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FINAL SCIENTIFIC REPORT

PROJECT TITLE: “Tasik Chini Biosphere Reserve in Regional Sustainable Development: Contribution of Tasik Chini Biosphere Reserve in Developing Local Community Economy”

BY

ARI KURNIA
DOCTORAL CANDIDATE
NATIONAL UNIVERSITY OF MALAYSIA
MALAYSIA

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EXECUTIVE SUMMARY

The development of East Coast Economic Region (ECER) in Malaysia’s development plan has various strategies to spur the development of rich natural resources. But, marginalized groups, especially indigenous groups or the Orang Asli are the exception and not being the focus of the design and development plan. One of initiative in this plan is to enhance Orang Asli Tasik Chini welfare, as one community which is considered marginal in the ECER. This approach would be more impressive if the potentials and opportunities was taken and the role of Orang Asli being concern as one of decision maker in Tasik Chini development plan.

The synergy between stakeholders must be achieved since the beginning of plan design to initiatives of Orang Asli’s economic empowerment. As consideration, there are different perspectives of needed between Orang Asli and other stakeholders in ECER development plan. This research tried to identify Orang Asli position in economic and social aspects, opportunities and threats, and also alternatives for Orang Asli future. This research will elaborate the suitability of ECER development plan with economic and social aspect of Orang Asli development plan in order to enhance Orang Asli welfare.

Based on survey in 2009 and 2010 about Orang Asli perspectives about their economic and social position and their future needs, Tasik Chini is knowing as ’mother’ for Orang Asli which support their daily life and needs. Tasik Chini becomes one of their resources and now it is getting destroyed by non green development. Orang Asli start to lost their basic needs resources. If this continues to happen, the Orang Asli Chini Sea will become increasingly marginalized and poor. In addition, the presence of sea chini as biosphere reserve will also be threatened dashed

Because of its specialties’ and uniqueness, Tasik Chini and its surrounding areas has become Biosphere Reserve in Malaysia. Tasik Chini is situated in the southern east part of Pahang state. Tasik Chini is the second largest natural freshwater lake in Malaysia. Diverse ranges of
ecosystems exist within the Reserve boundaries; and these ecosystems include significant freshwater lake, Felda plantation scheme and the Orang Asli settlement. This area is popular with mythical legend of sinking ancient cities among tourists and is of global ecological significance too. Some watersheds in the Reserve has been extensively logged in the past fifty years, especially the land conversion into agriculture and plantation area, and others have been subject to varying types and degrees of human activity. The main lake and forestlands within the lake’s catchment area are now managed under strict guidelines to maintain ecosystem integrity and health. There are five villages where the inhabitants are the indigenous peoples (Orang Asli) living near the freshwater lake. The main villages within Tasik Chini are Kampung Gumum (main village), Kampung Chenahan, Kampung Tanjung Puput and other four Orang Asli villages at small communities Kampung Melai and Kampung Ulu Melai. Tasik Chini also offers three main function of a designated biosphere reserve. The core area consists of the area required to meet the long-term conservation objectives; second is the buffer zone(s) and (b) the third region is the transitional zone, which act as areas suitable for working with local communities in testing out and demonstrating sustainable uses of natural resources.

The core area includes natural freshwater lake and its feeder rivers; terrestrial forest reserves surrounding the lake and water bodies as well as the dominant hill areas namely Bukit Tebakang and Bukit Ketaya. The freshwater lake and the surrounding areas have been gazette as Forest and environmentally sensitive land under Rank I (Protected Area in Peninsular Malaysia, Malaysia National Physical Plan). These areas have been categories as Environmental Sensitive Area (SEA) Rank 1. Existing forests and protected areas within the core area conserve a wide range of habitats and landscapes, covering approximately 69.51 km² (6951.44ha).

In term of governance, the core areas are of the concern of various stakeholders. A variety of legislative, regulatory and management mechanism are coordinated to ensure the protection and conservation of landscapes, ecosystem, and biodiversity within the terrestrial component of the Reserve. In the core protected area, these mechanisms include federal legislation (Wildlife Act 1972, Environmental Quality Act 1974), provincial legislation Wildlife Act

The buffer zone of Tasik Chini BR is also unique, as it surrounds the whole catchment area/core zone in order to prevent the encroachment of development in the core zone. Terrestrial buffer zones include all protected and unlogged major valleys and lake watersheds in the Reserve, totaling approximately 20.56 km² (2,056 ha). These areas are subject to forest planning that may lead to further refinements in the application of the zonation model, including the establishment of further transition areas. It also ensures that the area remains a productive natural environment for migrating birds and other wildlife while providing for compatible public use (such as transportation and tourism). Buffer and transition zones promote biodiversity and conservation under a wide range of status and management plans.

The third region is the transitional zones. With the coverage of 30.20 km² (3,020 ha) for the transition area comprising of private and public land ownership, sustainable resource management has been suggested as tools for development practices. These areas are subjected to ongoing planning that may lead to further refinements in the application of the zonation model, including the establishment of further buffer zones.
1.0 INTRODUCTION

In this globalization era, the strategic developments based on community needs are very relevant to implement in developed countries or in developing countries. Regional development in Malaysia in the contemporary era adhere to the principles of economic development, social and persekitaran in something that does not compromise the asset and the source semulajadi, otherwise sentiasa mendokong maintenance initiatives and pemuliharaan these sources. In Malaysia, Eastern Economic Area or the ECER is one rather than developmental areas terancang to stimulate the development of some land which digugasikan as a region. It involves the State of Kelantan, Trengganu and Pahang and Mersing.

Realizing ECER is a width and rich area with a diversity of sources, it is not surprising that the planned development would include natural areas and community groups that marginalized from prime development trend. In this case, Indigenous people from Jakun tribes that live in the villages around Lake Chini is among those who are in this situation. They are classified as people who need a reform of the economy, Their dependence on the environment itself will threaten the welfare of the ecosystem of the area. This is certainly not consistent with the objectives of ECER development vision to develop the area with conservation measures and ensure the sustainability of resources. Hence, this paper will examine to what extent ECER plan giving consideration to these groups.

Through some research done by Tasik Chini socio-economic research group in year 2007 and also Public Awareness Programme for the second time which was held in August 2008, this paper attempts to examine the views of indigenous people around Tasik Chini about their economic future. Does the threat of Tasik Chini is also means the significant threats to a way of life and their dependence on resources from the Tasik Chini? This paper is written in several parts, first, discuss the Ecer development scenario and the position of Tasik Chini, examines the views of Aboriginal people about their future in the development of this area.
and their willingness to ensure the success of the Biosphere Reserve as an approach for the sustainable development of Tasik Chini, at once positioning Tasik Chini in the ECER development.

1.1 EAST COAST ECONOMIC DEVELOPMENT REGION (ECER) AS MASTERPLAN OF EAST COAST COMMUNITY DEVELOPMENT

East Coast Economic Region (ECER) is a regional area of 66,000 sq km with population of 3.9 million or 14% of the total Malaysian population. In the development of the ECER region, economic growth becomes one of its main goals, and this does not exclude the tourism industry. ECER development vision is uniqueness, dynamism and competitiveness. East Coast is trying to highlight the unique culture, society and nature to the world by doing a rapid and dynamic development. In other words, development in selected sectors and strategic area fair to increase population economic sector in this region, especially those considered isolated and remote from the influence of the economic dynamism of the city and the country's major cities.

This region was inaugurated on October 29, 2007 by the Prime Minister of Malaysia, Dato Seri Abdullah Ahmad Badawi. Regional development is the initiative of the federal government and it is the third development area after the Wilayah Pembangunan Iskandar (WPI) in Johor and Wilayah Ekonomi Koridor Utara (NCER) in Northern Malaysia. ECER involves three states on the East Coast of Peninsular Malaysia, such as Pahang, Terengganu and Kelantan and the Mersing district in Johor. The area involved is 66,736 square kilometers or 51 percent of Peninsular Malaysia. ECER involving 3.9 million people. ECER Development will be held for 12 years from 2007 to 2020. Petronas is the main leader.

ECER development costs will be funded by Petronas, a Malaysian government-owned corporation. The first phase involves the cost of RM6 billion. The actual cost is RM112
billion. This allocation is channeled through the the Ninth Malaysia Plan (RMK9) program review and the addition of provisions during the RMK9 mid-term review. 227 projects valued at RM112 billion over the next 12 years will be undertaken by Petronas and others. To facilitate the development of the ECER, the core development of this region is classified according to key sectors such as shown in Table 1, which includes tourism, agriculture, education, infrastructure, fisheries and ports.

1.2 TASIK CHINI AS PART OF EAST COAST REGION DEVELOPMENT AREA

Tasik Chini is the second largest freshwater lake, in Malaysia, located in the southeastern state of Pahang. Tasik Chini is also surrounded by 12 lakes called the sea by local residents. Every ocean has its own name and total whole area of the lake is about 202 hectares. Tasik Chini area surrounded by tropical forest and total whole area of natural forests and fresh water is estimated to be approximately 12,000 acres or equivalent to 4.975 hectares. Communities that inhabit the area around the lake consists of the Orang Asli from Jakun tribes, though there are also some Semelai tribes, the Indians and the Europeans, as a result of local population marriage with outsider.

Tasik Chini is also a wildlife area with various species. According to the survey, there are 200 species of birds and 240 species of fish around the lake. Tasik Chini also has a rich wealth of flora and fauna and biological resources such as 51 species of plants low forest type, species freshwater swamp forest crop, 25 species of aquatic plants and 87 species of freshwater fish. Tasik Chini consists of 12 series of lake that called ocean by local population and the largest is the Gumun ocean, Melai ocean, and Jemberau ocean. The area around the lake resembles a hilly and similar to the back of a dragon. There are mountains called Mount Chini with a height exceeding 800 meters and covered with thick forests.
Table 1: ECER Development’s Main Core

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| **Tourism**      | • Develop resort centre facility and international hotel in coastal area. Would attract 7.4 million foreign tourists and 21.4 million domestic tourists by 2020.  
• Kuala Terengganu will be the hub of activities coast, cruise terminal, marina, craft markets, shopping centers, parks and several national parks, Endau-Rompin National Park. Mersing Jetty.  
• Tioman Island will be a tourism attraction.  
• Pengkalan Kubur become tourism centre border and South-East Asian level trade centre / growth triangle of Indonesia Malaysia Thailand.  
• Kota Baru City Centre (KBCC) in Palekbang near Kota Baru will be developed.  
• Nenggiri river, Burok river, Jenera river, Pulan river and surrounding area sekitarnya will be developed as national park  
• Kuantan Sentral and Bukit Gambang Resort City for Pahang  
• Oil industry, gas and petrochemical.  
• Manufacturing industry - downstream industry palm oil based, wood and different latex and agricultural products to produce goods such as oleochemical material, furniture, glove and halal food.  
• Taman Industri Halal in Pasir Mas was built to generate the downstream sector. |
| **Agriculture**  | • Hulu Setiu - agropolitan project covering 2,000 hectares.  
• Kuala Berang, Hulu Terengganu - Goat Breeding nucleus Centre Research. Expected to produce 10,000 breeders such as Jamnapari, Boer and Anglo Nubian in 2015 of high quality. Currently, Malaysia imports 70,000 goats from Australia and New Zealand each year.  
• Cooperation agreement (MoU) among Goat Breeding nucleus Research Centre, between JPH with Marditech Corporation Sdn Bhd and Terengganu Agrotech Development Corporation Sdn Bhd (TADC) had been signed.  
• Animal breeding research center covering 800 hectares will be built in Tersat, Kuala Berang.  
• Integration of goat farm with rubber field of 2,000 hectares, owned by Risda in Besut and Hulu Terengganu.  
• South Kelantan Development Authority (Kesedar) will promote 5,200 families in Gua Musang. Involving the Ministry of Rural and Regional Development.  
• Musang Mountain, Lembangan sungai Nenggiri, gazetted as a State Park. More than 10,000 indigenous people from the poor Temiar tribes will enjoy the ECER development. |
As small settlements in the District Structure Plan and East Coast Economic Region, Tasik Chini is proposed as an ecotourism destination in order to generate economies of the region around the (Department of Town and Country Planning Pahang 2005). According to Datuk Seri Mohd Najib Tun Razak, Tasik Chini should be restored as a center of biodiversity and the development of the East Coast Economic Region (ECER). He believes that if Tasik Chini is restored, these destinations will be the center of eco-tourism projects under the ECER to attract tourists from around the world to enjoy the beauty of the lake. However, in the present circumstances, Tasik Chini is threatened by economic activity due to less consideration to the ecological welfare. The results of scientific studies Tasik Chini Research Centre, UKM, clearly shows several indicators of the more polluted water lake, lotus attraction increasingly extinct and tourist arrival to Tasik Chini increasingly decline. In this situation the question arises, why is it occurs? Is that Indigenous people in Tasik Chini no longer depends on source of wealth in this lake? Who exactly affect the quality of Tasik Chini and how to restore Tasik Chini?
1.3 OBJECTIVE OF THE STUDY

This research is a micro study in the biosphere reserve of Tasik Chini which is one of the ecotourism destinations available in Pahang with a macro view on the suitability of Tasik Chini in the ECER area. This study strive to sustain the biosphere reserve Tasik Chini as ecotourism to increase awareness and prosperity of local communities. Tasik Chini is expected to achieve sustainability in the region either in the ECER region or town. Specific goals to be achieved in this study are:

a. Identifying the potential and suitability of Tasik Chini as economic resource in clusters of ECER.
b. Identify strategies and patterns of development to optimize the potential and suitability of Tasik Chini as economic resource in clusters of ECER, particularly for regional town.
c. Recommend guidelines and action plans to develop Tasik Chini that could provide benefits to the community in order to achieve sustainable development, especially in improving the economy of local communities.

This specific purpose made by structured, starting from macro level to the micro level so that findings is able discuss and analyze Tasik Chini from various point of view. This study is expected to put the Tasik Chini expansion plans to the national level until it becomes a national issue which requires mutual awareness.

2.0 METHODS

The Use of this methodology is to create a more systematic study. The research methodology consists of the types of data used, methods of data collection, sampling and determining the number of respondents and data analytical method.
This study uses primary and secondary data obtained from the field through qualitative and secondary data obtained from the relevant departments or agencies. This research involves not only local communities but also other stakeholders who also gave a role in sustainable regional development, strategy determination and determination of its involvement as a model for local government, non-governmental organizations, research centers, and others.

For the depth and suitability analysis, this study uses three types of analysis, the descriptive, evaluative and comparative. Descriptive analysis is used to describe the products offered by Tasik Chini’s competitors which is located in the ECER area so that the suitability of Tasik Chini is available as ecotourism destinations in the ECER area. In addition, descriptive analysis was also used to identify potentials of Tasik Chini by identifying the characteristics of local social and economic Tasik Chini Biosphere Reserve. This description is based on SWOT analysis which is part of the descriptive analysis of the role of ecotourism in order to facilitate the identification of Tasik Chini Biosphere Reserve in raising awareness and well being of local communities. Evaluative analysis is used to evaluate the role of nature, which have been developed, with standards of community involvement that has been done, particularly in environmental conservation.

While to determine the suitable strategies and models for development which is based on the ratio between the area of ecotourism Tasik Chini other Biosphere Reserves are expected to produce strategies to attract tourists to come to Tasik Chini and Tasik Chini expansion plans to achieve sustainable regional development benefit, especially economically to local communities, while still maintaining the natural environment of Lake Chini.

2.1 STUDY SITE

According to historical records, the origin of Tasik Chini began since the 14th century following the discovery of several archeological artifacts from the existence of a city, namely Khmer, Cambodia which is believed, located in the middle of the lake which is now was
drowned of water few metres in bottom of the lake. Also associated with the existence of this lake is the story of the legendary belief of the local indigenous people to a dragon or huge snake known as Seri Gumum Dragon. Dragons are believed to be the keeper of the lake at one time and the occurrence of violations of the agreement between the owner of the lake area with the settlers, indigenous people, then the area was flooded to form a lake called Tasik Chini. There is a story that stated the name is taken from the name of Chini Hill located near the lake.

Tasik Chini is located in the southeastern state of Pahang, about 100 km from Kuantan and 60 km from the town. It can be reached via KL-Karak Highway or via Segamat Highway to the town of Chini, and then turning into the lake through an oil palm plantation with a journey time of 15 minutes from the town. o can be visited through land route from Kuantan to Kampung Belimbing or Kampung Rambai which is near to Maran before traveling by boat through the Pahang river before going through the mouth of Chini river with a distance of 4.8 km.

Tasik Chini surrounded by 12 freshwater lakes called 'ocean' by local residents. Every ocean has its own name and area of the whole lake area is about 202 hectares. Tasik Chini is also surrounded by tropical forest and the total area of forests and natural fresh water is estimated to be approximately 12,000 acres or equivalent to 4.975 hectares. It is the second largest natural lake after Tasik Bera in Malaysia. It is noted as lake that possesses natural treasures and a variety of biological ecosystems, because very suitable to be promoted for eko-tourism purpose. However, any activity carried on around it, including the development of tourism or agriculture in a big way, either directly or indirectly, can disturbing the ecosystem of the lake. It not only can interfere with any biological diversity of ecosystems, including fauna and flora as well as water quality and the environment around the lake, but also a certain impact on the social and economic life of local residents who are dependent on the resources provided by the lake.
2.4 APPROACH

This study used the concept of sustainable regional development based on the Biosphere Reserve to the equation between economic development, environmental preservation, cultural promotion and a strong government with increasing economic and social empowerment of local communities and the environment (MAB Biosphere Reserve Bulletin 2004). This concept entails the development and the local community and integrate the roles of each stakeholder in order to achieve synergy. This concept is applied with a very large involvement of local communities. Quick understanding of participation is one way to learn and to get information, in a limited time, about a community, region, activity or specific problems by using common management technique.

The concept of sustainability is often associated with quality of life that encompasses the economic system, social and environment to ensure the comfort of living and a healthy and productive environment. These goals not only for the purposes of the present generation but also for future generations. This causes the term is always used as sustainable development, sustainable communities, agriculture, sustainable education, etc. Based on this fact, sustainable development is indeed inseparable from the development of science that integrates elements of economic, social and environmental studies in different contexts. Sustainable development is a development concept that emphasizes the integration and balance between economic development and social and environmental requirements to meet current needs without affecting the ability to meet future needs.

3.0 RESULTS

This section contains the discussion on the potential of Tasik Chini as biosphere reserve in the economic development of the surrounding community. The tourism sector is one of the leading sectors could be stimulated to develop the economic of communities which is still in traditional in nature.
3.1 POPULATION AROUND TASIK CHINI

Around the lake there are five (5) villages - Kampung Gumum as the main village, Kampung Tanjung Puput, Kampung Cendahan, Kampung Melai, and Ulu Melai and Kampung Ulu Gumum with an inner lead called Batin Awang Alok, 63-years-old.

The majority of indigenous people around the lake are from kaum Jakun tribes. They are estimated about 400 people with 190 people consisting of children. Most of the households from a sum 70 families that living around the lake found focused in Kampung Gumum (39 families). This was followed by the Kampung Ulu Gumum (12 families); Kampung Melai (3 families), Kampung Ulu Melai (6 families), and Kampung Cendahan and Kampung Tanjung Puput (5 families, respectively). According to UMNO women representative's census for election 2004, overall household around Tasik Chini amounted to 70 families with house number of buildings including the whole cottage is 98 pieces.

Of the total homes, 10 homes known as Jasmine house has been built in the 1970s by JHEOA as a result of the project to help the poorest people in the area. The majority of houses in the Kampung Gumum made of wall of wooden floor and zinc roof. There are also a number of houses in this village are made of cement (brick) and roofed with zinc or asbestos. However, there are some other houses in the village is still weak state of the walls and floors of bamboo and tree bark while the roof made of sago leaves. For homes in other villages as Cendahan, Melai, Ulu Gumum and Tj. Puput, almost all the old huts made of bamboo and tree bark on the walls and floor while the roof is lined with sago leaves.

Although the majority of residents are from sukukaum Jakun, but there are a number of people consist of sukukaum Semelai which being married to local residents. Moreover, there are outsiders living in this village such as Indians ethnic, Chinese, Malay, Iban and the European foreign descent. The presence of those people in this village is because of being
married to local residents while carrying out economic activities such as managing the resort for foreign tourists.

Infrastructure facilities around the main villages namely Kampung Gumum equipped with facilities which the coverage is not comprehensive. Here are two different resorts known as Tasik Chini Resort is operated by a foreign developer, Gumum Resort funded from the Koperasi Kijang Mas Company owned by indigenous peoples, and a National Service Training Camp. Two guesthouses such as Rajan Guesthouse and Gumum Guesthouse also operate in the research area. These villages have been supplied with electricity and piped water, though not all homes have it. For some homes, they have to use electricity from the generator or use a kerosene lamp. Their water resources depend on water of the lake for washing and bathing even though some others depend on water wells for the two activities. Noted the use of water wells is divided into two types - water wells for use in cooking and drinking and water wells for bathing, swimming and washing clothes. For some people, especially from the Kampung Cendahan, Tj. Puput, and Melai, water of the lake is often used for bathing, swimming and washing clothes.

Gumum Village also equipped with a community hall or public hall which is newly built about 2 years ago. Beside that, it also provides a field to play soccer for local residents and school children near Tasik Chini, namely Sekolah Kebangsaan Kampung Gumum. Gumum Village has been contacted by tarred roads and can be reached by taxi or bus or by boat through the Chini River. However, the mode of transport to other small villages such as Kampung Melai, Ulu Melai, Cendahan, and Tanjung Puput can only be done by boat or canoe to travel with distances of about 5 minutes to the Tanjung Puput Cendahan and up to 30 to 45 minutes to Kampung Melai, and Ulu Melai from jetty Kampung Gumum.
3.2 ORIGINAL STATE AROUND TASIK CHINI

Tasik Chini original state reputedly filled with lotus plants trees. Fishing activity is the main occupation of local people besides finding and gathering forest product around the lake. Hunting activity with chopsticks and trap also conducted.

In the rainy season around October to January, the lake water level will be increased to make more extensive coverage and lakes ideal for fishing. It is said more than a decade ago, the lake is rich with various species of fish. According to reports, the number of fish species ever recorded in this lake has reached up to 144 species at different times. Lake area was also known as bird convergence area of 200 species was recorded. In October and March, the migration out into the lake increased, especially from northern Asia to avoid the winter. In July to January, this lake seems beautiful momentarily because of the grown orange and white coloured lotus flower plant.

3.3 CURRENT STATE AROUND TASIK CHINI

Now fishery activity already decline following resources extinction. This caused many forced to find a source alternative such as tapping rubber or working in an oil palm plantation nearby. There are also involved in the work of a tourist boat carrying tourists to explore the pilot or interpreter nearby forest. Fishery shortage of activities cause tools of traditional fishing is no longer produced except as a craft material for sale to tourists. Other handicraft items for sale for tourist such as woven mats, hand bags made from pandanus leaves (Rasau). They also made small blowpipe, catapult, and boat model from the nearby forest resources for selling to the tourist. The tourists are also charged at lower rates to try blowpipe at the target provided. Herbs such as Tongkat Ali, Fatimah incisors, sweet, and etc are also available in several package sizes for sale at a price of about RM25 to RM30 per packet. Blowpipe’s price is estimated around RM65 to RM250 a hit. However, only a few residents involved in making of handicraft, especially from Tj. Puput and Kg. Cendahan. There are
several other local residents doing bring boats mining activities for the children to school or take visitors around the lake for a fee of RM70-RM120 for a single trip for a group of 6 to 8 people.

Several other activities is being done by local resident is to manage a rest house. There is also which manages fish breeding area property outsider for attraction or offering for tourist. Some local residents will be fishing in the lake and sell the lives of the restaurant business. Chini hill climbing activities and exploring the lake by boat is run as a tourist attraction activity. Other activities include the substitution of traditional activities such as jungle tracking, Boating, fishing, bird watching, canoeing and others. However, there are also local residents, especially young people who migrated further into town, Kuantan, Maran, and others to work as wage laborers.

3.4. UNDERSTANDING BIOSPHERE RESERVE: VOICES FROM THE LOCALS

During the campaign, several questions pertaining issues of Biosphere reserves were asked to respective participants. As predicted by members of the steering committee, most of the participants admitted that their knowledge in relation to the Biosphere reserve is minimal. They however, posed many questions pertaining to the development of Biosphere Reserve, especially who ‘owns’ the areas and what sort of benefits the locals should be getting from such programmes. In fact, they mentioned of giving full support to activities and programmes organized by the local stakeholders, as they believed that this entire programme would eventually influence their livelihoods. What is more important, according to the Tok Batin, ‘semua akan mendapat kebaikan’. Orang Asli, Felda dan Tasik akan dapat faedah’.

The participants were asked whether they knew the nomination process taking place in Tasik Chini. The responses for the nomination process are quite similar to the answers for the knowledge of BR. More than 50 percent of the respondents did not even know what really biosphere reserve meant. However when respondents were asked to detail out the Biosphere
reserve components, they seem to suggesting a wider spectrum of an ideal BR. Table 4 shows their responses, the average mean for Biosphere Reserve components is 4.36. Four BR components were found to exceeding the average mean, and these involved matters concerning the responsible agency, sustainable development, Biodiversity and a living laboratory. For most of the respondents, they ranked the assurance of the area to control development and maintain the natural well-being the highest. Apart from that, they ranked second for the sustainable development followed by the biodiversity and living laboratory.

3.5 BIOSPHERE RESERVES AND THE EXPECTATION OF INDIGENOUS PEOPLE IN TASIK CHINI

Biosphere reserves, the implemented program by the MAB-UNESCO, is not a new matter in the regional development arena and society marginalized among international community. Until the year 2009, there are 531 reserves Biosphere in 105 countries around the world (UNESCO 2009). Actually Biosphere reserve is one development approach which offset ecology welfare, social and economy (Vernhes 2001). This program was launched in 1974 and updated after Seville Conference 1995, and have purposes to i) reduce the loss of biodiversity ii) increase standard living of people who are staying in reserve radius, iii) strengthen the social position, economy and culture to ensure environmental sustainability, iv) directly contribute in achieving the objective of MDG or Millenium Development Goals, especially MDG7, the environmental sustainability (UNESCO 2009). For this country, Biosphere reserve is an approach to develop in Tasik Chini, following this area has some privileges in terms of ecology, community and commercial. But, however, it is now staying in threat from the result of reaction or development plan that less fulfilling needs and ecosystem suitability in this area.

Biosphere Reserve consists of two basic words, the biosphere and the reserves. The reserve word means an area which has assets and resources that are vital to all communities in the world. The biosphere word have meaning, is part of life and all things that represent life in
this planet. UNESCO uses this terminology because understandable and interpreted in many countries. This does not mean the area of Biosphere reserves is area that contiguous with human and development, however it is human activities, human health and the community to form part of the biosphere reserve. In sum, biosphere reserves explained as specific area where people are in it to practice sustainable natural resource use in character (Irribaren 2001, Little 200)

Biosphere Reserves have three main functions namely biological diversity conservation, sustainable development and support for logistics (Vernhes 2001). The term logistics refers to educational activity, research, training and supervision as a support to the development and preservation. Education, training, research and supervision developing local ability to make a decision and implementation. Planning on this activity support the community as part of Biosphere reserve to identify needs according to their own way. This Biosphere reserve also got support from various sector in terms of cooperation to preserve and develop biosphere reserves. For details about the functions of biosphere reserve can be seen in Figure 1.

As part from biological diversity protected area, biosphere reserve area has a huge opportunity to be developed as ecotourism. Ecotourism defined as visiting activity to natural areas to see and enjoy the flora and fauna with a low environmental impact or none at all (Scheyvens 1999). Ecotourism has objective to create sustainable environmental conservation along with the increasing empowerment of communities, especially around communities. Ecotourism is tourism based nature with the following of educational aspects and interpretations of the natural environment and cultural community with ecologically sustainable management (Ceballos-Lascurain 1996). Therefore, the preservation and development of the area have great community involvement that can be created by the ability of local communities, particularly in contributing to the preservation of the environment.
According to Wright (1994), one of the important factors which became the achievement key is role, community involvement, and capacity management. These areas would only be achieved if community and the other different stakeholders have the information, understanding, and shared vision in managing resources. This construction and local community expansion will be successful, only if stakeholders, especially local communities are actively involved. Community-oriented development is an approach that has been widely used in the preservation of regional resource management programs in various countries, especially developing countries. (Scheyvens 1999; Sofield 1996).

For Tasik Chini, the ability in gaining recognition as a Biosphere Reserve also means providing a sustainable form of life for all residents, especially Jakun Tribes. By the approach of Biosphere Reserve as well, the development of Tasik Chini can be planned, guided by the
preservation of the environment and local culture. In the context of the economy, the indigenous people should act as ‘actors’ in Tasik Chini to generate economic potential, rather than as ‘objects’ of economic resources. The uniqueness of indigenous people as cultural identity is maintained as an attraction for tourists to understand more about the unique of culture of Tasik Chini. For them, Tasik Chini is the economic capital of the groove pattern of life. They will keep and transmit it to future generations. In other words, normal daily activities they can do such as hunting and finding the forest product. However, it did not deny their opportunities to enjoy decent living and get the facilities they should get in line with the quality of life of people in this country.

4.0 DISCUSSION

As acknowledged that reliance of indigenous people on their source environment is very close, indigenous people of Jakun Tribes living in the Tasik Chini is no exception from this support. Economics of Jakun Tribes here is much related to the agricultural economy, finding forest product, tapping rubber, and being fishermen to get protein from sources that are all around them. From studies that carried out in 2007, a total of 80 indigenous families have been studied. This finding gives economic position of indigenous people here. Indigenous population around Tasik Chini occupied several villages, as shown in Table 2. Their average rate is consisting of Jakun’s population, worked as a farmer and do a side job. Headed households among the Jakun is made up of people of various age levels, with their relatively large number of households. Among the indigenous people, they are also living in nuclear families.

<table>
<thead>
<tr>
<th>Type of Villages</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg Gumun</td>
<td>45</td>
<td>56.3</td>
</tr>
<tr>
<td>Ulu Gumun</td>
<td>15</td>
<td>18.8</td>
</tr>
<tr>
<td>Kg Cendahan</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Kg Tanjung Puput</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Kg Melai</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Ulu Melai</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Average employment is agriculture-based population and the relatively small amount of their income, but they are rarely able to explain their exact monthly income. They also said they had no permanent job, but doing a side job as long as they earn in a month. This they also do their farming activities, hunting, looking for forest products and fishing in the lakes around. Instead for them, daily activities can not be separated from life right now because this is part of the user terumun. Moreover, this activity is to get food and their daily needs. However, modern activities are palm oil plantation in Kampung Gumum created to add more of their income.

Palm oil plantations are under the monitoring and management RISDA’s side that help indigeneous people to make their economies. Instead of RISDA’s side also assisted its palm trees, poisons and fertilizers for palm oil cultivation, through the RISDA Cooperation. Field of palm oil in Kampung Gumum is of 600 acres in which each participant is acquiring six acres to commercialize them. Indirectly, their involvement in farm activities is to assist indigeneous people to obtain a regular income to meet their daily needs, while introducing the progress of the villages around Lake Chini. Overall, the indigeneous population depends on fishing and the environment of the forest looking

Among indigenous households, especially the head of household, they rarely receive formal education, but among their children, school children in primary schools are increasingly becoming a concern people and their parents. There is a primary school and makes it easier for people who have children aged 7 to 12 years to send their children to school. Formal education is an opportunity for young people to improve the living standards of their families. Study Omar Mustafa (2006) showed that people here quite poor, living in a somewhat dilapidated homes. Facilities in this area have not spread among the villages in this area. Kampung Gumum is relatively better than other Villages where there is houses made of brick, electricity, no schools, boards and tarred roads. Accessibility to the Kampung Gumum is better mode of transport due to the boat to be used in addition to road or highway. While other villages, only can be accessed by boat.
Like the other indigenous residential areas, its welfare and future development of the people supervised by the Department of Indigenous Affairs (JHOE). This Department of Indigenous Affairs (JHOE) assisted from aspect of the construction of the house for Orang Asli group that inability and had many number of independent, apart from helping terms of providing basic amenities for natives in Taik Chini. Apart from that, Indigenous people’s village having association to safeguard and environmental protection. Under Tasik Chini Protection Association, this association created to preserve and protect the environment from further polluting the ecology of Tasik Chini.

Such as stated at early of this paper, Tasik Chini is currently in the process of nomination as a Biosphere Reserve, of course, this initiative will open up and provide more opportunities for them to overcome the crisis of poverty, basic taste better and thereby changing lifestyles. What is their hope to realize this? This question is revealed in the next section, with a focus on the reaction of residents Gumum as case studies.

4.1 ECONOMIC EMPOWERMENT OF INDIGENOUS PEOPLE IN ‘KAMPONG’ GUMUM

Kampung Gumum is indigenous people’s village and become an attraction in tourism sector in Tasik Chini. Gumum village is also as central village to all indigenous people of village in Tasik Chini. Among others village is Tanjung Poput, Kelahan, Kulai and a few other village. Kampung Gumum population have more about 500 peoples from 40 indigenous people families remainder in this Tasik Chini that stationed following group of family placement. Kampung Gumum is headed by Tok Batin which control and take care of every villages of indigenous people’s village in Tasik Chini, and he assisted another member of the JKKK. Most of the indigenous people in Kampung Gumum is Jakun tribes. Religion that followed are varied, consisting of animism, Moslem and Christian.
4.1.1 Economic Activity in Kampung Gumum

Based on data in field, the main activities at Gumum village are farming and hunting, fishing and making handicrafts. Incomes from this work are producing a simple pattern of income, but do not generate regular income in the population. However, when asked about the opportunity to continue the traditional economy at present and future, Table 3 shows the reaction to them.

Table 3: The Opportunities to continue the current economic and the future

<table>
<thead>
<tr>
<th>jawapan</th>
<th>The Opportunities to Continue the current traditional economic</th>
<th>The Opportunities to Continue the future traditional economic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Becoming worse now</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>Worse like before</td>
<td>14</td>
<td>31.1</td>
</tr>
<tr>
<td>Good like before</td>
<td>25</td>
<td>55.6</td>
</tr>
<tr>
<td>Better now</td>
<td>2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

N = 45 people

Over 55% of respondents said the situation was better now, and 5% felt better than now. While questions about the opportunity to continue traditional activities in the future, shows the increasing in percentage, from 4.4% to 13% in the future. This situation is likely due to the issue of nominating the Biosphere Reserve is starting to be heard by most people who want the continuity of their traditional activities.

Meanwhile, the views of those involved in eco-tourism opportunities are also found in the field. From Figure 2, it is obtained that ecotourism opportunities in good level as before with more than 50% of the population of Gumum’s statement. However, the opportunity to become entrepreneurs in the future of ecotourism, is at good level as current time. This is because the concept of ecotourism has become increasingly popular among indigenous
people. They believe that their 'place' and 'activity' become a choice of foreign tourists from Cherating to continue visiting this natural lake. According to Mr Bahrin, tourist arrivals is not certain and based on season, many of them come from Cherating and some directly from Kuala Lumpur. Tasik Chini image among the ‘specialized tourist’ does not decline, but their arrival just as day trippers from either Cherating or Kuantan.

4.1.2 The Job Opportunities in Current and Present Time

Opportunities to get jobs in current time and in the future also get responses from the respondents. Table 4 shows their responses. From this table is found, more than 50% of the respondents’ view are, the employment opportunities at the present and future good as ever and will be better than now. This is because they found the attention of indigenous peoples increasingly high, beside that, they also get information about job opportunities from this area such as Pahang and of higher education institutions especially UKM. The new development plan is to convince them that they will get this opportunity. Moreover, the role of village heads in spreading the development information also bring the positive effect to their current job opportunities.

Table 4: The Views of Gumum Society About Current Job and Future Job

<table>
<thead>
<tr>
<th>Answer</th>
<th>Current Skilled worker</th>
<th>Future Skilled Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Becoming worse now</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>Worse like before</td>
<td>13</td>
<td>28.9</td>
</tr>
<tr>
<td>Good like before</td>
<td>22</td>
<td>48.9</td>
</tr>
<tr>
<td>Better now</td>
<td>6</td>
<td>13.3</td>
</tr>
</tbody>
</table>

N = 45 people

In addition, other attractions that can generate the household’s economic is the skills of indigenous peoples in producing products that can be sold to tourists. It can be shown in Table 5. From the pattern of responses, it was found that more than one-third of the
respondents said that carving is a key advantage of skills they possess. While 25.6% states they are in good in making handicrafts, including woven mats. Production of carvings like chopsticks and other sculptures are also the skills they possess. Similarly with the crafts, most of the indigenous people earn their living by making handicrafts. Among the crafts produced are baskets, decorated with beads that look more interesting. For sale.

### Table 5: Skill of the Indigenous People of Tasik Chini

<table>
<thead>
<tr>
<th>Answer</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenunian kain</td>
<td>5</td>
<td>12.8</td>
</tr>
<tr>
<td>Engraving</td>
<td>13</td>
<td>33.3</td>
</tr>
<tr>
<td>Engraving</td>
<td>10</td>
<td>25.6</td>
</tr>
<tr>
<td>Woven mats</td>
<td>7</td>
<td>17.9</td>
</tr>
<tr>
<td>Traditional dance</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Traditional song</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Source: Field Research, The Public Awareness Program, August 2008.*

However, the traditional art of dance and song is quite low, about 10%. Their cultural activities like traditional dancing such as sewang dance is not considered as an asset they can sell in the context of tourism because of seasonal tourist arrivals and it is only directed to certain attractions. There is also possibility creates an embarrassment and low self-esteem showing the dance in front of outsiders. As a result, this activity is done for entertainment only.

### 4.1.3 The Threat of Current and Future Resources Destruction in Kampong Gumum

As was reported that Lake is endangered of natural assets extinction including natural source especially plants and animals and their food sources, it also affects the society of Kg. Gumum. For them, Tasik Chini is in the damage of sources at present and will continue to happen in the future. Extinction of the present and future sources are said to be in a doubtful situation. Of the total respondents, 57.8 percent state of the current extinction is becoming
worse and continuing happen in the future (Table 6). A total of 95.6 percent of respondents said that it will become worst in the future. Tasik Chini and its source is no longer a mother of economic to the society.

Table 6: The View of Society About the Extinction of Current and Future Resources In Kg Gumum

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Answer</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extinction of current resources (a)</td>
<td>Becoming worse</td>
<td>26</td>
<td>57.8</td>
</tr>
<tr>
<td></td>
<td>now</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worse like</td>
<td>13</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>before</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good like</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>before</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Becoming better</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The extinction of future resources</td>
<td>Becoming worse</td>
<td>43</td>
<td>95.6</td>
</tr>
<tr>
<td></td>
<td>now</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Becoming better</td>
<td>2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

N = 45 people

From the responses obtained from the first public awareness program, the residents of Tasik Chini is also expressed to the extinction of forest resources and fish resources. In fact, due to the relatively polluted lake water, bottom fishing is also decreasing. Meanwhile, revenue collection, such as petai and soaking are also significantly reduced.

4.1.4 Response of ‘Tok Batin’ and JKKK (Jawatan Kuasa Kampong) as Governans of Tasik Chini

In the context of the unity of indigenous people, Tok Batin is the referred source in the various welfare and future of their subordinates. Help and opinions of the Tok Batin in many cases will provide a more convenient routes for them to obtain assistance from the authorities. Based on interviews in the field, although Tok Batin voices a stress and problems
to his superiors, he was unable to overcome some problems related to their economy as a whole. In assistance case, continuing oil palm garden after rubber crop felled, not been operated yet nicely.

As a result, those who run the plantation is said having difficulties in collecting revenue of palm fruit because of the ground system is not compatible with the existing road system. The ground road of palm oil garden leads to the difficulty of fruit production efficiency. In terms of fertilizer, they did not get a thorough instruction of fertilizer, especially how to manage fertilizers which is not polluted. For them, the location and high structure of the field in slopes of the hill has caused water runoff carrying fertilizer into the lower area and enter the lake area.

5.0 RECOMMENDATIONS TO STRENGTHEN THE ECONOMIC OF INDIGENOUS PEOPLE OF TASIK CHINI

From the above discussion, it is clearly there is an attempt to find a way to increase economic for Indigenous people of Tasik Chini which need to be enhanced. Some of the problems described is closely related the unstable economic system at the macro level but conversely if it is examined through micro or the spectacle of the population. For them the opportunity to find forest products have become a routine part of their economy.

Initiative developing Tasik Chini and vicinity as Rizab Biosfera certainly bring good expectation of the current situation. However, economic opportunity among people who have energy source asset, capital and cultural asset need to be traced, maximized and then publicized to community. This step will create enable economic programme suggestion in the future which can be matched with human resource asset and culture in society. Capacity and group tendency can be adaptable with new opportunities that will be introduced in line with measures to revive Tasik Chini as ecotourism attraction and research centre.
Based on interviews with researchers in Tok Batin when public awareness programmes first carried out, he acknowledged the efforts to ensure his men have a birth certificate is the first step to enable the enjoyment of other economic opportunities. However, efforts to register the population has not been completed. According to him, this step allows the children to go to school to study and further other opportunities will follow. It is because without a valid birth certificate as the indigenous people entity, in this area will be affected. In this context, building its identity as indigenous people are the foundation of their lives and activities at Tasik Chini.

Meanwhile, the state and federal government’s action to improve infrastructure in promoting eco-tourism has not been felt by local communities. This is need to be done because fading reliance to local source especially Tasik Chini will participate fading sense of belonging community to this area. Organising a deeper explanation of the issues that threaten their lives can also be done in schools and youth organizations. Activity sponsorship oriented on uniqueness of Tasik Chini and local economic opportunity is reasonable to be exposed to new generation especially youths and student because those will continue fighting to increase dignity of Jakun tribes in this country.

There are some of economic challenges of the tourism and agricultural development around Tasik Chini, such as:

a. An economic need of the money has been increased as a platform to hold or support the needs of daily life. However, the extinction of natural resources due to exploring the nearby forests for oil palm agriculture in huge-scale, coupled with declining resources of the lake, create a need for local residents to find other alternatives to earn a living. Consequently, many young people going out to do migration in finding another job to ensure the acquisition of fixed income. However, due to lack of academic qualifications and skills, many of them trapped in inferior job type with lower income.
b. Economic resources of the lake, such as fish are almost extinct since the authorities build the dam at the mouth of Sg. Chini in 1995 to improve the lake water level of eco-tourism destination. Effects of dam construction has affected the original functions of the lake as a breeding ground for fish such as kelisa fish (arowana) and belida fish (giant featherback) which are entering the lake via the Chini River from Sg. Pahang in certain months to spawn, breed and thrive. It becomes more daunting when the lake water is polluted, because of accelerating the process of extinction of the fish resources in the lake. This makes the lake as a source of supply of fish for food and income of local residents has been reduced. As an alternative, local residents are forced to venture into other economic areas such as rubber gardening and do other side work to get additional income. Lake water pollution also creates business market of lake fish increasingly difficult lately following the concern of customer who avoids eating fish from polluted lake.

c. Construction of the dam also resulted in the flow or movement of lake water is limited due to the high acid content. This lead to the deterioration of growing and breeding process of the fish in the lake. At the same time, the contaminated water of the lake causing weed plant species were breeding rapidly in the lake area. This situation not only threatens the lives of fish and other lake creatures, but also impedes reproduction of the lotus plant. Weed plants ‘tail of cat’ prevented seeds of the lotus plant to reach the bottom of lakes and sprout then grow because of the restrictions of roots (weeds) ‘tail of cats’, in addition, preventing sunlight reach the bottom of the lake. Consequently, the growing up of a lotus in the lake area is decreasing, because of the potential prejudice of the lake as a tourist attraction.

d. Breeding weed plant ‘tail of cat’ in Tasik Chini is said to occur from the activities of tourist’s boat movement and fisherman’s fishing boat, or taking tourists from the Paya Bungor Lake which are certainly plentiful in the area. The effect of the spread of weed plant ‘tail of cats’ growth has brought the difficulty for the movement of boats in the lake due to the simple roots stuck in the engine and lead to damage to the boat engine. The growth of weed plant ‘tail of cats’ in lakes also causes the flow or movement of lake water is limited, then agglomeration bacteria in the water continued to rise because the threat to biodiversity and water quality and the environment around the lake. Compared to before, when the rainy season, water from the Sg. Pahang will flow into the lake with fish and other water sources. Whereas after the rainy season, the lake water will flow out
through the Sg. Chini to Sg. Pahang which can cause the sewage and bacteria can be cleared from the lake.

e. Since the activities of miners to operate tourist boats have been raised the revenue, the competition with those outsider in controlling tourist boats around the lake continued to rise. However, in that competition, the outsiders who have a huge capital has always successfully to take a huge profits rather than the local population, especially among the indigenous people who have lack of capital and facilities. Until this research have been done, operators of tourist boats only 2 people from local people. It is very contrast with the situation two years ago with the boat operator from among the local population is about 4 people. Reduction the number of operators of tourist boats from the Local people following the inability of the owners to fix damaged boats and engines that require relatively high financial cost. This situation is quite different from the operator of the boat owned by an outsider, an average of Malays. They dont only have a more suitable boat-engine speed, but also have better financial to support the business in repairing if any damage occurred to the boat or the boat engine. This phenomenon shows the effort to develop eco-tourism activity around the lake is not enough to bring economic benefits to local people.

f. Effect of construction of the dam at the mouth of Sg. Chini has increased the water level in the lake to the height about 1.8 to 2.8 meters. Some of the edge of Sg. Chini is becoming wider and shallower due to cliff erosion. River edge erosion is not only due to high water levels, but also due to frequency of the boat passed which cause the land of the edge become more soft and lead to the occurrence of soil erosion. As a result, many trees are endangered. Some have fallen into the lake or across the river so that bring the difficulty for the movement of tourists and local fishermen's boats on the river. By one estimate, the increase in water level of Tasik Chini and also the construction of dams at the mouth of Sg. Chini has resulted in about 60 hectares of forest area around the edge of Tasik Chini experiences the destruction.

g. Efforts to replant the rubber land garden with oil palm plantation in Kamoung Gumum organized by Risda which were abandoned after the old rubber trees were uprooted as well as threatening the economic resources of local residents. Risda’s failure to continue the oil palm planting work on rubber nearby Kampung Gumum caused many of the locals
lose their source of income from rubber tapping work. For those who are directly involved in rubber tapping activities of the remaining rubber plantation, the return is not that big, about RM70 per month.

h. Felda Agricultural land clearing for oil palm plantations in a big way near the lake have been threatened eco-systems of surrounding areas. Cutting down the forest and old rubber trees from the surrounding areas have significantly enhanced the process of soil erosion and muddy runoff and contaminated with pesticides and fertilizers in the lake. The situation is getting worse by finding that local people also do logging on the forest area near the lake for agricultural purposes, and gardening products. This resulted in some area lakes and rivers have been an increase area of sand edge, because making the lake more shallow and muddy.

i. Containment activities in the lake water is also causing a certain season, especially around October to December, the small villages around the lake, such as Tanjung Puput, Cendahan and Malai are often overwhelmed by flood water.

j. Chini Resort Development and the National Service Training Camp also giving a certain impact on the sustainability of ecological and environmental quality at Tasik Chini. There are claims that initial cause of the lake water pollution is the sewage pipes of the two places have been allocated to the lake. Such matters, however, was denied by the supervisors of the training camps and resorts.

k. Water runoff from oil-palm estate and nearby rubber estate sponsored by Felda and Risda also brings about weedicide inflow into that lake especially when rainy day. It is threatening quality of the water in the lake including for life in river and residents's usage.

l. The process of clearing the surrounding forest for oil palm and rubber farming is also threatening the source stability hunt and forest product such as forest herbs, sandalwood or aloes wood, rattan, etc. Reported that searching for the forest product and hunting are more difficult to be done by local residents. Long time ago, going to forest looking for rattan, woods and stick root only takes time about one day to three days only. Currently, journey to forest not only taking more time but effort to get forest product is decreasing and difficult. In fact, not many local people who get involved in this work.
m. Extinction of the surrounding forest and fish resources in the lake area is also causing the probability of local residents and tourists discover the presence of birds and wild animals of certain species is said to have declined in recent times. Before, there are about 200 species of birds can be found around the lake, currently the number is dropped to only a few species. These developments show how greed development activities primarily involve exploration of the forest area around the lake has been threatening the ecology of animals that often visit the lake.

The challenges of socio-cultural tourism and agricultural development around Tasik Chini:

a. Widespread symptoms of alcoholism and drug addiction among young men due to the influence of the presence of tourists and foreigners.

b. Safety issues of residential areas around the kampung Gumum increasingly threatened by the increasing cases of clashes involving the visitor chalets who organized dances while drinking alcohol.

c. Improve symptoms of theft involving local youth and rural people on drug and alcohol addiction. Chalet Resort Gumum often suffered invasion and theft of furniture, electrical equipment, and travel goods. Vandalism also occurred on private goods and public property.

d. Free sex life style involving young men in the Kampung Gumum is increase. Youngsters from the surrounding areas (Felda) is also often visited some dating area until the late night.

e. Pollution of the lake and surrounding villages continued to occur. Plastic food wrappers and bottles of soft drinks and alcohol appeared scattered mainly in the area on the lake or the jetty. Engine oil bottles are also seen scattered in various places around the lake, polluting the area and Resort Gumum and Resort Tasik Chini.

f. Chalet manage operating costs has become increasingly expensive. Incidents of crime and environmental pollution caused little interest to tourists travel to this area. For those who are present, the average visit only for a short period. There are reports showing the number of visitors staying in resorts around Tasik Chini is not reach 10 percent of
tourists come to travel during daylight hours only. In other words, Tasik Chini is a temporary stopover for tourists on their way to Kuantan, because not many people staying at nearby resorts.

g. Tourists and foreigners also build relationships with people outside of the local population. As a result, rural lifestyle has been imitated by many of local people i.e. how to dress, speak, and behave. There are some of villagers in kampong Gumum can speak foreign i.e. English and French. Open-minded to outsiders prevail, but some are already married to foreigners i.e. of ethnic Indians, Chinese, Iban, including the Europeans from the Dutch and Russian.

h. Admission outsider also influence the belief systems of local population. Some have turned religion from animism to Islam and Christianity. The entry of Christian missionaries is more significant than Islamic preachers which lead to the bigger number of local population has embraced Christianity.

i. Local youth are more likely to work outside the village and absorb the values of urban life when returned to the village on weekends. Each house can be said to have been equipped with TV sets, radio and DVD. Several houses were also equipped with refrigerators, fans, gas stoves and such. Some houses have also been refurbished and built with better materials than cement board with a better design and comfort. Most of them have a better job as a contractor near an oil palm plantation, retired government department or to marry someone outside the more secure economic position.

j. Cases involving drug addiction and the sale of drug which involved of local young people are familiar in the research area. Similarly, cases involving motor racing around the outside of the village have also been problematic. Inner reprimand and local residents are often neglected or ignored. Practice respect for older people has faded and loose. This phenomenon raises a sense of frustration and dissatisfaction among the local population, especially among older persons in the village. Accidents often occur, and in some circumstances lead to serious injury.

k. Drinking water and domestic use increasingly contaminated with ecoli bacteria. Pollution also involves the flow of groundwater leading to contamination of water wells. Rationing of water supply pipe is often happen to hit a few days to several weeks in a
month. Among the causes were due to low water pressure. The construction of national service training camp near the water supply also inhibits the native people of this community area. This is due to the use of water is preferable for the camp participants and tourists from nearby resorts.

1. Water pollution of lakes and wells cause the criminal problem from local people that their children often fall sick due to having diarrhea Berit (diarrhoea) because of drinking the pond water during bathing, swimming. There is also grumbling disease or itchy skin due to bathing, swimming in the lake. For those who are still working on the lake for fishing activities as daily food, there were comments that the fish taste muddy although it said no such thing happened about 10 years ago. The biggest problem for parents of local people is to control their children from the age-long bathing-swim in the lake and prevent them from drink the polluted lake water.

6.0 CONCLUSION

From the discussions above, obviously the effort to find a way to increase economic for Orang Asli Tasik Chini need to be raised. Some of the problems that elaborated have strong relation with unstable population economic system by macro otherwise if it is scrutinized by micro or from population spectacle. For them, the opportunity to find forest product already become a routine part of their economy.

Initiative in developing Tasik Chini and area around the lake as biosphere reserve lead to a good hope of present situation. However, economic opportunities among residents who have assets of energy resources, capital and cultural assets must be tracked, maximized and then publicized to community. This move would enable the recommendations of economic programs in the future can be matched with human resources and cultural assets in a given society. Capacity and group tendency also can be adjustable with new opportunities which will be introduced in tandem with reviving Tasik Chini as eco-tourism attraction and research center.
Based on interviews with researchers Tok Batin when the first public awareness programs conducted, he admitted that measures to ensure his subordinates having birth certificate is the first step to enable the economic opportunities enjoyed by others. However, efforts to register people have not done. According to him, this step allows the children to school and subsequently other opportunities will follow. This is because without a birth certificate as a valid entity Orang Asli in the area will be affected. In this context, building self-esteem as children of indigenous people is the basic for activities and their lives in Tasik Chini.

Meanwhile, the measures of the state government and Federal government to improve infrastructure in order to promote eco-tourism has not been felt by the local community. This need to be done because the extinction of dependency on local resources, particularly Tasik Chini will also lead to the extinction of sense of community belonging to the region. Organizing an in-depth description of the issue claim their lives also can be done in school and youth associations. Organization-oriented activities unique of tasik Chini and local economic opportunities should be exposed to a new generation, especially youths and students because they will continue the struggle to increase the dignity of Jakun Ethnic in this country.

This paper are merely part of study findings researcher doing under research project in year 2007 and this go ahead in first and second public awareness programme in year 2008. The discussion about the economy of Tasik Chini and kg Gumum especially, indeed become the scenario actually be expected to be a guideline of the activities of which will be held in the local area. Local resident's opinion nowadays and future justified heard, because what they voice out is internal strength and anxiety dimension is in socio-economic radius population continue to support existence of Tasik Chini. Steps to improve the economic resources of Tasik Chini is also reasonable to be done by identifying daily activities that have contributed to the preservation of this unsustainable area for life and their environment. Activities of a sustainable appreciation is surely existing, due to their dependence on natural resources is a cultural assets that can promote economic of Tasik Chini.
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