Staying Afloat: Operating Tourism in Disaster-Prone Areas of Mesilou, Sabah

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Abstract. Multi-hazards and disasters affect our lives greatly and therefore it become everyone’s business. Every time disaster hit a community, it left substantial damages to physical and non-physical components (particularly economic and social aspects) that shaped our livelihood. From the community-based rural tourism (CBRT) point of view, disaster occurrences often led to significant decrease to destination image and reputation, increase fear of safety, damaging infrastructure and agriculture land. These led to the declining of tourist arrivals which affect income generation and revenue from tourism to the community. Failure to acknowledge these direct and indirect effects might weaken the tourism community’s capacity in coping with future disasters. Based on previous studies on CBRT in disaster-prone areas, researchers have uncovered unique cases whereby some rural communities that operates tourism as a vital income are able to raise above adversity and become resilient. In this light, a tourism community in Mesilou Village in Sabah, Malaysia is selected as a case study. This community was badly affected by 6.0-magnitude earthquake that hit Kota Belud in June 2015. At the time, a study of the post-earthquake has been conducted by a group of researchers from UTM in October 2015 and discovered that Mesilou had about 20 homestay operators. For nearly six months after the earthquake, the majority of CBRT operators were affected with high booking cancellation, damages of infrastructure (main road, bridges), disruption of water and electricity supplies and local transportation which hindered tourists from coming to their village. In October 2018, an impact study had been conducted by the same researchers from UTM and found that CBRT in Mesilou not only recovered from the disaster, but remarkably has been booming since then. This is evident from the survey which indicated a growing number of homestays from 20 full time operators (until 2015) to 40 homestays by October 2018. Two general conclusions can be made from the result of data analysis; (1) disaster did not deter the tourists from visiting Mesilou after the earthquake; (2) the CBRT operators pose strong social, economic and environmental capitals to “bounce back” from adversity and rebuilt the community prior to the disasters. This paper will discuss the lessons learned from CBRT operators in Mesilou regarding business recovery and resiliency prior to disaster.

1. Introduction
In recent years, there has been renewed interest in developing Malaysia’s rural areas as it became obvious that the agricultural sector alone did not hold the key to rural economic prosperity. In the mid-1990s (during the Second Phase of Rural Transformation, 1991 – 2020) [1–3], federal government...
agencies began to seek out alternatives in developing countryside and rural communities with more profitable economic activities. This effort in turn, sparked an interest for promoting tourism as a tool to revitalize the countryside and rural communities in sustainable ways [4].

Review of literature indicated the development of community based rural tourism (CBRT) in Malaysia has resulted from the reflection of the general equity principles of the New Economic Policy (NEP) launched in 1971, that put emphasis on indigenous access to and control of Malaysian tourism [4,5]. Local participation in tourism activities is further promoted in the Seventh Malaysia Plan 1996-2000 [6] with the effort in rural tourism reflecting aspects such as social, political and ideological circumstances [5,7,8]. Ideally, community-based tourism in remote areas is developed using the inherent character and resources of the locality which typically include “their attractive natural environments, original local culture and traditional systems of land use and farming” [9].

The idea of CBRT for local economic development have been eagerly embraced by local tourism stakeholders as the activity might become the major contributors to rural development and is an agent of change for rural people. The strengths of CBRT are described in various forms; as a tool in economic and physical development and as a means to enhance the social and human capital development and conservation of natural environment [4,10,11]. Despite the positive outlook and continuous investments by both the government agencies as well as by tourism industry players and host communities in planning and developing sustainable tourism in rural areas, it is widely recognised that many rural regions are constantly exposed to various types of natural disasters hence affecting livelihoods and rural tourism businesses [12,13].

These disasters generally could be categorised into two namely area specific disasters such as floods and earthquakes, and site specific particularly landslides. In any circumstances, both categories of disasters often hit rural areas and their communities hardest. Without proper mitigation, rural community and tourism business that support their livelihood would be the most vulnerable aspect to disasters. This paper intended to analyse (and to some extent, to uncover) possible factors which making CBRT in Mesilou Village in Sabah, Malaysia to persist and flourish even the community was once been affected by 6.0-magnitude earthquake that hit Kota Belud in June 2015.

2. Literature Review: What is CBRT?

The definition of community based rural tourism (CBRT), according to Bernardo [10], takes rural environmental, social and cultural sustainability into account. CBRT also should be managed and owned by the community with funding and assistance from government agencies or NGOs, for the community, with the purpose of enabling visitors to increase their awareness and learn about the community and local way of life [14,15]. Therefore, what becomes the main outcome of CBRT is the improvement of livelihood of the community via tourism activities, whilst preserving natural environment, maintaining cultural authenticity and ensuring local ownership.

2.1 Main Components of Sustainable CBRT

Environmental resources (whether they are managed or not), community (host community) and tourism businesses play important roles in CBRT [10,16–18] (Figure 1). Ideally, the success of CBRT activities depends on the flexibility and strength of the relationship between these components. As shown in Figure 1, CBRT cannot be pursued without sustaining the core elements, which are the capital stock including environmental, sociocultural and economic capital (also described as First Circle – sustainability of local capital stock). For sustainability of local capital stock, strategies should be implemented (Second Circle –strategies for rural tourism development). These strategies include:

1. Increase the level of co-operation between host communities with tourism operators in promoting and marketing of CBRT products.
2. Establish management plans through collaboration between tourism authorities and host communities.
3. Tourism authorities should improve the effectiveness of tourists’ education, including promotion of responsible tourists’ behaviour.
4. Integrate and optimise the potential both of tourism operators and of tourists to stimulate the local economy.

The proposed strategies are derived from examining the interaction within major stakeholders that should also be sustained by ensuring the roles and functions are optimised (Third Circle – participation of key stakeholders) to reach effective implementation of strategies and the capital stocks [14]. CBRT is a form of sustainable tourism derived from a bottom-up approach, with an objective of achieving responsible management of community resources and ensuring equitable distribution or sharing of benefits from tourism activities.

![Figure 1. A conceptual model of CBRT (Source: adapted from kamarudin [4])](image)

3. Research Methodology
A total of 20 respondents have participated in the survey conducted on 10th October 2018 consisted of local stakeholders, particularly homestay operators, business people, and residents from within the communities who work in tourism-related sectors, i.e. both in farming and non-farming activities. The respondents were interviewed to represent their opinions and perceptions of the tourism business performance in Mesilou Village, and in relation to the concept of disaster risk reduction and community resilience in disaster-prone areas (Figure 2). The survey of local stakeholders was conducted using questionnaire-guided interviews (to obtain quantitative data) and it is supported by qualitative information derived from a series of interviews and informal discussions with local informants, the youth group Mesilou Volunteer Club (MEVOC) and the head of the community. Personal observation of local tourism activities during the fieldwork is also included.

The main purpose of conducting the local stakeholders survey (involving local tourism and tourism-related entrepreneurs) is to assess the pertinent internal and external factors for tourism business resilience. In order to gather relevant information, a dedicated section of the survey questionnaire was formulated and answers given by respondents were recorded in a form of nominal data (selection of “yes” or “no” for answers). All data then was transferred to SPSS software (Statistical Package for Social Sciences) for analysis using simple frequency analysis to identify the most influential internal and external factors (i.e. with combinations of few sub-elements with highest to lowest percentages) that influenced business resilience in Mesilou village.
Figure 2. Location of Mesilou village, Kundasang, Sabah & distribution of homestays (and other tourism enterprises) in Mesilou as observed and recorded during research fieldwork in October 2018 (Source: as stated on each image)

4. Results and Discussions

4.1 Keeping CBRT afloat in disaster prone areas

There is no doubt that the tourism sector has become one of the major contributors to development and it is an agent of change for many parts of the world. The strengths of tourism are described in various forms; as a tool in economic and physical development and as a means to enhance social and human capital development and the conservation of our natural environment [4,10]. In rural areas especially in developing countries, tourism development had been eagerly embraced as a panacea for revitalising the rural economy. Ever since the concept of sustainable development came into the development and conservation debate, many government agencies, particularly tourism-related bodies, have invested heavily to promote more sustainable forms of tourism in rural areas.

Multi-hazards and disasters on the other hands, affect our lives greatly and therefore it become everyone’s business. Every time disaster hit our community, it left substantial damages to physical and non-physical components (particularly economic and social aspects) that shaped our livelihood. From the community-based rural tourism (CBRT) point of view, disaster occurrences often led to significant decrease to destination image and reputation, increase fear of safety, damaging infrastructure and agriculture land. These led to the declining of tourist arrivals which affect income generation and revenue from tourism to the community. Failure to acknowledge these direct and indirect effects might weaken the tourism community’s capacity in coping with future disasters. Based on previous studies on CBRT in disaster-prone areas, researchers have uncovered unique cases whereby some rural communities that operates tourism as a vital income are able to rise above adversity and become resilient. These findings have led to further investigation to be undertaken to investigate the extent of inputs and local knowledge from the community in improving the disaster risk reduction (DRR) initiatives and promoting resilient CBRT in disaster-prone areas of Malaysia.

The popular tourism and major vegetable production areas of Ranau-Kundasang in Sabah in general, and Mesilou village in particular, have come into the limelight after the 6.0-magnitude earthquake hit Sabah in June 2015. Many experts considered the earthquake as the strongest to effect Malaysia since the 1976 Sabah earthquake. Based on local news report, eighteen fatalities were recorded and all occurring on Mount Kinabalu. Many of the local tourism attractions and highland farming areas have been closed temporarily for repair works, however many are yet to recover due to severe and/or permanent damages particularly on the basic infrastructure (collapse bridges, water supply disruption and damaged main roads and farm roads) [19].
4.2 Influential internal and external factors for CBRT resilience in Disaster-Prone Areas

This section identifies and explains the extent to which the respondents understand and are aware of the enabling factors for tourism activities and the phenomena of disasters in their village and the surrounding areas. As presented in Table 1, all respondents selected multiple answers when identifying the internal factors which contributed towards business resilience. All respondents answered “high self-esteem or self-belief they can succeed in business” as the main internal factor for business resilience. This showed a strong influence of the innate qualities of the individual in the business in charting the success of their company. These people who are also assumed as “local champions” are usually leaders with certain qualities such as high self-esteem and they are highly proactive. They are visionaries and risk takers who will put in the necessary effort to ensure business continuity and resilience in times of adversity.

Apart from individual factors, the surrounding environment also posed great influence towards business resilience. This includes the pertinent roles of kinship and family in supporting the business, particularly during difficult times by providing financial and moral support.

Table 1. Internal factors enabling business resilience (n=20)

| Valid | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| High self-esteem/self-belief they can succeed in business & Kinship/family support during difficult times (financial, workforce, morale boost) & Possess suitable skills to carry out self-maintenance/repair works & did not suffer major damage | 4 | 20.0 | 20.0 | 20.0 |
| Self-esteem/Self-belief can succeed in business & Kinship/family support during difficult time (financial, workforce, morale boost) & secured income from other sources | 3 | 15.0 | 15.0 | 35.0 |
| Self-esteem/Self-belief can succeed in business & Possess suitable skills to carry out self-maintenance/repair works & secured income from other sources & did not suffer major damage | 5 | 25.0 | 25.0 | 60.0 |
| Self-esteem/Self-belief can succeed in business & Kinship/family support during difficult time (financial, workforce, morale boost) & Possess suitable skills to carry out self-maintenance/repair works & secured income from other sources & did not suffer major damage | 2 | 10.0 | 10.0 | 70.0 |
| Self-esteem/Self-belief can succeed in business & Kinship/family support during difficult time (financial, workforce, morale boost) & Possess suitable skills to carry out self-maintenance/repair works | 6 | 30.0 | 30.0 | 100.0 |
| Total | 20 | 100.0 | 100.0 | |

Source: research fieldwork [19]
Other than the internal factors, the study has identified a few external factors that enabled business resilience (Table 2). A majority of the respondents i.e. 55% have specifically mentioned they are able to sustain their business despite growing disaster risks and uncertainties due to the following reasons; (1) they are not badly affected by the past disaster, hence were able to “bounce back” and resume normal operation, and; (2) tourists’ eagerness to return to Mesilou where it was observed that the number of visitors started to increase only a few months after the earthquake.

| Table 2. External factors enabling business resilience (n=20) |
|-------------------------------------------------------------|
| **Valid** | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Strong unity among community members & tourists eagerness to return | 4 | 20.0 | 20.0 | 20.0 |
| Suffer only small damages & tourists eagerness to return | 11 | 55.0 | 55.0 | 75.0 |
| Quick recovery works by government, suffer only small damages & tourists eagerness to return | 4 | 20.0 | 20.0 | 95.0 |
| Did not specify answers | 1 | 5.0 | 5.0 | 100.0 |
| **Total** | **20** | **100.0** | **100.0** |

Source: research fieldwork [19]

Figure 3 combined the main findings from data analysis i.e. explaining the interaction between internal and external factors that ensuring local CBRT business afloat and persist in Mesilou village in Sabah, particularly after 2015 earthquake. The presence of strong self-belief among tourism operators played a vital role and was cultivated through kinship strong and continuous support, income diversification strategy, possession of suitable skills and minor damages or disturbances prior to the disaster. Other than that, external factors helps speed up the recovery of business and enabling many of tourism operators to raise above adversity not long after the distortion period.
As to prove that the local CBRT has “bounce back better” hence recovering from previous bad experience, information in Table 3 indicated positive sign of development of new CBRT businesses in Mesilou after the 2015 Kudasang earthquake (45%) as compared to few years before the earthquake (55%). This finding can be interpreted as a positive sign of the resilience of local tourism businesses after a major disaster. It also proved that a place with high tourism potential such as Mesilou is not defined by the earthquake. In this instance, a major disaster event did not deter local and nearby investors to continue developing tourism and other economic projects in the study area.

Table 3. Year of establishment of business (n=20)

| Year of Establishment | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------|-----------|---------|---------------|--------------------|
| Early 2000 to 2010*   | 4         | 20.0    | 20.0          | 20.0               |
| 2011 to 2015 (before earthquake)* | 7 | 35.0 | 35.0 | 55.0 |
| 2016 (post-earthquake)* | 2 | 10.0 | 10.0 | 65.0 |
| 2017*                 | 7         | 35.0    | 35.0          | 100.0              |
| Total                 | 20        | 100.0   | 100.0         |                    |

Source: research fieldwork [19]

5. Conclusion
Keeping local CBRT business afloat prior to occurrence of disaster was not easy and straight forward process as demonstrated by respondents of this research. However, the process of bouncing back and business recovery after disaster is also possible to achieve but with strong and continuous support from both internal and external factors as presented in Figure 3. Findings from data analysis has enable authors to made two general conclusions namely; (1) disaster and fear of safety did not deter the tourists from visiting Mesilou after the earthquake, and; (2) the CBRT operators pose strong social, economic and environmental capitals to enabling them to “bounce back” from adversity and rebuilt the community within shorter period after disasters i.e. less than three months for majority of respondents. Disaster did not deter tourist from returning to Mesilou due to high level of visitors satisfaction (good visiting experience) and due to variety of tourist attractions to be offered to tourists (as compared to other highland destinations in Sabah). The availability of internal and external support system also encourage CBRT operators to regain confident to be persist and rebuilt their business reputation.

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