Dive Tourism: Transformation and Implications on the Fisherman Community in Mabul Island, Sabah, Malaysia

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Abstract: Tourism development in Mabul Island began in the early 1990s after the discovery of Sipadan Island as one of the leading dive destinations in the world. Mabul, located next to Sipadan Island, is a tourist destination on the famous scuba diving as muck diving. The diversity of the coastal depths in this island is a habitat to many unique and exotic species of corals, marine flora and fauna. This paper examines the transformation of scuba diving tourism development and its implications on the fishing community in the resort island for the last 10 years. In 1999, there were only three resorts operating in Mabul. Presently, two new resorts have been added, Borneo Divers Mabul Island Resort and Scuba Junkie Mabul Beach Resort. To meet the increasing number of international tourist arrivals and to offer affordably-priced scuba diving packages, some small business owners have commissioned the building of guest houses near the fishing community village on the island. There have been significant changes from the effects of tourism development on the resort island in the past 10 years. Although resorts in Mabul own most of the land, island residents who live in the inland village of Mabul have been allowed to build houses on the sea; in contrast, residents in Musu’ are not permitted to erect any house on the sea, but instead allowed to construct houses on land. However, the numbers and the areas for such houses are limited. To realize the concept of sustainable development, the rapid pace of development in Mabul has to be controlled so as not to exceed its carrying capacity and also to ensure that the fishing community will gain benefits from the development.

Key words: Tourism • Scuba Diving • Dive Tourism • Fishing Communities

INTRODUCTION

Dive tourism is the fastest growing component of tourism and increasingly popular. According to the World Tourism Organisation (WTO), currently there are 5 to 7 million active certified divers around the world [1]. Studies of dive tourism started to get serious attention from scholars from the mid-1990s. Among them, the study conducted in the United States, Australia and Japan [2]; External Caribbean Sea and the Pacific Coast of Central America [3]; Great barrier Reef, Australia [4]; Asia southeast, such as Malaysia [5] and Thailand [6], Indonesia [7] and the Philippines [8]. Research was also conducted to tours scuba diving in the Red Sea in the vicinity of Jordan, Egypt and Israel [9, 10, 11]. Additionally, in Maldives [12], South Africa [13], Mozambique [14] and Greece [15] and [16]. Rapid development of the dive tourism is concentrated in tropical areas because of the clear ocean waters and relatively warm temperatures and the presence of various biological and geophysical characteristics corals provide an exciting scuba diving location. Coral reefs in many tropical destinations provide the primary motivation for the development of dive tourism [17].

Dive Tourism: Literature Review: Before the concept of scuba diving tour become popular, most related activities include snorkeling, free diving and fishing activities are
associated with island tourism, marine tourism, eco-
tourism and sports tourism. Scuba diving tour is traveling
to a dive destination either in an isolated island, a group
of islands off the coasts or the mainland coast of the
country. It involves at least one expedition dives done.
Scuba diving is a form of niche tourism that offers scuba
diving as a major activity within a tourist vacation [18].
Dives involves a combination feature-based tourism and
adventure cruise into the sea. It is also related to the
study of caves, archeology, art photography and fishing
activities on the seabed and gastonomy [19]. Scuba
diving activities require special clothing that comes with
some extra equipment such as tanks storing gas cylinders
of compressed oxygen, face mask and foot fins. A scuba
diver can stay longer in the sea floor compared to other
forms of dives. Scuba diving requires theoretical courses
and specialized training for acquiring important skills that
are in a comfortable situation with the environment on the
seabed and thus feel safe and fun dives during the
expedition.

Positive and negative impacts of tourism
development impact of scuba diving has bringing the
attention to few scholars and researchers such as [1, 7, 20
& 21]. Dive tourism has developed economy, improving
living standards and well-being of a population of about
8500 people on the island of Utila, Honduras [21].
Negative impact is emigration from mainland of Honduras,
the pressure on natural resources through the exploitation
of mangroves, coral reef deterioration, the influx of cheap
budget accommodation operators and external
domination. For a case study in Mabul, the positive
impact of dive tourism is generating revenues in marine
resources, job opportunities in the resort and fishing skills
can be utilized, such as boatman and dive master.
Negative impact, the fishing community does not agree
that the development of tourism in the island improve
their standard of living, job opportunities in the sector
but only subordinates as general workers, security
guards and sales assistants and tendency kitchen
island land sold to outside entrepreneurs [20]. Economic,
socio-cultural, whether direct or indirect, as well as the
environment is studied in the Wakatobi Marine Park,
Indonesia. Scuba diving tours provide economic benefits
to the local community because of the dependence on the
supply of non-food items specifically related to the
operation and maintenance of tourist boats from local
suppliers, acceptance and positive attitude of the local
community to the presence of tourists and the existence
of the park management ensure marine conservation and
sustainable use of marine resources in the vicinity [7].

Studies of scuba diving tourist perspective examined
in terms of demographic characteristics, satisfaction and
motivation to diving destination [5, 14, 22, 23]. Study on
perspective and demographic profile of scuba diving
tourist conducted at Tofo Beach, Inhambane,
Mozambique [14]. This research also examines the urgent
need for strategic planning and better management to
maintain the attractiveness of this area and prevent the
loss of biodiversity. Data was collected through
questionnaires from 530 respondents. Tourists are
classified according to the level of diving experience and
motivation of their vacation. Other than that, the
demographic profile of scuba diving tourists has also
been examined. This study also examines the
characteristics of scuba diving in Tofo that may affect the
sustainability of this sector in the long term. Study found
that there was validity of interconnected between wants
and needs of scuba diving tourists and nature of the
coral reef dive locations around Bonaire, Caribbean [23].
The findings of a survey of 200 respondents found that
there are dive locations most favored and least favored
and attributes that contribute to the selection. In addition,
ecological surveys to 76 of 81 dive locations around the
island are also performed to assess the actual condition
attribute that indicates the importance of the site
selection.

Among the issues in a scuba diving tour are the
problem of congestion and the frequency of the dives in
a destination [5, 11, 24, 25]. Scuba diving tourism
threatens coral reef in Dahab, South Sinai, Egypt as a
destination is among the most visited in the world with
more than 30,000 divers per year [11]. The results showed
that the number of frequent location is a tourist scuba
diving lead to more serious negative impact on the
damage and destruction of rocks and coral reefs.
Sipadan Island, scuba diving tourists crowding issues to
draw in a way that leads to efforts to limit the number of
tourist arrivals and dives in one time. In addition, efforts
to make Sipadan Island as a marine park and scuba diving
tour operators transfer to other nearby islands proposed
in an effort to reduce congestion scuba diving tourists to
the island [5].

In addressing the issue in a number of scuba diving
tours diving locations in the world, there are several steps
and proposed management strategies [1, 5, 8, 26]. Among
management strategies that can be done by the operator
scuba diving to minimize the damage to the coral reef dive
site is doing a turn, teaching methods and educate divers
float through courses and briefings before dives done
[27]. Scuba diving tourism management measures that can
be done is through the idea of sustainability, such as removing the pressure on coral reefs through the construction of artificial undersea gardens as a means to integrate the development and coral reef conservation, environmental education and safety of the risk management approach when diving activities [1].

Measures to limit the number of divers per year are also a practical strategy [5] and [11]. A plan for ecologically sustainable scuba diving for each dive location must be implemented and to enforce environmental education to pilot and recreational divers interpreter so that they realize the importance of conserving the ecology and quality ecstic dive locations [11]. On the island of Utila, Honduras, the main issues that require a more efficient management system is coral reefs and related ecosystems particularly mangrove forests are widely exploited the effects of the development. These efforts are essential to ensure the survival of the tourism-based economy scuba diving [21]. Calamianes Islands, the Philippines, efforts to create a harmonious relationship between the area of marine conservation, tourism, scuba diving and fishing communities is considered successful in terms of theory, but in practice found a different understanding of marine protected areas in the conflict between [8].

Dive Tourism Development in Malaysia: Malaysia is one of the scuba diving destinations that are increasingly popular in the world for its rich marine environment which is located in the Valley of the Indo-Pacific. The existence of a variety of marine biodiversity and unique, a group of islands with beautiful beaches and crystal clear waters and quite hot scuba diving attract tourists to visit the country. From a group of hammer sharks, Barracudas and various species of turtles down to the unique and exotic species like frogfish and nudibranchs, sea floor several islands in Malaysia give satisfaction to scuba divers. Reef ecosystems in Malaysia reported as supporters to aquatic organisms, comprising 50 genera of corals and over 200 species of fish. Every time servei marine biodiversity is done, the list of species recorded has increased. Generally, there are four distribution locations scuba diving in Malaysia, namely (i) outside the West Coast of Peninsular Malaysia - PulauPayar, Kedah and PulauJarak, -Perak (ii) outside the East Coast of Peninsular Malaysia (North Zone) - eg, PulauPerhentian, PulauKapas and PulauRedang (iii) Off East Coast of Peninsular Malaysia (South Zone) - Tioman Island, Pahang and PulauAur, Johor and (iv) Offshore Sabah - eg. PulauLayang-Layang, PulauSipadan and Mabul Island (Figure 1).

Development of island tourism destination in Malaysia started to get noticed after the Ninth Malaysia Plan 3 (1985-1990) with a focus on the development agenda which is to strengthen the development of the island on the east coast of Peninsular Malaysia to divert tourists to the Klang Valley. In Malaysia, the concept of this tour is included in one of the island tourism destination attractions. Among the well-known scuba diving destination in Malaysia is Sipadan Island, Mabul Island, PulauPerhentian, Redang and Tioman Island. There are few studies about the scuba diving tourism in Malaysia as Pulau Tioman [28], Pulau Payar [29], Pulau Mabul [20] and [30], Pulau Sipadan [5] and PulauLayang-Layang [22].

Dive Tourism in Mabul Island, Sabah: Mabul Island is a small island located adjacent to the East side of Sipadan in Sabah. It is located in the Celebes Sea which borders three countries, namely Malaysia, the Philippines and Indonesia. Mabul Island has an area of 20 hectares, flat and oval shaped with a height of 2 to 10 meters above sea level (Photo 1). Mabul Island is separated with the nearest town of Semporna by shallow shelf with depths from 2 to 20 meters and is separated from Sipadan Island by sea gap in excess of 800 meters to the base (Figure 2).

While Sipadan Island is discovered as diving destination in 1987, this island resort is a fishing village. It has always been a transit point for tourists who make scuba diving expeditions in Sipadan Island. Tourism began to be developed based scuba diving in Mabul Island in the early 1990s. First resort opened on the island of SipadanMabul Resort is (SMART), which in 1993 (Table 1).

Mabul Island is famous among tourists scuba diving as Muck diving destination. The concept represents the most basic dives into the sea other than coral reefs and is often associated with the event a diver can witness various small marine species, unique and exotic [31].

Sipadan is no discovery; it's been around for a while now, but the real discovery is the diving around Mabul island itself, home to the world's best muck diving.

In the offshore areas available around the island with a depth of 0.5 meters to 3 meters, there are many species of marine life such as octopus, invertebrates such as starfish and sea urchins, corals, snails, clams and seaweed. There are several diving spots in PulauMabul. Among them are Lobster Wall, Nudibranchs Centre and
Fig. 1: Scuba diving location in Malaysia

Photo 1: Aerial photo of Mabul Island

Fig. 2: A cross section plan of Mabul Island
Ray Point (Figure 3). In each location, the various species of marine life can be found. Diverse form of Mabul coastal that is sloping up to 30 meters with two sides separated by a coastal island different depths have become suitable habitat to a variety of marine flora and fauna that are unique and exotic.

Most tropical fish and marine invertebrate in the world, you will see practically everything you are going to see in Mabul. Not in one or two but in ten's and twenty's. Dozen of frogfish, pipefish, mandarin fish, fire gobies, nudibranchs, scorpion fish, sea horses, snake Eels, see moths and exotic shrimps, lobsters, crabs and sea urchin are to be seen at the site as Mandarin Valley, Froggy Lair and Crocodile Avenue.

(Sport Diving Magazine, 47 to 52)

Transformation and Implications of Dive Tourism Development Towards Fisherman Community: Studies on the development of tourism in Mabul was conducted in 1999, as a comparison of particular transformation in the development of fisherman communities and the implications for the environment of Mabul Island, a repeat survey was conducted in 2011. In 1999, the study involved questionnaires, observation and in-depth interviews with stakeholders and the community at Mabul Island. A total of 120 respondents were involved in the study. Review of 2011 over the area of review through observation and interviews with some of the residents of the island. There are some people who has been interviewed has also involved in the 1999 study. There are some developments that provide a source of essential information on the survival of tourism development in island resort scuba diving tourism in particular.

At the beginning of the scuba diving development in Mabul Island, there are only three resorts that operate there. It is concentrated in the western part of the island of SipadanMabul Resort only (SMART), Sipadan Water Village (SWV) and Seaventures Dive Resort (SDR). At the time, it is rarely to see tourists walk through the village street of Mabul. Based on a survey conducted in 1999, only 71.7% of respondents indicated that tourists just passing by, watching the surrounding area. This is because the real attraction is the at the Mabul sea floor itself rather than the community or the village on the island [20]. However, at present, more than 80% of the island is owned by a few major resorts here and hence the scenario has changed. Tourist and fisherman communities in this island resort have become one community. Observations in 2011 found that the presences of tourists in the village are typical. In fact there are five guest houses that offer budget accommodation erected in the village at Kampung Mabul. For example, Big John's Homestay and Scuba Junkie Bacpackers Homestay.
Based on 1999 study, 80.8% of respondents indicated that they prefer the presence of tourists to the island resort. At that time, they realized that the main attraction of tourists come to the island is the natural beauty and uniqueness of its marine life. However, their attitude towards tourists varies if tourists are allowed to stay in their homes. The majority of them (68.3%) do not agree, 22.5% less agreed and only 9.2% are agreed. Out of the 82 respondents who did not agree if tourists stay with them, the main reason given is that they are embarrassed by the condition of the destitute home and do not have the skills to communicate in English [20]. In the last 10 years, there is a significant transformation of the fisherman community attitudes in Mabul. They are much more open minded, especially when there are several operators built cheap budget accommodation in the fishing village. To date, there are several accommodation facilities are available. Fishing communities were more positive with tourists as the resort grew and jobs were opened wide to women and youth on the island. It thus raises awareness to them that most tourists requires low budget scuba diving package because the cost staying at the resort are far more expensive. There are accommodation facilities operators who hire workers from around the village people as it is easy to commute from home to the work place.

Jabil study showed 70.8% of respondents agreed that the development of tourism in the island resort having great benefit on them [20]. Consequently, over 95% of respondents agreed with the development of tourism in the island. In fact, they are so optimistic when over 85% of respondents stated that the tourism sector will grow rapidly in the future. Features a major tourist attraction on the island is a naval source. At the same time, the life of the fisherman community is also dependent on the marine catch. Thus, the parallel uses of these resources have a positive impact on the perception of the population on tourism. Peoples who involved in the tourism sector in Mabul as boatman and dive master is found more positive towards tourism sector. The results showed that for the work in the tourism sector, 80% agreed that the higher income derived from previous work. For example, the starting salary working as general workers in most resorts is RM350. Up to now, there are some among them who had been working as high as RM800 - RM1000 per month. While the starting salary for boatman is RM1000 and RM1600 as dive master per month. According to Hatijah Abdullah (36 years old) who worked as an assistant at the resort restaurant for ten years, found scuba diving tourism development opportunities to the women on the island. Based on observations, various media coverage and research about Mabul as the unique island resort and as a destination for muck diving has been conducted. There are researchers who are studying the impact of tourism development on the physical aspects of Mabul Island [30, 33]. In addition, there is documentary footage, films, activities of non-governmental organizations (NGOs), environmental care activities undertaken by the resort islands such as the Scuba Junkie and ministerial visits has made the island resort been visited by visitors and tourists frequently. Such programs would indirectly benefit the residents of the island and the fisherman community.

In terms of local participation in scuba diving tourism development, showed that only 12.5% of the 120 respondents who were interviewed using the questionnaire form are directly involved in this sector [20]. Among them are the general workers at the resort, security, drivers and tour guide. There are some people who sell souvenirs from snail shells on their own. It is influenced by two factors, namely the educational background and skills of the local people. For those who are educated and can communicate English, the opportunity to work in a better sector in tourism is bright. According to Musa Osman (39 years old) who used to work as a fisherman mentioned that despite working as a security guard since three years ago, it was a pleasure to get to know the job because he can meet a lot of people and enhance their communication skills with management and tourist resorts.

The second factor is the skill of the fishermen themselves with life in the sea. Fisherman community are familiar with Jongkong and been fishing to the sea for a few days. Among other skills is archery and install traps in Kaloong fish in the sea. Thus diving skills and handle the Jongkong facilitate their employability as a dive master and boatman at some resorts on the island. At present, more and more youth, teens and young women working as laborers, boatman, security guards and a kitchen assistant and sales assistant at the resort. In addition, staff from the island population is also needed for the cleanliness, maintenance and construction of the resort. According Zulasman Jauaali (34 years) who served as boatman at one of the resorts on Mabulisland since 2003 explained that the factor income from fishing in the sea of uncertainty has led him to work in the tourism sector on the island permanently.
In respect of tourism entrepreneurship in scuba diving, Mabul Island population appears to be responsive to this field if given the opportunity [20]. Over 90% of respondents are willing to involve in this field. On average the respondents choose the transport sector (45.8%) - a boat facility services and business gifts (25.8%) as an option due to the compatibility of fishermen of both sectors. In the transportation sector, the fishing skill in handling Jongkong can be harnessed. In fact, the fishermen also have technical knowledge base if the boat suffered damage. Hence, no wonder that many in the population who are interested in boat transportation business. This is because it does not require specialized expertise and knowledge in entrepreneurial management compared to the more challenging and risky as accommodation and restaurant entrepreneur. It is also a choice of the people to sell souvenirs as most of the handicrafts resources are from the sea such shells, clams, shellfish and corals. It is easy to get cheap source of supply for their lives as fishermen and it is much help in that regard. For example, there are people on this island who carry Kaloong get a quality shell for home furnishings and souvenirs to be sold.

The reality at present, not many people in the island who are successful in entrepreneurial boat transport, but there are more houses in the village Musu 'that sell souvenirs made from shells compared to the previous study. Most residents are aware that in order to operate a business that involves travel and tourism sector is difficult and challenging. Benefits in entrepreneurial sector are still dominated by outsiders, especially the Chinese entrepreneurs and politicians [34]. Even the guest house in the fishing village that operates currently is owned by either external party from Semporna or Kota Kinabalu such as Uncle Chang's SipadanMabul Dive Lodge and Billabong Scuba, Uncle Chang's SipadanMabul Dive Lodge, Big John's Homestay. Results of this study have similarities with Bird study on the impact of tourism development on the island of Langkawip [35]. When the new local community aware of the tourism potential in the area they found it was too late when the strategy to capitalize on the opportunities available were taken by outsiders [36]. In the case of Mabul Island, entrepreneurial opportunities that are occupied by outsiders cannot be denied. In Utila, Honduras found 45% of tourism stakeholders undertaking scuba diving dominated by outsiders, the majority from Europe and 22% other players are from mainland Honduras [21].

The most significant change is the increase in the number of operating resort in Mabul. In a previous study (1999), there are only three resorts that operate in the SipadanMabul Resort here (SMART), Sipadan Water Village (SWV) and Seaventures Dive Resort (SDR). All three of the resort has its own uniqueness. SMART is the biggest resort and the first to be constructed, it involves a resort built on land on the resort island and sea water. SVS concept village built over water extends to the edge of the island, while the SDR is the first floating resorts which are driven by fixed offshore Mabul Island. At present (2009), there are two new resorts that operate on the island of Borneo Divers Mabul Island Resort and Scuba Junkie Mabul Beach Resort. With the existence of five resorts that are largely used the word "dive" as a trademark that makes this island resort resort as a tourist destination popular scuba diving in Sabah in particular and Malaysia in general.

Proliferation of international tourist demand especially adventure travelers (backpackers) to dive in the sea floor led to the construction of the island resort offering accommodation facilities and diving accommodation packages at a much cheaper price. Previously, most of the tourists who come here are managed by a travel agency and involve accommodation package at the resort at Mabul Island. Given the high cost if staying at the resort and scuba diving demand for continuous, convenience package cheap budget accommodation services are in high demand. To date, there are several guest house accommodation facilities erected in the water village on the island, namely; Life Whitewater Longhouse, Billabong Scuba, Uncle Chang's SipadanMabul Dive Lodge, Big John's Homestay and Scuba Junkie Backpackers Homestay.

The rapid development of the scuba diving tourism in small island resort has changed the patterns of land use in the past 10 years. There are not many changes in terms of the village infrastructure such as mosque, primary school, community hall and a general movement as it is remains as before. However, the land use for the purpose of construction of new resorts has increased expansions of the existing resort, guest house and the existence of some physical structures associated with it. Figure 4 shows the pattern of land use Mabul Island in 2006. Residential areas located on both sides of the island of Mabul Village which runs from northwest to southeast of the island tourist boat routes constrained by human construction while Musu village is located on land adjacent to the Sipadan Water Village (SMV). There are additional resorts been built on the water next to the SMV. Two new resort located on the ground and have their own jetty is Borneo Divers Mabul Island Resort (next to the mosque) and Scuba Junkie Mabul Beach Resort (near Kampung Musu').
Fig. 4: Landuse of Mabul island
Source: Aw et al. (2006)

Photo 2: Musu' Village after relocation
The rapid development of scuba diving tourism-based in Mabul also has implications to the fisherman settlement patterns on the island. Over the past 10 years, there are two small villages in Mabul. The majority of the population is Mabul Village mysticism ethnic (Tausug), while in Musu 'is Bajau Laut ethnic (Palau). Usually, the Palau stay in the boat, but they also built a house on the water. This scenario also occurs in Mabul. Since their settlement is nearby the SMART and SWV, thus there is an effort to move them to the ground in the same place to avoid water pollution around the resort have been done (Photo 2). However, in Kampung Mabul, the people are prohibited to build house on the water because a path have been built for scuba diving boat accessibilities at SMART jetty. Therefore, they can only stay on the coastal land. However, when they were allowed to build a house on the water nowadays and there are five guest house erected in the village already.

**DVE Tourism Management Issues in Mabul:** Studies showed that the impact of tourism development on Mabul Island fisherman community in the last decade is still at an acceptable level [20]. But after 10 years, the rapid development of dive tourism in the island poses a number of issues that need to be addressed by all parties. Mabul position is unique in several aspects. The island is small, the population was about 2000 people and the main economic activity is fishing in the sea near the international border. At the same time, the coastal of this island are the habitat of various species of marine life unique, small and exotic. It became tourist attraction for scuba divers from around the world. The Sabah government has banned construction in the Sipadan resort in 2004. The existence of an increasing number of resorts and cheap budget accommodation service in the island fishing village has increased tourists arrivals here especially scuba diving adventure travelers (backpackers). There are three main issues of environmental degradation of the island, the issue of capacity and future capacity of the fishing community in Mabul.

The issues of environmental degradation in Mabul are increasingly critical over the years. On land island, garbage problem, potable water and sewage systems. Environmental management priorities in Mabul be implemented in various phases of planning: short term, intermediate and long-term [20]. The development of tourism and the fishing community lifestyle Mabul influence environmental deterioration based on the review of the biological characteristics of corals, the physical aspects such as land use, water quality, groundwater and sea water as well as socio-economic indicators studied [30]. However, at present there are several programs and activities in promoting environmental awareness among island communities. Among them, Mabul Marine Day runs by the WWF. This program involves operators and operator scuba diving and island communities. Some activities related to the environment carried out practical activities such as clean up the park and other educational gaming activities for kids. This is an attempt to address the gap between tourism and population and to increase environmental awareness. In addition, there is also a dumping zone provided on the initiative of the scuba diving tour operators. Each scuba diving and resort operators are responsible for providing a waste collection point or place in their zone. This is a direct involvement of the scuba diving tour operators on the island.

Carrying capacity issues are also important in view of Mabul Island as a small island but scuba diving tourist arrivals continue to rise every year. During the 2000-2001 year, tourist arrivals increased by 4.2% from 5,020 to 5,231 people per year [33]. At this time, tourist arrivals increased to over 10,000 people a year. Since Mabul is a global destination for Muck diving then effort to identify some practical steps to control the arrival of scuba diving tourists within the limits of its carrying capacity. For example, Pulau Sipadan is limited to only 120 tourists per day. This step should involve all the scuba diving tour operators including the operators of budget accommodation in the village of Mabul due to high demand from tourists especially the backpacker and this should be given a serious attention.

With regard to the future of fisherman communities in Mabul Island, the majority of the population only has primary education and worked as a fisherman, involved in village activities and small businesses. On the other hand, the school facilities on the island giving the children the opportunity to learn until the primary level only. After that, most of them did not pursue secondary school in the town of Semporna due to financial difficulties and problems in citizenship. There are teenagers and youth, who work at the resort and some migrated to the city to find another job. Hence, there is no specific program that will benefit the youth and adolescents in the development of scuba diving tourism on the island. Problems in education, business knowledge and capital are a major obstacle to them [34].

**Summary:** In the case of Mabul Island, the problem of size and location of the island which is far away from the mainland, community-based economic resources in marine and dive tourism products, the problem of land use and
land ownership of the island, the issue of citizenship and community education as well as environmental issues such as waste disposal, potable water, sewage and land view physical change requires a management system that is sustainable tourism development. The island and communities as island hosts and the tourists are using the same source but in a different space. Tourists dive into the sea to enjoy the beauty and uniqueness of the marine life while the fisherman community catching the fish far at the international border. Before this, the 'movement space' of the scuba diving tourists is vertical in nature while fishing activity is horizontal [34]. However, the rapid development of the resorts and budget accommodation in the fishing village makes residents and tourists to exist as a community. This scenario may raise other issues specifically related to the socio-cultural and community identity in the future. Hence, the various parties such as state governments, operators and travel agencies, resort operators and operator scuba diving, fishing communities, researchers, NGOs and mass media should play their role in an integrated manner to ensure Mabul continue as a famous Muck diving destination in the world, at the same time the environment continues to be preserved and the fisherman community is still taken care.

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