also for the drinking water for the people living in nagari.

Figure 1. Banned fish management in Nagari Sikucur. A. Fish population involved in the banning for local people in Nagari Sikucur, B. Announcement board of banned fish, informing “ai paureh untuk sagalo panyakik”, miracle water for curing all diseases

The above mentioned local agreement indicated that local people commonly living in the traditional village applied special ethics binding the member of their local community. The ethics include some guidelines judging values of life such punishment and assessment of good and bad and also ruling way of life in the society that affirming the true meaning and purpose of life (Abdullah, 2006). They believe, that people who
applying “good” ethics to the environment will succeed in managing their natural resources as applied in Nagari Sikucur.

CONCLUSION
1. Improvement of environmental understanding for local people could be done through informal ways, by using radio, television, banners, and some temporal activities like specific training and counseling.
2. Local ethics or local wisdom implemented in the Nagari Sikucur in managing rivers (ie: banned fish), forest for selected tree lodging has succeeded to preserve their natural resources and to sustain the development of their environment.

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