

Sustainable Marine Tourism: Its Existence and Role for Local Communities in Bali

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Abstract

The development of marine tourism in Indonesia has rapidly impacted the economic, socio-cultural and living environment for the local community, therefore, its activities must consider the principles of sustainability. As a world tourist destination, Bali is also famous with its marine tourism. It is developed by managing the diversity of tourist resources in coastal areas, so that the growth of this industry has penetrated almost all areas of this island. This study aims to assess the existence of marine tourism in Bali and its impacts to the local community in the economic, socio-cultural, and environmental sector. Data were collected from 54 marine tourism companies which spread across three regencies in Bali : Buleleng Regency in the northern part of Bali, Karangasem Regency in the eastern part of Bali, and Badung Regency in the southern part of Bali. The survey on 414 Local communities in three locations were selected purposively, then some questionnaires were distributed to determine their perceptions on the economic, social - cultural, and environment impacts and they were analyzed by using factor analysis. The results showed that the existence of marine tourism in Bali, can be seen from the existence of 85.2 per cent of the marine tourism business which are owned by the local community. About 55.6 percent of this business employs local people from one up to 10 people. In terms of human resource development of local communities, 61.1 percent of these efforts have shown some contributions. Furthermore, the concern about the environment in the form of conservation is very high which is perceived by 92.6 percent of respondents. The type of products offered by marine tourism in Bali covers almost the entire marine tourism product in the world, with major markets: Europe, Asia, and Australia. The benefits derived from marine tourism for local community in their region are : (1) employment, (2) an increase in local public education, (3) a rise of physical environmental conservation and preservation of the marine coastal and marine biota.

Keywords: marine tourism, sustainable tourism, tourism impact, local community, bali

I. Introduction

Tourism has shown extraordinary strength and resilience in recent years, despite many challenges, particularly those related to safety and security. Yet, international travel continues to grow strongly and contribute to job creation and the wellbeing of communities around the world (UNWTO, 2017).

Tourists who visited Indonesia experienced a positive growth. In 2013, foreign tourists visited Indonesia were 8.8 million with foreign exchange earnings of US \$ 10.054 million. By 2015, the number of foreign tourists who come to Indonesia has reached 10.4 million people, and by the end of 2019 foreign tourists are targeted to visit Indonesia as many as 20 million with the forecast of foreign exchange revenue of Rp. 260 trillion (www.bps.go.id., www.parekraf.go.id retrieved on March 1st, 2016).

The results of the PES (Passanger Exit Survey) report indicates that culture is the most popular tourism (60 percent), nature-related products (35 percent) and the rest are artificial tourism products. From a number of natural tourism products that became the main tourist attraction in Indonesia, it turns out that marine products are in a great demand by foreign tourists (PES, 2014). In the future, this tourism product will become a leading tourism product, considering the potential of Indonesia's maritime resource with the support of government policy. In the current Jokowi-JK governance era, Indonesia's development agenda in the next five years is emphasized on preparing Indonesia as the world's maritime axis, thus providing opportunities for marine tourism development, whose demand in Indonesia has reached one million foreign tourists.

Besides its popularity as a cultural tourist destination, Bali is also known as a destination with a variety of marine tourism products. Bali has become the leading sailing destination in Indonesia, especially North Bali and South Bali, even become one of potential yachting sites in Indonesia, namely Lovina, Amed, Benoa Harbor, and Serangan.

Three districts in Bali that have a prominent marine tourism potential are Buleleng, Karangasem and Badung. The development of tourist visits to the region, as set out in Table 1.

Table 1
Growth of Tourist Visits in Buleleng, Karangasem and Badung Regencies-Bali
Year 2009 – 2013

No	Buleleng Regency			Karangasem Regency			Badung Regency		
	Year	Tourist Visits		Tahun	Tourist Visits		Tahun	Tourist Visits	
		Freq	%		Freq	%		Freq	%
1	2009	153,522	106.15	2009	293,277	17.45	2009	1,441,471	-39.68
2	2010	466,078	203.59	2010	354,473	20.9	2010	2,745,555	90.47
3	2011	263,075	-43.56	2011	416,363	17.5	2011	3,265,907	18.95
4	2012	562,895	113.97	2012	462,223	11.0	2012	4,126,862	26.36
5	2013	638,147	13.37	2013	461,515	-0.2	2013	3,586,221	-13.10

Description: (%) shows the growth of tourist visits

Source: BPS Buleleng Regency (2014), BPS Karangasem Regency (2014), BPS Badung Regency (2014)

The growth of tourist visits from year to year in all three districts as shown in Table 1 indicates that there is an increasing trend of demand for marine tourism in all three areas. This will affect the development of the marine tourism industry and its role for local communities. That is why it is important to see further about the existence of marine tourism in all three locations and its role for the life of local people in Bali.

II. Main Body

A. Literature Review

1. Defining Tourism and Marine Tourism. Tourism is the sum of the phenomena and links arising from the interaction of tourists, governments, and local communities in the process of attracting and hosting these tourists and other visitors (Galston & Baehler, 1995). The marine environment has long been one of the most attractive settings for tourism (Oram, 1999). Marine tourism, as defined by Orams (*Marine tourism: Development, impacts and management*, Routledge; 1999, p. 9) includes 'those recreational activities that involve travel away from one's place of residence and which have as their host or focus the marine environment (where the marine environment is defined as those waters which are saline and tide-affected)'. Thus, it includes a wide spectrum of activities, such as scuba diving and snorkeling, wind surfing, fishing, observing marine mammals and birds, the cruise ship and ferry industry, all beach activities, sea kayaking, visits to fishing villages and lighthouses, maritime museums, sailing and motor yachting, maritime events, Arctic and Antarctic tourism, and many more. There is no estimate of the value of the marine tourism industry; however there is no doubt that the annual turnover is substantial and that it forms a significant business sector with widespread economic influence. This particularly so for island and coastal communities, where marine tourism can form the single most important economic activity (Miller, 1990).

2. Sustainable Tourism Concept . Four basic principles for the concept of sustainability have been considered (Jiaying & Sanjay, 2009): (1) the idea of holistic planning and strategy-making; (2) the importance of preserving essential ecological processes; (3) the need to protect both human heritage and biodiversity and (4) development based on the idea that productivity can be sustained over the long term for future generations (WCED, 1987). Applying these concepts to Sustainable Tourism, the World Tourism Organisation (WTO, 1998, p. 21) defines Sustainable Tourism development as meeting the needs of present tourists and host regions while protecting and enhancing opportunities for the future. Sustainable rural tourism development has been defined as a tourism which focuses on the appropriate policies and strategies that could guarantee the benefits while restricting its negative impacts of rural tourism in local community (Ertuna & Kirbas, 2012). Sustainable tourism is highly demanded due to mass tourism which was insensitive to its social, cultural, economic, and environmental condition of tourist destinations (Fiorello & Bo, 2012). As a result, sustainable tourism is used to avoid the negative effects of tourism on local destinations (Dolnicar, 2006). Tourism may cause long term changes in the community's values, beliefs, and cultural practices. Culturally sustainable principal can be seen through local community involvement in tourism activities to preserve the traditional culture in a community (Dorobantu & Nistoreanu, 2012). On the other hand, Cawley and Gillmor (2008) posited that tourism could harm the environment and the

community. Thus, community involvement in marine tourism development process plays a crucial role in protecting the environmental sustainability in a tourist destination (Dorobantu & Nistoreanu, 2012).

3. Marine and Tourism Impact for Local Community. Tourism is a sector that can not stand alone but requires the support of other sectors. Both the tourism sector and other sectors related to the tourism sector can not be denied a job that absorb so much labor. The negative impacts caused by tourism has a smaller magnitude than the positive impact. The negative impact of one of them is increase the rate of inflation and skyrocketing land prices. The velocity of money in economic activity in the area is very large tourist destination. Demand for consumer goods also increased, which in turn will trigger inflation. On the other hand, the construction of various tourism facilities will soon trigger a price of land around the site until the price is unreasonable (Mathieson and Wall, 1982; Leiper, 1990: 233). Conversely, tourism also has a number of effects that are less useful to the local community (McKercher 2014). The presence of tourists and their impact on local communities: a) Demonstration effect, b) Crime, c) Religion, d) Prostitution / sex tourism. However, Mathieson and Wall (1982: 37) states that there is no clear distinction between social and culture phenomena, so most experts combine social impact and the impact of culture in tourism to the title of "socio-cultural". Lal Mukherjee (2013) underlined that tourism also impacted to the socio cultural to the local communities in some points such as in the change of the local identity which can be seen in some facts: 1) Commercialization of local culture; 2) Standardization; 3) Adaptation to tourist demands. Cultural clashes may arise through : 1) Economic inequality - between locals and tourists who are spending more than they usually do at home., 2) Irritation due to tourist behaviour - Tourists often, out of ignorance or carelessness, fail to respect local customs and moral values, 3) Job level friction - due to a lack of professional training, many low-paid tourism-jobs go to local people while higher-paying and more prestigious managerial jobs go to foreigners or "urbanized" nationals (Lal Mukherjee ,2013). Tourism, according to Timur and Getz (2009), may lead to social problems such as traffic congestion, construction projects, crimes, mixed effects on quality of life, and changes in the communities' identity. Besides, tourism can influence local communities' moral values due to monetary benefits (Archer, Cooper, & Ruhanen,2005).

As marine tourism also part of tourism, and Bali also a marine tourist destination, those impacts could be affected to the local community who live around the area, involved directly or indirectly to marine tourism activities.

III. Method

This research was conducted in Bali, and its sampling area, namely: North Bali area is Buleleng Regency (Lovina Tourism Area, Pemuteran, and Menjangan Island); East Bali area is Karangasem Regency, (Candidasa Tourism Area, and Tulamben Tourism Area); and South Bali Area namely Badung Regency (Tanjung Bena Tourism Area, Kedonganan, and Pandawa Beach). The selection of the areas are based on several considerations, including: (1) these three districts are the golden triangle of marine tourism potential in Bali, (2) The marine tourism activities in Bali are centralized in these three locations; (3) Their success in developing marine tourism destinations, so that they obtained the awards of marine biota conservation, as well as being the top ten dive site in Asia CNN version because of its beauty.

The total of 54 marine tourism companies were selected as samples using purposive accidental sampling technique with checklist as a data collection tool to perceive the existence of marine tourism company. To comprehend the role of marine tourism for local community, 414 respondents of local community were selected with purposive sampling technique and questionnaire as its tool. These respondents belongs to the local government, academics, community leaders, NGOs, tourism practitioners, and tourism industry actors. The composition of respondents in each area are: North Bali (144 respondents), East Bali (120 respondents), and South Bali (150 respondents). The validity and reliability test were performed on the questionnaire to determine the feasibility and consistency of the questionnaire. The criteria of respondents in this study can be seen in table 5.

Table 5
The Respondents in Buleleng, Karangasem and Badung Regency 2015

NO	Type of Respondents
1.	Local Government : Department of Tourism and Department of Fisheries and Marine Service
2.	Tourism Academics in the Region of North, East, and South Bali, Lecturer at the University of Tourism Department
3.	Community Leaders in the Region of North, East, and South Bali
4.	Non-Governmental Organizations Figures that are initiated by local people especially in tourism

area in North, East and South Bali Area
5. Tourism Practitioners (people who are considered to have knowledge in tourism) in North Bali, East and South Bali
6. Tourism Industry Performers (accommodation, restaurant, dive shop, village businesses engaged in tourism) in the Region of North, East, and South Bali

Source: Destination Field Research (2015)

To support the results of this study, interviews with leaders of government department and community were also conducted. The collected data were analyzed using factor analysis to find out the most dominant factors of marine tourism role for local community.

IV. Conclusions

A. Results

1. Existence of Marine Tourism in Bali. It covers the following points: (1) company profile, (2) the product offered, (3) market share, and (4) its contribution to the economic, social - cul-ural and environmental aspects of local people. Table 6 illustrates the existence of marine tourism companies in Bali Province.

Table 6
Existence of Marine Tourism Company in Bali Province 2015

Company Criteria	North Bali		East Bali		South Bali		BALI		
	Freq	%	Freq	%	Freq	%	Freq	%	
Length of Business	<1 year	1	4.2	2	10.0	0	0.0	3	5.56
	1-5 years	9	37.5	4	20.0	0	0.0	13	24.07
	5-10 years	7	29.2	6	30.0	3	30.0	16	29.63
	>10 years	7	29.2	8	40.0	7	70.0	22	40.74
Business Ownership	Local	20	83.3	16	80.0	10	100.0	46	85.19
	Immigrant	1	4.2	0	0.0	0	0.0	1	1.85
	Foreign	3	12.5	4	20.0	0	0.0	7	12.96
Number of Local Workers	1-10 people	18	75.0	11	55.0	1	10.0	30	55.56
	11-20 people	4	16.7	4	20.0	2	20.0	10	18.52
	21-30 people	1	4.2	2	10.0	3	30	6	11.11
	> 30 people	1	4.2	3	15.0	4	40	8	14.81
Local Community Job	Manager	9	4.89	0	0.00	17	45.95	26	4.77
	Staff Office	27	14.67	237	73.15	15	40.54	279	51.19
	Dive Guide	69	37.50	57	17.59	0	0.00	126	23.12
	Porter	6	3.26	7	2.16	0	0.00	13	2.39
	Fisherman	39	21.20	2	0.62	0	0.00	41	7.52
	Souvenir seller	18	9.78	0	0.00	0	0.00	18	3.30
	Massage Therapies	10	5.43	0	0.00	0	0.00	10	1.83
	Security	1	0.54	5	1.54	0	0.00	6	1.10
	Driver	5	2.72	16	4.94	5	13.51	26	4.77
Enactment of regional minimum wage	Yes	9	37.5	10	50.0	9	90.0	28	51.85
	No	15	62.5	10	50.0	1	10.0	26	48.15
Enactment of employment insurance	Yes	8	33.3	9	45.0	2	20.0	19	35.19
	No	16	66.7	11	55.0	8	80.0	35	64.81
Minimum Requirements for Education	Elementary school	2	8.3	3	15.0	0	0.0	5	9.26
	Junior High School	1	4.2	1	5.0	0	0.0	2	3.70
	Senior High School	8	33.3	9	45.0	1	10.0	18	33.33
	D1/D2/D3/D4	1	4.2	0	0.0	0	0.0	1	1.85
	Others	12	50.0	7	35.0	9	90.0	28	51.85
Marine Tourism Products	Watersport	1	1.61	0	0.00	27	54.00	28	22.05
	Canoeing	2	3.23	0	0.00	0	0.00	2	1.57
	Cruising	1	1.61	0	0.00	0	0.00	1	0.79
	Dolphin watching	5	8.06	0	0.00	0	0.00	5	3.94

	Glass Bottom	3	4.84	0	0.00	0	0.00	3	2.36
	Kayaking	3	4.84	0	0.00	0	0.00	3	2.36
	Scuba Diving	24	38.71	14	38.89	5	10.00	24	18.90
	Snorkeling	20	32.26	9	25.00	5	10.00	34	26.77
	Turtle Watching	2	3.23	0	0.00	5	10.00	5	3.94
	Whale Watching	1	1.61	0	0.00	0	0.00	1	0.79
	Culinary	0	0.00	10	27.78	2	4.00	12	9.45
	Trekking	0	0.00	1	2.78	0	0.00	1	0.79
	Hookah	0	0.00	1	2.78	5	10.00	6	4.72
	Fastboat	0	0.00	1	2.78	0	0.00	1	0.79
	Surfing	0	0.00	0	0.00	1	2.00	1	0.79
Marine Tourism Market	East Asia	11	12.94	4	22.22	18	58.06	33	24.63
	Australia	12	14.12	4	22.22	7	22.58	23	17.16
	Europe	52	61.18	9	50.00	0	0.00	61	45.52
	ASEAN	10	11.76	1	5.56	6	19.35	17	12.69
	Amerika	2	2.35	0	0.00	0	0.00	2	1.49
Social Cultural Contributions	Yes	14	58.3	9	45.0	10	10.0	33	61.11
	No	10	41.7	11	55.0	0	0.0	21	38.89
Environmental Contributions	Yes	23	95.8	17	85.0	10	10.0	50	92.59
	No	1	4.2	3	15.0	0	0.0	4	7.41
Environmentally Friendly Waste Management System	Yes	8	33.3	5	25.0	8	80.0	21	38.89
	No	16	66.7	15	75.0	2	20.0	33	61.11
Total Informan		24	100.0	20	100.0	10	100.0	54	100.00

Source: Destination Field Research (2015)

Table 6 illustrates, based on the 54 marine tourism companies selected as samples, as much as 85 percent are owned by local communities. Interestingly, almost 13 percent of the business are owned by foreigners. Generally marine tourism business has been operating in Bali for a long time. As many as 54 percent have been around 1 to 10 years, even nearly 41 percent have been in operation for more than 10 years. The local people employed in those tourism company are varied with 56 percent of the companies employ local people between 1 - 10 –eople; 19 percent of companies employ local people between 11 - 20 –eople, and about 15 percent of companies employing local people more than 30. This is very encouraging, because the existence of marine tourism business is already able to open employment opportunities for local communities. Determining from the position occupied by the local community in the company, currently not satisfying enough. Less than 5 percent of local people are able to occupy managerial positions, while most of them (78 percent more) are only staff (office staff, dive guide, porter, and security). This condition is not surprising, because in terms of education, more than 46 percent was only able to complete his education at high school level, even as much as 52 percent more did not finish primary education. It needs a serious attention from the government and business managers, through improving the education and skills of local communities, so that knowledge transfer and managerial skills can be implemented. From these conditions, it is depicted that marine tourism in Bali has provided economic benefits for local communities

The benefits of marine tourism for local communities, a total of 61.11 percent of the company contribute to the socio-cultural side, which include: the development of human resources in the form of English training, free snorkeling and diving training, providing educational scholarships, and opening dance studio. Meanwhile, on the environmental side, 92.59 percent of marine tourism companies delivered their contribution to this field, with activities in the form of beach and sea cleaning from plastic waste, cleaning of coral reefs from pests and plastic waste attached to coral reefs, turtle breeding, reforestation with certain types of crops, the development of artificial reefs, contributions in the form of funds for cleanliness, and liquid waste management. The products offered by marine tourism companies to tourists cover almost all types of marine tourism products in the world with three major market shares coming from countries in Europe, Asia, and Australia.

2. Marine Tourism: Economic, Socio-Cultural, and Environmental Impacts for Local Communities in Bali. The role of maritime tourism for local communities is derived from the tabulation of questionnaire data, where respondents perceive the role in terms of economic, socio-cultural, and environmental aspects as shown in Table 7.

a. Profile of Respondents

Table 7

Profile of Respondents

Informan Types		North Bali		East Bali		South Bali		BALI	
		Freq	%	Freq	%	Freq	%	Freq	%
Local government		4	2.8	0	0.0	0	0	4	0.97
Tourism academicians		2	1.3	2	1.7	0	0	4	0.97
Public figures		24	16.7	38	31.7	45	30	107	25.85
Non government organization figures		46	31.9	20	16.7	90	60	156	37.68
Tourism industry performer		65	45.2	52	43.3	10	6.7	127	30.68
Tourism practitioners		3	2.1	8	6.7	5	3.3	16	3.86
TOTAL		144	100	120	100	150	100	414	100
Gender	Male	111	77.1	104	86.7	94	62.6	309	74.64
	Female	33	22.9	16	13.3	56	37.3	105	25.36
Age	18-25	25	17.4	18	15.0	24	16	67	16.18
	26-33	25	17.4	23	19.2	30	20	78	18.84
	34-41	30	20.8	22	18.3	44	29.3	96	23.19
	42-49	46	31.9	32	26.7	31	20.6	109	26.33
	50-57	15	10.4	15	12.5	14	9.3	44	10.63
	58-65	3	2.1	10	8.3	7	4.6	20	4.83
Informan Types		North Bali		East Bali		South Bali		BALI	
		Freq	%	Freq	%	Freq	%	Freq	%
Length of stay	<10	7	4.9	7	5.8	4	2.6	18	4.35
	10-20	18	12.5	7	5.8	36	24	61	14.73
	21-30	18	12.5	7	5.8	9	6	34	8.21
	31-40	12	8.3	4	3.3	3	2	19	4.59
	>40	2	1.4	3	2.5	1	0.6	6	1.45
	From birth	87	60.4	92	76.7	97	64.6	276	66.67
Education	Not completed in primary school	6	4.2	0	0.0	14	9.3	20	4.83
	Primary school	14	9.7	13	10.8	28	18.6	55	13.29
	Junior High School	13	9.0	13	10.8	26	17.3	52	12.56
	Senior High School	65	45.1	61	50.8	62	41.3	188	45.41
	D1/D2/D3	27	18.8	7	5.8	11	7.3	45	10.87
	D4/Bachelor	18	12.5	22	18.3	8	5.3	48	11.59
Post Graduates	1	0.7	4	3.3	0	0	5	1.21	
Religion	Hindu	123	85.4	118	98.3	131	87.3	372	89.86
	Catholic	1	0.7	1	0.8	5	3.3	7	1.69
	Christian	2	1.4	0	0.0	1	0.6	3	0.72
	Islam	18	12.5	1	0.8	13	8.6	32	7.73
Main Occupation	Civil Servant	12	8.3	14	11.7	3	2	29	7.00
	Business Manager	41	28.5	22	18.3	40	26.7	103	24.88
	Tour Operator	10	6.9	2	1.7	1	0.6	13	3.14
	Hotel/Villa Employee	13	9.0	12	10.0	2	1.3	27	6.52
	Farmers	4	2.8	5	4.2	3	2	12	2.90
	Fisherman	4	2.8	6	5.0	6	4	16	3.86
	Dive Operator	21	14.6	12	10.0	8	5.3	41	9.90
	Security	1	.7	2	1.7	15	10	18	4.35
	Restaurant employee	4	2.8	10	8.3	21	14	35	8.45
Others	34	23.6	35	29.2	46	30.7	115	27.78	
Previous Occupation	Unemployed yet	5	3.5	5	4.2	16	10.7	26	6.28
	Labor	8	4.9	4	3.3	12	8	24	5.80
	Private employees	56	38.9	26	21.7	33	22	115	27.78
	Student	19	13.2	23	19.2	18	12	60	14.49
	Fisherman	8	5.6	7	5.8	8	5.3	23	5.56
	Unemployed / House Wife	3	2.1	3	2.5	11	7.3	17	4.11
Others	45	31.3	52	43.3	50	33.3	147	35.51	

	<1	31	21.5	15	12.5	16	10.7	62	14.98
	1-2	54	37.5	59	49.2	64	42.7	177	42.75
Income	2,1-3	26	18.1	25	20.8	28	18.7	79	19.08
	3,1-4	15	10.4	10	8.3	11	7.3	36	8.70
	>4	18	12.5	11	9.2	21	14	50	12.08
Increased revenue	Yes	104	72.2	87	72.5	107	71.3	298	71.98
	No	40	27.8	33	27.5	43	28.7	116	28.02

Source: Destination Field Research (2015)

Table 7 shows that, out of 414 selected respondents, dominated by men over the age of 42 years old and an average of 10 years of stay in each region, so it is idered quite understandable with the development of marine tourism in the region. The education background of the respondents is dominated by high school graduates. They have felt the role of marine tourism for local people's li'es, expressed in the form of their perceptions where as much as 71.98 percent stated the increase in income, with an average current income of 2 million or less expressed by 57.73 percent of respondents, 28 percent of respondents earned between 2.1 - 4 m-llion per month, and the rest earned more than 4 million.

b. Factor Analysis Results

After all of the statement item on the questionnaire extracted on the factor analysis, some items are clustered, consisting of factors 1 and factor 2 which is then named in accordance with the characteristics of items that make up the group as can be seen through the table 8 below.

Table 8
Result of Factor Extraction Analyzer

Variable Impact		North Bali		East Bali		South Bali	
		Internal Benefits	External Benefits	Benefits	Load	Benefits	Load
Economic Impact							
AE1	Rising prices of basic commodities	TVR	TVR	0,19	0,75	-0,11	0,74
AE2	Rising rental and property prices	TVR	TVR	0,16	0,83*	0,06	0,84*
AE3	Increasing business competition	TVR	TVR	0,14	0,76	0,23	0,73
AE4	Increased earnings	0,67	0,33	0,68	-0,18	0,74	0,05
AE5	Increased employment opportunities	0,85	0,20	0,77*	-0,07	0,85*	0,06
AE6	Increased business opportunities	0,76	0,18	0,75	-0,19	0,78	0,10
AE7	Increased employment	0,88*	0,12	0,68	0,08	0,77	0,08
AE8	Ease to meet the necessities of life	0,47	0,55	0,67	-0,18	0,58	-0,03
AE9	Increased demand for seafood products	0,28	0,53	0,36	0,09	TVR	TVR
AE10	Increasing the quality of public facilities and infrastructure	0,16	0,88*	0,51	0,01	TVR	TVR
AE11	Increased number of public facilities and infrastructure	0,09	0,86	0,61	-0,04	TVR	TVR
Socio-Cultural Impacts		Benefits	Load	Benefits	Load	Benefits	Load
SB1	Increased crime	TVR	TVR	-0,28	0,64	-0,19	0,77
SB2	Deviation of social behavior	-0,11	0,40	-0,23	0,52	-0,12	0,80*
SB3	Perubahan kebiasaan masyarakat menjadi lebih buruk	-0,19	0,68	-0,02	0,65*	0,08	0,76
SB4	Changes in people's habits become worse	0,00	0,75*	0,32	0,62	-0,22	0,37
SB5	The erosion of traditional activities	-0,01	0,63	0,47	0,63	-0,24	0,54
SB6	Commercialization of local cultural products	0,03	0,55	0,30	0,39	TVR	TVR
SB7	Increased stress or anxiety	-0,03	0,60	0,23	0,56	-0,04	0,56
SB8	Livelihood changes	TVR	TVR	TVR	TVR	TVR	TVR
SB9	Increased role of women	0,63	-0,02	0,43	-0,04	TVR	TVR
SB10	Strengthening awareness on traditional values	0,63	-0,36	TVR	TVR	0,66	-0,25
SB11	The more preserved the shrine	0,76	-0,21	TVR	TVR	0,76	-0,17
SB1	Increased public education	0,82*	0,01	0,73*	-0,32	0,78*	-0,10

2							
SB1	Increasing number of migrant population	TVR	TVR	TVR	TVR	TVR	TVR
3							
SB1	Increased ability of foreign languages	0,69	0,10	0,53	-0,34	0,53	-0,34
4							
	Environmental Impacts	Benefits	Load	Benefits	Load	Benefits	Load
LI1	The agricultural area is converted into a place of business	TVR	TVR	TVR	TVR	0,25	0,55
LI2	The decline of living comfort	-0,13	0,60	-0,18	0,44	TVR	TVR
LI3	Increased air pollution	-0,23	0,80*	-0,22	0,66	-0,35	0,73
LI4	Increased water pollution	-0,26	0,79	0,08	0,86*	-0,23	0,79*
LI5	Reduced public space	0,15	0,64	-0,08	0,75	0,01	0,65
LI6	Increased volume of waste and waste	0,06	0,75	-0,16	0,71	-0,14	0,74
LI7	Increased use of environmentally friendly waterways	0,38	-0,05	0,45	-0,05	0,61	0,23
LI8	Increased maintenance and conservation of coral reefs	0,87	-0,02	0,80	-0,13	0,79	-0,06
LI9	Increased conservation of marine biota	0,85	-0,06	0,88*	-0,13	0,82*	-0,17
LI10	Increased conservation of coastal and marine physical environments	0,90*	-0,09	0,74	-0,32	0,77	-0,12
LI11	Increased preservation of trees	0,79	-0,09	0,66	-0,05	0,45	-0,20

Description: Sign (*) represents the highest loading factor value in a group of component factor means that the item is valid and reliable in each of the research sites

Source: Destination Field Research (2015)

Table 8 described in accordance with each of the following study areas:

1). *North Bali Area (Buleleng Regency)*. Marine tourism in the area of North Bali plays a positive role for the local community which is shown from the economic benefits felt by the community. These benefits include: the increase employment opportunities, business opportunities for local communities, and household income of local communities. Other economic benefits include: improving the quality of public facilities and infrastructure, making it easier for people to meet their daily needs, and increasing demand for seafood products.

In relation to the socio-cultural aspects of marine tourism in the area of North Bali also tends to play a positive role for local communities, which is shown by the dominant perceived benefits of: increasing local community education, increasingly protected and maintaining the holy places in their environment, increasing ability to speak foreign languages of local communities,, the increasing role of women in marine tourism activities, and the growing public appreciation of their traditional values. On the other hands the socio-cultural problems occurred in the local community includes: traditional structures with the concept of upstream – downstream (*hulu –teben*) has faded slowly, traditional activities eroded or disappear slowly, increasing stress or anxiety felt by the community (traffic congestion, noise, more populations, competition for livelihoods), commercialization of local cultural products, and deviations from social behavior.

In terms of the environment, marine tourism in the North Bali Region positively contributes to local communities reflected in the environmental benefits perceived by local communities including: increased conservation of coastal and marine physical environments, increased conservation and conservation of coral reefs, enhanced marine biota conservation, Natural vegetation as a shading, and increasing use of environmentally friendly transportation. In addition to the benefits, there are also environmental problems: the increase of waste, air, water pollution, the decline of public spaces and living comfort.

2). *East Bali Area (Karangasem Regency)*. The benefits of marine tourism in East Bali for the local community economically include: the increase of employment and local business opportunities, the ease of local communities to meet their daily needs, the quality and quantity of public facilities and infrastructure, as well as the rising demand for local marine products. The economic problems are from the presence of marine tourism in their area, including: the increase in land and property lease prices, business competition, and rising prices of basic needs.

In relation to the socio-cultural aspects of marine tourism in the East Bali Region also play a positive role for local communities in the form of: the increase of local communities education, the increase of foreign languages ability, and the increasing role of women in marine tourism activities. In addition, maritime tourism also raises some problems, such as the social behavior of people is adversely changing, the increase of criminal

acts, the decline of traditional activities, the fading of traditional structures that known as the upstream and downstream (*hulu teben*), the increase of stress or anxiety, and the commercialization of local cultural products.

The environmental side of the existence of marine tourism in East Bali is said to play a positive role for society, which is shown from the benefits occurred to the community. The benefits include: the increase conservation of marine animals and plants (*biota*) of the sea, guarding and preservation of coral reefs, preservation of marine and coastal physical environment, reforestation, as well as the use of eco-friendly water transport. On the other hand there are some problems occurred, namely the increase of water pollution, the decline of public spaces, the increase of volume of waste and air pollution, and the decline of living comfort.

3). *South Bali Area (Badung Regency)*. Marine tourism in South Bali Region positively contributes to the local community as shown by the economic benefits, such as: the increase of employment and business opportunities and the ease to fulfill the needs of life. On the other side, it causes some economic problems the rise of property rental prices (houses, land etc.), basic needs and the increase of competition.

From the socio-cultural point of view, marine tourism poses a positive role for local communities as demonstrated by: improving community education, preserving of sacred places, strengthening respect for traditional values, and increasing the ability of foreign languages of local communities. In addition to the benefits, there are also socio – cultural problems such as the change of social behavior, the increase of crime, the increase of stress and anxiety such as traffic congestion, the decline of traditional activities, and the fading of traditional buildings with the concept of upstream-teben.

In addition to economic and socio-cultural aspects, the role of marine tourism in South Bali for the environment also creates some benefits to the local communities such as: the increase of marine biota conservation, the increase of preservation and conservation of the coral reef, the increase of conservation of coastal and marine physical environments, eco-friendly water transport, and the preservation of trees. On the other hand, it should also be aware that there will always be environmental problems such as the increase of water pollution, waste, rubbish and air pollution, the decline of public and agricultural spaces, and the change of conservation areas into business spaces.

B. Discussion

The Confirmative Factor Analysis results show that marine tourism activities in Bali provide positive benefits to local communities. In the economic aspects, the benefits are the rise of employment, income, and the ease to meet the needs of life. This is in line with the results of various research on the impacts of tourism in a region. There is empirical evidence indicating that tourism activities in a region cause the growth of local economic activities. Basically the tourism sector is needed to create a success in any business related to it. Therefore, tourism is a sector which raises job opportunities in both formal and informal sectors. In some developing countries, wages from the tourism sector are higher than in other sectors. It can attract workers from other sectors to work in the tourism sector. Turner (2013) also asserts that as more tourists come to a destination, more hotels, restaurants and other tourism services are needed, resulting in more employment.

For the area of North Bali, an important finding in this study is people notice the economic benefits of marine tourism in their area. The dominant external benefits perceived by local communities in the area of North Bali is the improvement of the quality of public facilities and infrastructure. This is in accordance with the WTO statement (1980), that the location of tourist attraction requires infrastructure or public facilities (roads, railways, means of communication, clean water, electricity, gas, etc.). This is used to build supporting facilities.

There is a dominant local economic problem in East and South Bali, in the form of the increase in property (land / house / boarding house). Confirming the results of this study, Cohen (1984) stated that the development of tourism brings the impact of rising prices. Consumer price index is also increasing which will ultimately trigger inflation rate. On the other hand, the construction of various tourism facilities will soon trigger the price of land around the location. Tourism spurs the development of less productive sites or land, in some cases, the existence of tourism can increase the value of land (WTO, 1980). People notice the increase in land prices, especially the ones which close to the beach. Now in the villages where this research located in East Bali area is quite difficult to find the land which can be bought, even if available, the price offered is quite high. Many local people cannot afford to buy land because some investors can buy it without any economic problems, therefore some are buying in other villages or in rural areas. Similarly, in the area of South Bali, the development of tourism, especially marine tourism causes the price of land and property increased because its strategic position, especially land and property adjacent to the beach.

The social – cultural side play a positive role throughout the region. The dominant benefits is the improvement of local community education. Zaei (2013) also confirmed that one of the impacts resulting from the existence of tourism activities is the improvement of public education level. This is due to the interaction with the various languages and cultural tourists where it can build mental strength and public attitudes become more opened and advanced, so that people agree education is important. In addition, the demands of the tourism

industry for reliable human resources cause more emerging schools for the people who are interested in working into the world of tourism because of various job vacance opportunities. From the statement, maritime tourism in the three areas actually become one of the stimulants which can improve the education of local communities in order to work in the tourism sector, especially marine tourism.

On the other hand, there must be a social-cultural problems, and one of them is the fading of traditional structures. In accordance with the statement of McKercher (2014) which revealed eight fundamental truths about tourism, such as tourism is an industry dominated by private sector in which investment decisions are dominantly set based on the maximum profit to be gained. Thus, the development of tourism, especially marine tourism in an area will tend to stimulate various forms of investment, especially by the private sector that tend to be oriented towards profit. This form of investment is to build various types of tourism services business, such as accommodation. The tourism industry that tends to be profit oriented indicates the ignorance of the traditional concept held firm by the local people. Unlike the case of East Bali, the social-cultural problem is the local people tend to feel the change of habit which is caused by the interaction of people with a variety of languages and tourists' culture. Moreover, people tend to more easily imitate the behavior or bad habits of tourists. Confirmatively, this fact contradicts the statement of Zaei (2013) which states that tourism activities can build mental and public attitudes because of the interaction with various languages and cultural tourists, because on the other hand the interaction between tourists with local communities can also affect the attitude and local customs. As for the area of South Bali, the social-cultural problems that occurred is the deviation of social behavior. This is allegedly to the nature of the tourist to behave freely in tourist destinations, so that the indication of the characteristics of tourists in Badung regency will greatly affect the social – cultural changes. Such as drug abuse, prostitution, juvenile delinquency, and soon.

On the environmental aspects, the existence of marine tourism tends to play a positive role. This is demonstrated by the dominant benefits perceived by local communities in the areas of North, East and South Bali. The results of this study found that East and South Bali area has the same dominant benefit in the environmental aspect, namely the increase of marine biota conservation. On the other hand, North Bali gain an increase of the physical environment preservation of the coast and sea. Burke et al. (2012) states that, in many countries, fisheries, tourism, and coastline protection services are essential for livelihoods, food security, and community welfare. Therefore, the threat to coral reefs not only endangers marine ecosystems and species, but also directly threatens the communities and countries that depend on them. Because of this great dependence, not only the government is doing the conservation of fish and plants (biota) that live in the sea, local people also plant coral reefs, educate tourists not to step on the reef and not allow tourists to give food to the fish.

In addition to the perceived environmental benefits, it must be aware of the environmental problems that local communities have to bear, such as the increase of air and water pollution. This fact confirms that although the tourism industry belongs to a group of green industry, the growing supporting industries (accommodation, transportation, etc.) tend to increase soil, water and air pollution in areas where tourism activity takes place (Choi & Sirakaya, 2006 in Mertha, 2014).

C. Recommendation

Based on these reviews, the conclusions of this study are that the existence of marine tourism in Bali Province, among others: mostly owned by local people (85.19 percent); 55.56 percent of marine tourism businesses have employed local communities ranging from 1 to 10 people; contributing to the development of local people's human resources (61.11 percent of companies); as well as contributing to the conservation of the environment expressed by 92.59 percent of respondents. The types of products offered by marine tourism in Bali Province cover almost all marine tourism products in the world, with the main market share being Europe (45.52 percent), Asia (24.63 percent), Australia (17.16 percent).

The existence of marine tourism in Bali Province has a positive role for the local community. This can be illustrated through the benefits that are perceived by them in the form of: (1) employment, (2) local community education, (3) coastal and marine physical environment conservation and marine biota conservation. On the other hand, there are some problems for the existence of marine tourism in the form of: (1) the increase of land rent and property, (2) the waning of traditional structure, (3) the change of habit and social interaction (4) the increase of air and water pollution, (6) the increase of waste, (7) the decline of public spaces, and (8) the decline of comfort.

Referring to the conclusions of this study, some recommendation may be given as follows: (1) For Local Government : It is recommended to optimize the empowerment of local communities; Promote educational support programs for local communities; conducting counseling on the importance of preserving Balinese culture, and enhancing environmental conservation efforts. The government can work with academics to implement the program. The government also needs to make zoning arrangements for tourism activities, seaweed farming / seaweed farming and conservation of marine biota, especially on marine destination that have been developed; (2). For Community Leaders : It is advisable to draft regulations at the village level in relation to the

entry of investors, business competition and land use to avoid the economic problems such as the increase land and property lease rates and g business competition that could harm local people.

D. Limitation and Future Study Need

This study found that marine tourism has given benefits and costs to the local community. However, to measure the benefit in detail and confirm the cost that arise among the community needs further study with more sample quantity and different analysis technique to get the best result which represents the existence and real condition in the communities. It is also advised to conduct further research to analyze the development of marine tourism in Bali which emphasizes on the characteristics of the marine tourism market with the benefits and needs of the community, such as markets in Southeast Asia. It is also advisable to do research on the existence of marine tourism in terms of demand (tourists).

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