

調査報告

北スラウエシ州の国立自然公園 (Bunaken 及び Tangkoko) における観光現状とエコツーリズムに関する意向調査

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Research Report on the Current Tourism Conditions and Questionnaire Research on Ecotourism in the National Nature Parks, Bunaken and Tangkoko, in the North Sulawesi, Indonesia

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要 旨

本報告は、Bunaken 国立海洋公園及び Tangkoko 国立自然保護区（インドネシア、北スラウエシ州）でのエコツーリズム振興の可能性について、同地域の観光統計及びエコツーリズムの実施に関与する団体（地域住民、旅行業者、宿泊業者、及びガイド）への意識調査（アンケート）により検討するものである。北スラウエシ州への観光客の入込数としては、インドネシア全体の0.5%以内（29,715人、2009年）で変動しかなり限られている。Bunaken を訪問する観光客は、北スラウエシ州を訪問する外国人観光客の60%程度が訪問し、また国内観光客も最も多く訪問する、最も有名な観光地であることが分かった。一方、Tangkoko 国立自然保護区は、北スラウエシ州を訪問する外国人観光客の5%程度（1,859人、2009年）が訪問し、国内観光客は僅かしか訪れない場所である。アンケート調査では、何れの団体においても、エコツーリズムによる観光振興に対する期待は大きく、また、積極的に関与したいと思っていることが分かった。しかし、ゴミ問題、未処理水の流出等の環境問題や動物との関わり方の問題等の自然との関わりに関する問題、地域として関わりの社会的な問題、ガイドのインタープリテーション技量や商品としての質の問題等、様々な問題を抱えている。

キーワード : エコツーリズム, Bunaken 国立海洋公園, Tangkoko 国立自然保護区, 北スラウエシ州

Abstract

This is a report on evaluation of the possibility of ecotourism promotion in Bunaken National Marine Park and Tangkoko Nature Reserve, North Sulawesi in Indonesia, through review of tourism statistics and questionnaire research conducted on ecotourism related groups, local residents, travel agencies, hotel businesses and guides in these regions. Inbound tourists to the North Sulawesi are very limited as within 0.5% (29,715 in 2009) of those coming into

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Indonesia. In Bunaken, approximately 60% of inbound foreign tourists of North Sulawesi visited and many of domestic tourists visitation make Bunaken the most popular destination in the North Sulawesi. On the other hand, in Tangkoko Nature Reserve, where only 5 % (1,859 in 2009) out of foreign tourists of the North Sulawesi visited and few of domestic traveler visitation. The questionnaire result shows that ecotourism is welcomed as a part of tourism promotion, and many local residents and tourism affiliates have high expectations for it along with willingness to actively participate. However, they face many issues: environmental problems due to garbage and sewage; human-wildlife relation problems due to encounters between tourists and wild animals; social problems due to relationship-building with local communities; and professional problems due to lack of interpretation skills and quality of tour contents.

Keywords: Ecotourism, Bunaken National Marine Park, Tangkoko National Nature Reserve, North Sulawesi

Introduction

The tropical area of Southeast Asian region, although its natural environment has suffered damage from deforestation, construction of plantations, and the like activities, tropical rain forests and ocean coasts as well as mangroves around the estuaries which are rich in natural resources compared to developed nations. The level of excellence of the natural environment in this region has allowed active promotion of ecotourism. The biodiversity of Indonesia, alongside its cultural diversity are both signs of development of ecotourism in the nation.

Ecotour sites in Indonesia are widely dispersed throughout the areas stretching from Java and Bali Islands to the eastern side of the nation, including Lesser Sunda Islands and Sumatra (Paxton and Paxton, 1998). Although there are many natural parks and sightseeing spots in Sulawesi, its potential as an ecotour site is yet limited. For one reason, the sites are far away from the capital, Jakarta, and transportation access is inconvenient. The North Sulawesi, the venue of the field study of this paper, is a typical case of this and receives only a limited number of foreign tourists. However, the North Sulawesi's ecotourism resources are as rich as that of Tangkoko Batuangas Dua Saudara National Nature Reserve (described as "Tangkoko National Nature Reserve"), Bunaken Manado Towa National Marine Park (described as "Bunaken National Marine Park"), and Bogani Nani Wartabone National Park (Ross and Wall, 1999). There is quite a distance between this area and Java where the capital Jakarta is located. Only a limited number of tourists, both domestic and international, visit the area due to the inconvenience. The effort toward ecotourism or, rather the infrastructure development of ecotourism, is comparatively slow (Ross and Wall, 1999), but authors of this paper who have participated in local ecotours, consider that the potential of ecotourism promotion for this area is high.

In this study, attempts to grasp of their perspective and expectations to ecotourism, and the possibility of promoting ecotourism in this region are analyzed through the questionnaire on local residents and local tourism industry, travel agents, lodging facilities and tour guides. The field study has been conducted in Manado, Batuputih village, vicinity of Tangkoko Nature Reserve and Bunaken Island, the island included in the Bunaken National Marine Park.

Methods

1. Area Information

1.1 Manado

Manado is the capital of North Sulawesi with population of 429,149 as of 2008 (Sulut Dalam Anka 2009). There are many shopping malls, shops, hotels and restaurants as well as banks, federal agencies and universities. It is the center of business, tourism, public administration and education, etc. (Berkmoes, 2009). Manado served as the main place of tourist in the areas covered in this study, Bunaken and Batuputih as neighboring village of the Nature Reserve (Fig.1). From Manado, 47 travel agencies have been selected from the Indonesia Travel Agencies Association List for this study.

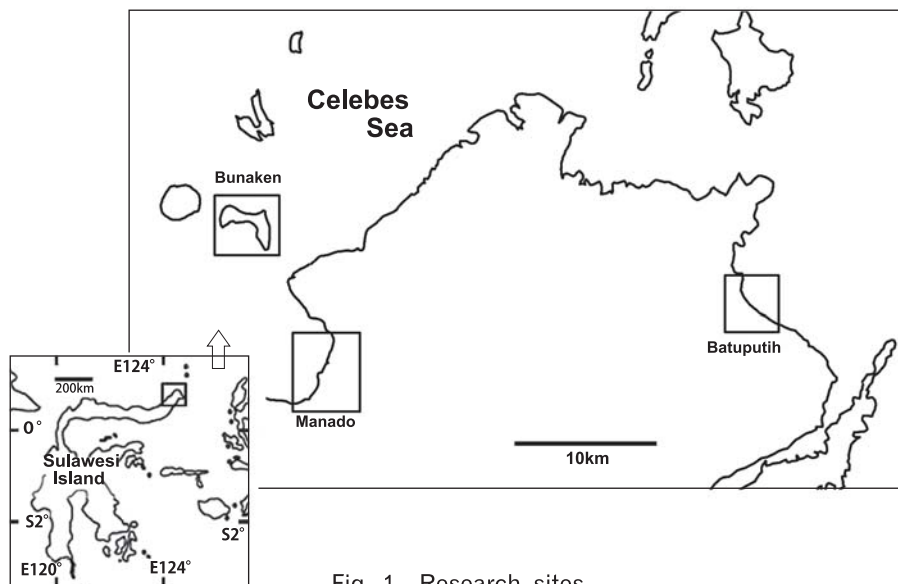


Fig. 1 Research sites

1.2 Bunaken Island

Bunaken is an island with 808 ha of land, located 7 km to the northwest of Manado, surrounded by coral reefs. It is a part of Bunaken National Marine Park, 76,265 ha (Berkmoes, 2009). The drop-off view of its coral reefs as well as its high-level biodiversity make the island one of the globally popular SCUBA diving sites. Most of the tourists come to this island for its marine activities, such as SCUBA diving and snorkeling (Berkmoes, 2009).

There are three villages in Bunaken Island which are Bunaken, Tanjung Parigi and Alung Banua. The population is 2,465 with 763 households (the same number as the heads of households) (Table 1). Many of the villagers make their living by fishery or agriculture, and some work in the tourism sector such as hotels, but there is no statistical data to confirm this.

1.3 Batuputih Village

Tangkoko National Nature Reserve is located in the northern part of Sulawesi Island and is a nature reserve covering 8,000 ha of land (Berkmoes, 2010). Most of areas are comprised of thick forest and many animals typical to the tropics may be observed. The most famous of all is the world's smallest ape Tarsius. Among the others, Cuscus, Black Macaques and Knobbed Hornbills may also be observed (Kinnaird and O'Brien, 1995). Dense jungle and the animals that inhabit the area have been a strong appeal to attract tourists.

The village closest to Tangkoko National Nature Reserve is Batuputih. There are two communities,

Batuputih Bawah and Batuputih Atas, form the village. Batuputih Bawah is near the entrance of the National Nature Reserve, and has guest houses, 4 facilities, to accommodate the tourists who plan to join tours of the National Nature Reserve. Batuputih Atas is somewhat far from the National Nature Reserve and stretches along the coastline. It has no lodging facilities, but has more restaurants and shops than Batuputih Bawah and is the center of Batuputih village. The rangers and guides working at the National Nature Reserve also reside in Batuputih Atas.

The population is 1,773 for Batuputih Bawah as of July 2011, and 2,038 for Batuputih Atas as of 2009. The former have 510 households and the latter has 553 households (Table 1). Major occupation of the villagers is either fishery or agriculture, and Batuputih Atas has 593 fishermen, which is 2.5 times more than that of Batuputih Bawah. For agriculture, the former has 152 farmers and the latter has 123 farmers (Table 1).

Table 1 Local resident statistics of Batuputih and Bunaken

Item	Batuputih		Bunaken I
	Atas	Bawah	
Male	1057	918	1248
Female	981	855	1217
Subtotal	2038	1773	2465
Householder	553	510	763
Fishermen	593	236	
Farmer	152	123	
Farm labor	61		
Carpenter	45	33	
Employee	15	39	
Retired	7	7	
Driver		30	
Unemployment		116	

Date sources: Batuputih Atas (in 2009), Batuputih Bawah (Feb. in 2009), and Bunaken (July in 2010).

2. Questionnaire Research

The questionnaire made with reference to the one conducted by Hirano (1999) asks local residents about their perspectives on tours emphasizing nature and cultural experiences (ecotourism) in terms of what benefits such tours would have, and the drawbacks from receiving incoming tourists. The questionnaire also asks about the level of participation and expectation. Based on this research, we were able to gain clear understanding of how local residents and the local tour industries, travel agencies, hotels, and tour guides, think and relate to ecotourism and what kind of expectations are embraced. It was also possible to know the local sensitivities concerning the subject and their readiness to prepare for promotion of ecotourism in the future. Research was conducted mainly in the areas where nature-experience tours are taking place, which are Bunaken and Batuputih where Tangkoko National Nature Reserve is nearby. In addition to this, questionnaire research was conducted among travel agencies in Manado, so that it may be possible for us to understand the perspectives from the business angle of tourism industry.

2.1 Method of Questionnaire Research and Target Groups and the Time Frame

For this research, two staffs (Indonesian university students) visited companies and households and interviewed respondents who were willing to participate. The questions were verbally asked in face-to-face while the answers were taken down in a form by staff. In an interview, the dialogue was recorded with an IC recorder and the files were saved. The respondents received a complimentary item, a hand towel.

The target group in Manado was travel agencies (a manager-level person per agency) but we also

surveyed tour guides (eco-tour and SCUBA diving). In Bunken and Batuputih, the target group was local residents (an adult per household) but we also surveyed the hotel businesses (a manager-level person per facility) and the tour guides.

The number of samples needed were determined based the following equation (case of finite population). Since there were 47 travel agencies (Indonesia Travel Agencies Association List) in Manado, more than 32 samples were needed. As for local residents, since there were 763 households in Bunaken, we needed more than 86 samples. For Batuputih, we needed 89 samples out of 1,063 households (Batuputih Bawah and Batuputih Atas combined).

$$n \geq \frac{N}{\left(\frac{e}{K}\right)^2 \frac{N-1}{P(1-P)} + 1}$$

Finite Population(N) :
Reliability(a) : a=0.95 k=1.96
Ratio of N(p) : 0.5 (maximum ratio due to uncertainties)
Required Accuracy(e) : 0.1

Selection of the samples has been conducted as such: For travel agencies in Manado, we visited the address of the travel agencies on the list. For local residents of Bunaken and Batuputih, the households on the sidewalk, every one out of 4 and 6 on one side, respectively, were visited and interviewed.

Results

1. Tourism Statistics

The foreign tourists coming to Indonesia has slightly increased from 6.23 million in 2008 and 6.32 million in 2009. But in 2010, there was a rapid increase and the total number was 7 million (Table 2). Amongst the airports and seaports, Bali receives the highest number of incoming foreign tourists, ranging between 2 million and 2.5 million (30% of the total) followed by Jakarta, Batam (near Singapore). The top two airports (Bali and Jakarta) and the seaport (Batam) together receive more than 70%, between 4.6 million and 5.4 million tourists, which shows that tourists tend to concentrate in these areas (Table 2).

Table 2 Inbound tourists to airports (seaports) in Indonesia

Port of Entry	2006		2007		2008		2009		2010	
	N	%	N	%	N	%	N	%	N	%
Ngurah Rai (Bali I)	1,328,929	27.3	1,741,935	31.6	2,081,786	33.4	2,384,819	37.7	2,546,023	36.4
Soekarno-Hatta (Jakarta, West Java)	1,147,250	23.6	1,153,006	20.9	1,464,717	23.5	1,390,440	22.0	1,823,636	26.0
Batam (Batam I)	1,012,711	20.8	1,077,308	19.6	1,061,390	17.0	951,384	15.0	1,007,446	14.4
Juanda (East Java)					156,728	2.5	158,076	2.5	168,888	2.4
Polonia (North Sumatra)	110,405	2.3	116,614	2.1	130,211	2.1	148,193	2.3	162,410	2.3
Tanjung Pinang (Bintan I)					123,505	2.0	102,487	1.6	97,954	1.4
Tanjung Priok (Jakarta, West Java)					67,886	1.1	59,212	0.9	63,859	0.9
Minangkabau (West Sumatra)					40,911	0.7	51,002	0.8	27,482	0.4
Sam Ratulangi (North Sulawesi)	15,902	0.3	17,000	0.3	21,795	0.3	29,715	0.5	20,220	0.3
Entikong (West Kalimantan)					19,989	0.3	21,190	0.3	23,436	0.3
Adi Sucipto (Central Java)					19,022	0.3	16,489	0.3	46,987	0.7
Others	1,256,154	25.8	1,399,898	25.4	1,046,559	16.8	1,010,723	16.0	1,014,603	14.5
Total	4,871,351	100.0	5,505,759	100.0	6,234,497	100.0	6,323,730	100.0	7,002,944	100.0

Date resources: Badan Pusat Statistik (<http://dds.bps.go.id/>) (reference date : 2011/9/8) and Sulawesi Utara Dalam Angka (2008).

In Java, there are three airports and one seaport which are Soekarno-Hatta (airport) and Tanjung Priok (seaport) of Jakarta and Juanda (airport) of East Java, and Adi Sucipto (airport) of Central Java. These ports receive between 25% and 30% of the incoming tourists, 1.6 million and 2.1 million. If incoming foreign tourists of Bali were added to these figures, it is more than 60%, 3.7 million, of all tourists coming through this area and the foreign tourists tend to concentrate in Bali and Java (Table 2). In other regions like Polonia (northern Sumatra, airport near the capital, Medan) receives approximately 2.5%, between 160 thousand and 170 thousand, Tanjun Pinang (Bintan, near Singapore) receives approximately 2 %, between 100 thousand and 120 thousand, and the rest of the regions together receive less than 1 % of the total, and the foreign tourists that visit these areas are very limited (Table 2).

In North Sulawesi, the number of foreign tourists increased from 15,902 in 2006 to 29,715 in 2009, but the number rapidly decreased to 20,220 in 2010 (Table 2). The proportion of foreign tourists visiting North Sulawesi stays at less than 0.5% with some variation, which shows that the incoming foreign tourists in this area are limited on a permanent basis (Table 2).

1.1 Tourism Statistics of Bunaken National Marine Park

The number of tourists in 2001 was 15,066, but there was a sharp rise two years later in 2003, and the number increased by 2.5 times and reached 38,855. Afterwards, however, there was a continual decline, though with some variation, and the number decreased to 26,455 in 2007 (Table 3). Domestic tourists comprise more than 60% (79% at maximum) and the variation of the total is consistent with the variation of the domestic tourists. On the other hand, the number of foreign tourists was 5,194 in 2001 but steadily rose to 10,409 in 2005, although it slightly decreased afterward, 10,373 in 2007 (Table 3).

The incoming foreign tourists from Sam Ratulangi International Airport increased from 15,902 in 2006 to 17,000 in 2007 (Table 2). On the other hand, the number of incoming foreign tourists to Bunaken Island remains stable at approximately 10,000 (Table 3). It is shown that the number of foreign tourists visiting Bunaken is in decline, but still around 60% of the foreign tourists coming in from the international airport visit Bunaken. Therefore, Bunaken is becoming the most important destination for foreign tourists in the area.

Table 3 Tourist visitation to Bunaken National Marine Park

Year	Foreign	Domestic	Total	F/T(%)	D/T(%)
2001	5,194	9,872	15,066	34.5	65.5
2002	8,263	17,616	25,879	31.9	68.1
2003	8,246	30,609	38,855	21.2	78.8
2004	9,824	28,177	38,001	25.9	74.1
2005	10,409	21,387	31,796	32.7	67.3
2006	10,229	22,050	32,279	31.7	68.3
2007	10,373	16,082	26,455	39.2	60.8

F/T: Foreign/Total, D/T: Domestic/Total Data source: Bunaken Entrance Fee System (<http://bunakenmanado.blogspot.com>) (reference date : 2010/8/15).

1.2 Tourism Statistics of Tangkoko National Nature Reserve

With regards to the statistical data of visitors coming to Tangkoko National Nature Reserve, we retrieved information from the Nature Reserve's record (guest book) under the permission of the reserve officers. The record was kept from January 26, 2009 to September 3, 2010. The information is categorized into visiting months, visitors' nationality and origin of region and has been charted in Table 4. Visitors from total of 56 nations and regions have been confirmed. During the recorded time frame, approximately 60% of the nations and regions (33 nations and regions) had less than 20 tourists visiting the National Nature Reserve.

The number of visitors in 2009 was 1,829. During high season between July and September, August had the largest number of 426, which is twice the number of July and September. The same trend was also seen in 2010 (Table 4). In 2009, Netherlands comprised the largest group at 246 (13.5%), followed by Germany (225, 12.3%), France (200, 10.9%), USA (152, 8.3%), UK (146, 8.0%) and Japan (100, 5.5%). The same trend was also observed in 2010. The region tends to receive more tourists from Europe, 1,209 in 2009 at 66.1% and 742 in 2010 at 65.1% (Table 4).

Since the number of foreign tourists who came in from Sam Ratulangi International Airport was 29,715 in 2009 (Table 2), we can say that 6.2% (1,859 tourists) have visited Tangkoko National Nature Reserve.

Table 4 Tourist visitation to Tangkoko National Nature Reserve

Nationality	2009												Total	%	2010									Total	%
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec			Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept		
Netherlands	2	6	17	16	13	21	37	50	35	29	10	10	246	13.4	22	1	13	17	20	13	27	63	4	180	15.8
Germany	2	4	49	12	10	17	23	33	32	19	17	7	225	12.3	5	10	5	12	12	12	24	32	1	113	9.9
France	1	3	7	8	12	9	14	105	16	9	11	5	200	10.9	5	7	9	13	7	7	9	66	2	125	11.0
USA		6	13	11	11	23	16	19	22	14	14	3	152	8.3	10	7	34	9	22	4	13	13	3	115	10.1
UK	2	9	24	20	11	12	19	19	16	7	3	4	146	8.0	11	4	8	7	4	7	11	19		71	6.2
Japan	3	2	4	1	4	3	17	39	16	5	2	4	100	5.5	1			5	14	8	4	3	1	36	3.2
Switzerland		1	2	2	2	7	14	15	14	11	14		82	4.5	4	1		7	13	7	12	16		60	5.3
Italy		2	3	7	10	4	1	37	1	6	4	4	79	4.3	6	3	2	3	1		14	18	2	49	4.3
Spain				4	2	1	16	27	9	4	3	1	67	3.7		2		4	2	4	6	16		34	3.0
Malaysia	13		2	3	2	5	8	6	4	6	2	2	53	2.9	1	1				6				8	0.7
Australia		3	3	1	2	7	15	5	5	2	2	5	50	2.7	3	2	4	3	5	5	4			25	2.3
Indonesia		3	7		1	3	5	4	3	2	3	4	35	1.9	3	5	1	1	1	4		3		18	1.6
Belgium			4	2	2	3	8	4	1	5	2	3	34	1.9	1		2	1	1	3	7	5	3	23	2.0
Singapore	3	1	2	1		7	4	8	4			2	32	1.7	2			9	2	1	2			16	1.4
Poland			2		9		1	8	7	2	2	1	32	1.7	1	1				2	1	5		10	0.9
Russia		1			3	1	2	8	1	11	2		29	1.6	14	7		6	8	6	1	2		44	3.9
Canada		1	1	4	2	1	6	2	4	2	1	2	26	1.4	2	2	3		3	2		4	1	17	1.5
Austria		2	4				5	11	2	1			25	1.4			4		4		1	9		18	1.6
Sweden		4					3	3	13				23	1.3	3	1		2	1	2	2	1		12	1.1
Czech				2	5	3	4	1	5				20	1.1	4		3	2			1			10	0.9
Danmark		1	5	1	2		2				4	1	16	0.9	10		9	1	1		1	2		24	2.1
Finland		1	1	1					1	1	9		14	0.8	1	1			6	2		2	1	13	1.1
Slovenia		2					3	3			3		11	0.6			2	4			2	1		9	0.8
Other		8	9	9	7	4	13	15	9	23	7	4	108	5.9	13	3	25	5	10	7	2	16	5	86	7.5
Unidentified		2			4	1	1	4	2	5	2	3	24	1.3	3			4	4	8	3	3		23	2.0
Total	26	6.2	159	105	114	132	237	426	222	164	117	65	1829	100.0	125	58	124	115	141	108	145	301	23	1140	100.0

Data source: Guest book of the Nature Reserve.

2. Questionnaire Research

We were able to collect 283 samples (Table 5). Among the samples are 55 from Manado (15 guides and 40 travel agents). We also had other respondents including 29 guides (12 ecotour guides, 15 diving guides and 2 ecotour/diving guides) and 14 accommodations. The target groups of the research were local residents (over 89 for Batuputih and over 86 for Bunaken) and travel agents (over 32 agencies), and we have attained 95% reliability for all these groups for the research.

Table 5 The number of questionnaire respondents

Site	Resident	T Agent	Guide	Accom	Total
Bunaken	91	0	6	11	108
Batuputih	109	0	8	3	120
Manado	0	40	15	0	55
Total	200	40	29	14	283

T Agent: Travel Agent, Accom: Accommodation

2.1 Awareness about Ecotourism

Although level of awareness about “Ecotourism” slightly varies between the villages (Batuputih and Bunaken) the result shows that it is generally low (12.8% and 5.5%). On the other hand, the guides show the highest level of awareness (71.0%), followed by accommodation (57.1%) and travel agent (33.3%) (Fig. 2). It shows that the occupations that directly provide on-site services (travel agent and accommodation) for the tourists have higher awareness regarding “Ecotourism”.

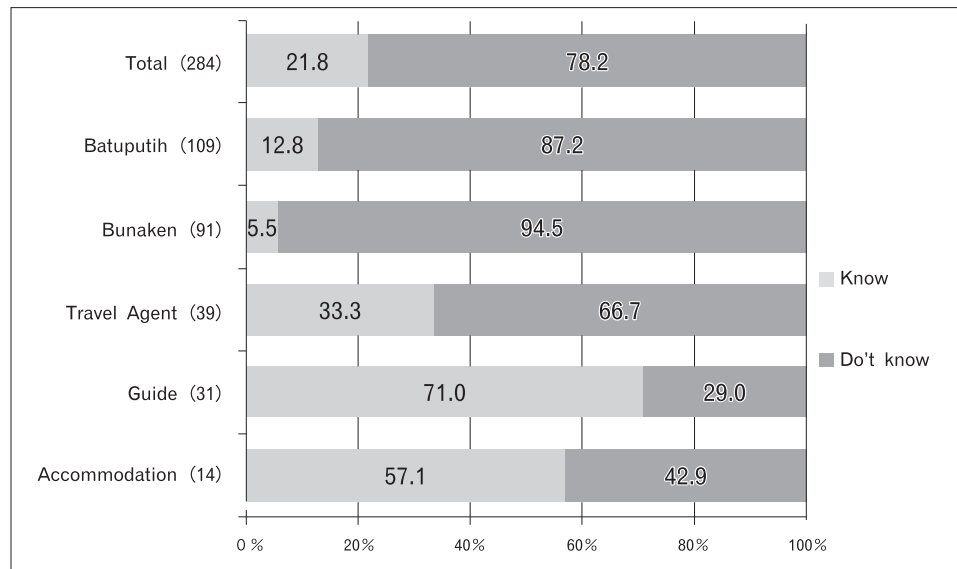


Fig. 2 Awareness of ecotourism

2.2 Benefits of Promoting Ecotourism

Option (b), “Employment opportunities” is the highest (average of 33.1%) followed by (a), “Economic improvement” (average of 27.8%), and (d) “Interpersonal exchange” (14.9%) (Fig. 3).

The differences of trend are found among the groups. For local residents, Bunaken residents, option (b), “Employment opportunities” (38.4%) and (a), “Economic improvement” are both as high as it surpasses the other options, which comprise less than 10%. On the other hand, for the villagers of Batuputih, although (b) “Employment opportunities” (28.5%) and (a) “Economic improvement” (23.5%) are both as high as Bunaken, option (d) “Interpersonal exchange” (18.5%) is also raised as a benefit for promoting ecotourism. The same trend is also seen among travel agent and accommodation, but the travel agent regards (d) “Interpersonal exchange” (21.3%) as a larger benefit. The tour guides also select (b) “Employment opportunities” (43.1%) and (a) “Economic improvement” (20.7%), but the difference from the travel agents is that the guides see (b) “Employment opportunities” as a more important benefit. They also see option (c) “Preservation of natural environment” (17.2%) as a larger benefit than (d) “Interpersonal exchange.”

2.3 Drawbacks from Receiving Visitors (Promotion of Tourism)

Option (f) “Nothing specific” (average of 31.6%) and (e) “Other” (average of 31.1%) both are at the same level and both are high. The next popular option is (d) “Change in local life-style” (18.9%) (Fig. 4). Option (e) “Other” includes 71 responses that said that “Not worried,” which was the highest (57.7%). The remaining option was “Safety concerns (such as terrorism)” at 13 (10.6%) (Table 6). Overview of the responding trend show that 79 (64.2%) are optimistic whereas 37 (30%) are negative toward receiving tourists.

Among the answers of local residents, (e) “Other” was the highest, followed by (f) “Nothing specific.” Difference between Bunaken and Batuputih is that Batuputih sees (d) “Change in local life-style” (19.2%) as the largest drawback. Among the different occupations, travel agents see (d) “Change in local life-style” (35.6%) as the largest drawback. Guides see (b) “Damage on natural environment” (26.1%) as the largest

drawback, followed by (c) “Worsening of natural environment” (17.4%) and (d) “Change in local life-style” (15.2%). It shows that the guides consider natural environment to suffer most and then the living environment, both of which are regarded as main drawbacks. Among the travel agents, (a) “Increase of garbage” (21.7%) is seen as a large drawback. The survey target excluding the local residents, therefore, shows a trend to be more concerned about the drawbacks on natural and living environments.

2.4 Ways to Participate in the Promotion of Ecotourism

Option (a) “Actively participate/cooperate” (69.3%) is particularly high, followed by (b) “Participate/cooperate to some extent” (19.1%) (Fig. 5). These two options comprise 88.4% of all responses. Although there is some variance, all occupation-based targets and groups show the same trend.

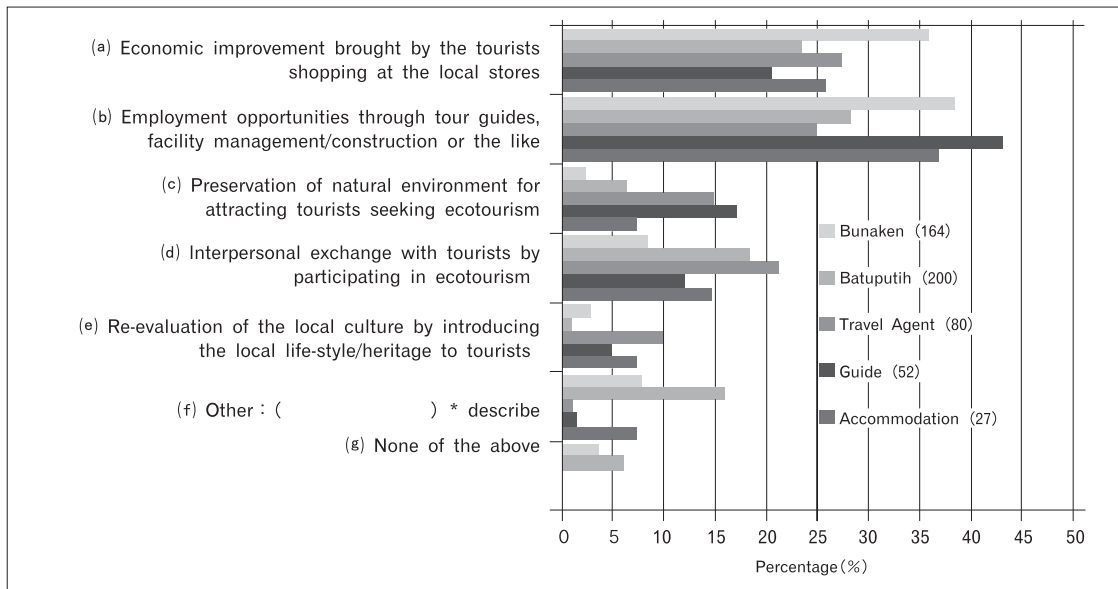


Fig. 3 Benefits from promoting ecotourism

The number in parentheses after the group name indicates the total number of answers. Two answers choices from choices (a~g). Question: Q2 Among the benefits expected from promoting Nature/Culture-oriented tourism (ecotourism), what are the benefits you think are the most important? Please select 2 items from the following list.

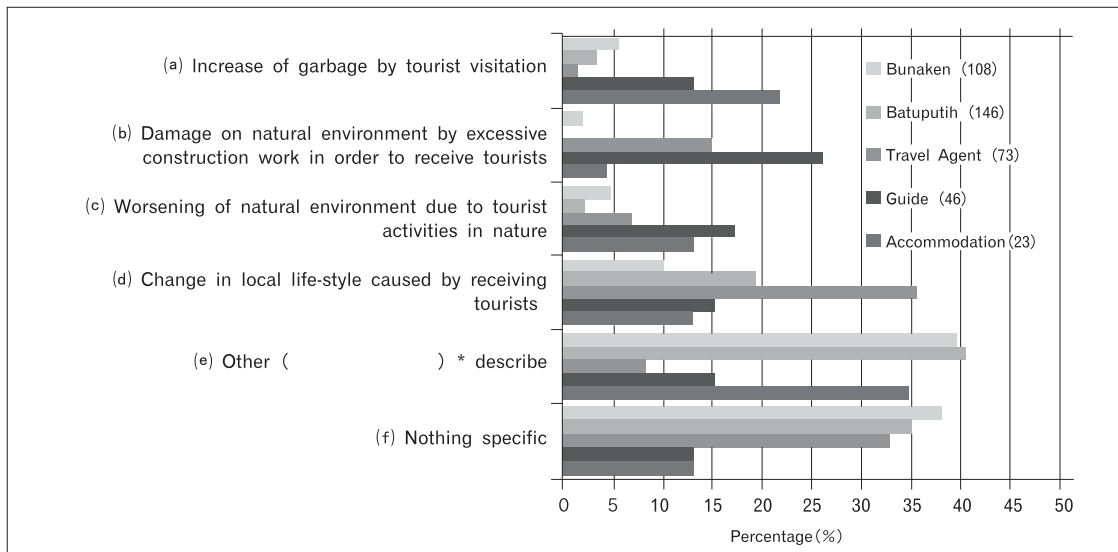


Fig. 4 Drawbacks from promoting ecotourism

The number in parentheses after the group name indicates the total number of answers. Two answers choices from choices (a~f). Question: Q3 With regards to accepting tourists, what are the concerns you think are the most important? Please select 2 items from the following list.

2.5 Expectations from the Promotion of Ecotourism

Option (a) “Improvement of local economy/employment” (average of 33%) was the most selected, followed by (d) “Interpersonal exchange” (average of 18.1%) and (e) “System set up for nature preservation” (average of 13.5%) (Fig. 6). The response pattern replicates that of Question 2 (Fig. 3) on benefits from ecotourism promotion, and expectation is high for “Economy and employment opportunities.” On the other hand, “Preservation of nature” and “Interaction with local residents,” both of which were popularly selected in

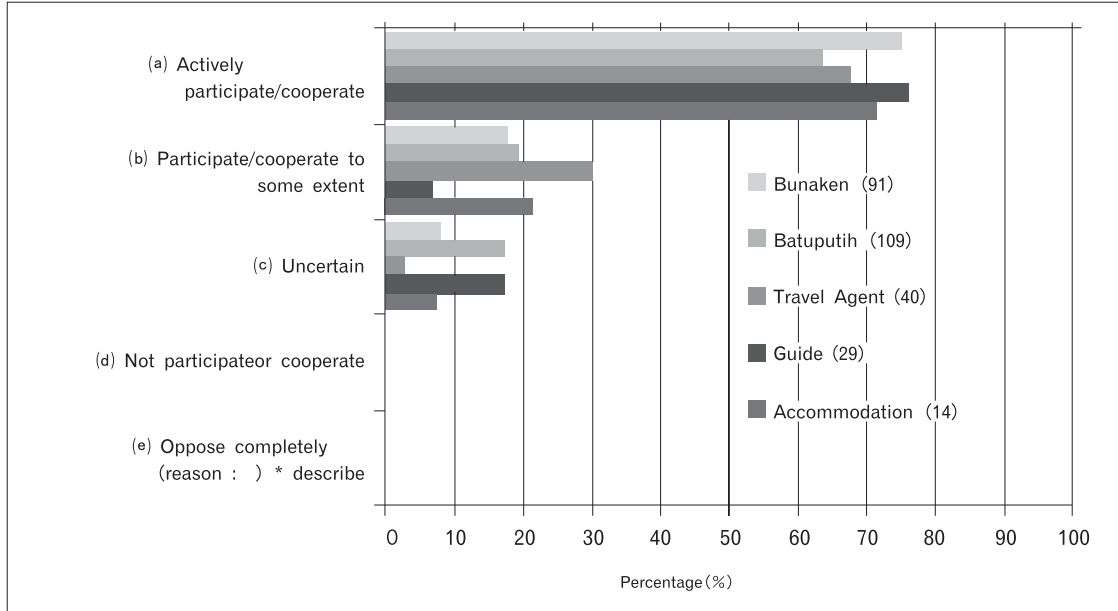


Fig. 5 Ways to participate in the promotion of ecotourism

The number in parentheses after the group name indicates the total number of answers. One answer choices from choices (a~e). Question: Q4 If nature/culture-oriented tourism (ecotourism) were to be promoted locally, what would be your attitude? Please select 1 item from the following list

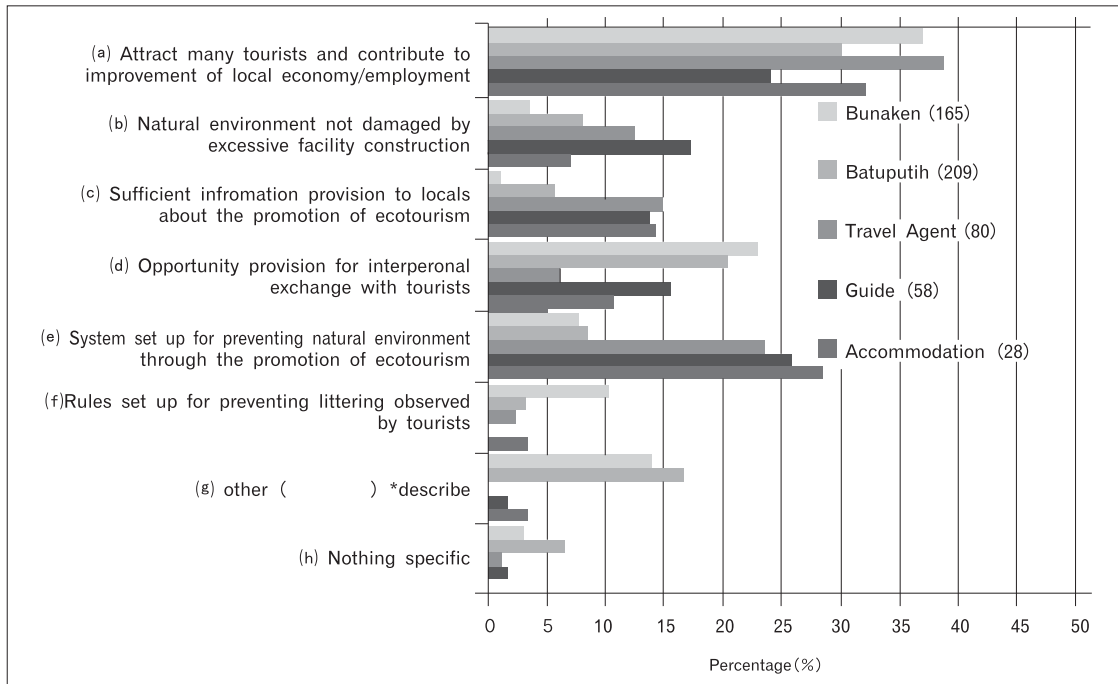


Fig. 6 Expectations from the promotion of ecotourism

The number in parentheses after the group name indicates the total number of answers. Two answers choices from choices (a~h). Question: Q5 If nature/culture-oriented tourism (ecotourism) were to be promoted, what would be your expectation? Please select 2 items from the following list.

ecotourism is not as high in this realm, although the subjects remain in 2nd and 3rd place in the priority list.

Among the local residents, general trend is the same with groups mentioned above. However (g) “Other” (average of 15.3%) is relatively high compared to other target groups. The composition of the 34 (57.4%) responses include “Employment opportunities,” “Better future for children,” “Increase of tourists,” “Improvement of accommodation facilities,” “Installation of garbage disposal facilities,” etc., all of which are positive (Table 7). On the other hand, local residents saw option (c) “Sufficient information to the local communities” non-appealing, compared to other target groups. Only 1.2% Bunaken villagers selected this option and for Batuputih, it was 5.7%.

For travel agencies, option (a) “Improvement of local economy/employment” (38.8%) was selected most, followed by (e) “System set up for nature preservation” (23.8%) and (c) “Sufficient information to the local

Table 6 Free description of drawbacks in promoting ecotourism

Description	N	%
Not worry	71	57.7
Safety concerns (such as terrorism)	13	10.6
Tourist behavior	6	4.9
Tourist dress (appearance)	4	3.3
Environmental effects from domestic tourists	4	3.3
Limit of entrance	4	2.4
Garbage increase	3	2.4
Restriction of fishing	3	1.6
Exchanges with foreign tourists	2	1.6
Welcoming	2	1.6
Working opportunity by tourism	2	1.6
Not worry (environmentally conscious tourists)		1.6
Other/unknown	7	5.7
Total	123	100.0

Data source: summary of “other” (free description) of Q3 by keywords.

Table 7 Free description of benefits from promoting ecotourism

Description	N	%
Employment opportunities	8	13.1
Better future for children	6	9.8
Opportunity for English learning	4	6.6
Increase of tourists	3	4.9
Improvement of accommodation	3	4.9
Installation of garbage disposal facilities	2	3.3
Improvement of transportation	2	3.3
Interpersonal exchange with tourists	2	3.3
Local development	2	3.3
Reduction of garbage	1	1.6
Benefit from tourism	1	1.6
Business (sales of meals)	1	1.6
Safety consideration	4	6.63
Not expect to tourism (as a farmer)	2	3.3
Other/unknown	20	32.8
Total	61	100.0

Data source: summary of “other” (free description) of Q5 by keywords.

communities” (15%). The difference from the responses given by the local residents is that (e) “System set up for nature preservation” is seen as a more important aspect. The same trend can be observed in accommodation and travel agent. The responses from the guides may be characterized as having heavier emphasis on (b) “Considerations on natural environment” (17.2%).

Discussion

1. Tourism Statistics

Foreign tourists visiting Indonesia are increasing rapidly, reaching 7 million in 2010. The trend conspicuously show that these foreign tourists concentrate in the fixed areas such as Bali, Java, Batam, and these regions together receive more than 80% (5.65 million) of the tourists. On the other hand, the foreign tourists visiting North Sulawesi stays within 0.5% of the total number of visitors, with some variance (29,715 in 2009, 0.5%). It could be said that the proportion of foreign tourists visiting North Sulawesi is limited on permanent basis. In order to promote tourism and its development in this region, it is necessary to increase the number of tourists.

Among the foreign tourists who visit North Sulawesi, approximately 60% visit Bunaken as well. This shows that Bunaken is the main tourist destination of North Sulawesi. Also, 60% of these tourists received by Bunaken are domestic tourist (78% in 2003) which means that the island is an important tourist destination for domestic tourists as well. The island's incoming tourists reached its peak in 2003, marking 38,855 tourists, but has been on a declining trend. The number of tourists for 2007 was 26,455. Even so, the island maintains a considerable size of incoming tourists compared to the prior years (our data marks 15,066 for 2001). The problems faced currently include damages to the natural environment (pollution from garbage and sewage) due to rapid increase in the number of lodging facilities like hotels. Damages on corals due to the marine activities (SCUBA diving and snorkeling, etc.) are also raising concerns (DeVantier and Turak, 2004).

Tourists visiting Tangkoko is approximately 5 % of all tourists who visit North Sulawesi (1,859 in 2009 which was 6.2%), and the number is very limited. Authors visited Tangkoko in 1992, and compared to the infrastructure at that time, the area now has better access with paved roads. Such improvement may have contributed to an increase in tourists. Even yet, an annual reception of 1,800 tourists is not sufficient enough to support the local tourism industry. There are about 50 people who serve as tour guides of Nature Reserves and there are also rangers who, too, guide the tourists on occasions. Taking all factors into consideration (guides, personal observation, etc.) there is only a limited number of tourists per tour guide, which means that the tour guides have difficulty in maintaining livelihood from the profession alone. But although the current number of incoming tourists is not large in size by all means, the number is increasing. This situation raises yet another concern about the effects on the wildlife, more specifically the effect on the wild animals through their frequent encounters with humans. For example, when authors visited the Tangkoko in 1992, the Black Macaques were extremely cautious against human approach that it was rare for tourists to even see the animal. But currently, there is even a case where Black Macaques attack human, not showing fear at all. It is necessary to assess the effect of human approach to the wildlife, including the effect on the change in animal behavior.

2. Questionnaire research

Ecotourism is welcomed as a part of tourism promotion, and many local residents and tourism affiliates have high expectations to it along with willingness to actively participate in the process of promotion. In particular, the economic improvements such as “Employment opportunities” and “Profits from tourists as shopping” are highly expected and are regarded as important factors. The trend was conspicuous among local residents. Same trend was observed among the tourism affiliates, but local residents tend to put more emphasis on the other aspects of ecotourism such as “Nature conservation” and “Interpersonal exchange”. Such trend may become a driving force to promote ecotourism in the region. But on the other hand, local

residents also welcome economic revitalization from the promotion of tourism (no distinction is drawn between conventional tourism and ecotourism) and are hopeful and willing to cooperate. In any case, such attitude of local residents is an important component in the process of promoting ecotourism.

In the future, it is necessary to deepen understanding of local residents on ecotourism through events like lectures and workshops. Simultaneously, it is necessary that local residents re-acknowledge local resources (like doing a treasure-hunt). If a list of ecotourism resources could be compiled, it will serve as an important step toward implementation of ecotourism. In this process, it is preferable that tour guides and hotel affiliates who possess high level of understanding about ecotourism serve the leading roles.

3. Current Situation of Ecotourism

The natural resources, the kind of which are equivalent to ecotourism resources, are extremely rich in Bunaken National Marine Park as well as in Tangkoko National Nature Reserve as mentioned previously. Within the time frame of the research, authors have visited Tangkoko with the local tour guide and observed the nature and animals in the National Nature Reserve. The tour could be called an ecotour, but there was only a little explanation (interpretation) on the natural environment and about on flora and fauna from the tour guide. The role of the tour guide is quite limited, basically confined for showing tourists the directions through the tour route. The explanations were offered mainly information about the nature itself. Only little explanation was offered about the local history, heritage or the local cultural background. Ross and Wall (1999) have commented on the same situation. One of the major incentives for a tourist to become a repeated visitor is to be provided with appropriate information and knowledge about the local area (Kaizu and Yamaguchi, 2009) and, therefore, one of the challenges faced by tour guides is to provide interpretation with enthusiasm based on accurate information.

Ecotourism in Bunaken National Marine Park and Tangkoko National Nature Reserve is still at a fledgling phase at present. They face many issues: environmental problems due to garbage and sewage; human-wildlife relation problems due to encounters between tourists and wild animals; social problems due to relationship-building with the local communities; and professional problems due to the lack of interpretation skills and low quality of tour content. Despite the issues, however, there is a high expectation embraced by the local residents and tourism industry. There is a potential for development in problem-solving process itself, as concerned members tackle the various challenges.

Acknowledgements

We would like to thank the local residents (Batuputih and Bunaken) travel agencies (Manado), hotels (Batuputih and Bunaken) and all who have cooperated with us on questionnaire research. We also thank the rangers of Tangkoko National Nature Reserve and Bunaken National Marine Park who provided us with statistical data on incoming visitors. We are also grateful to Mr. Rico Taramen, president of “Bella Wisata Tours & Travel”, Tomohon, North Sulawesi, who gave us information about the local ecotourism. We thank Mr. Beeny Zougira and Mr. Mustika Kelana Tarigan, Dept. of Fishery, Sam Ratulangi University, both of whom helped us to compile information and conduct questionnaire research with the local residents, and an anonymous English reviewer of this report. Our research has been sponsored by the Research Institute of Meio University (2010, General Research Fund.)

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Appendix

Questionnaire sheet (in Indonesian)

Survei Opini Ekowisata

- a. Pedoman (Ecotour / Scuba Diving)(afiliasi: _____) Posisi _____
- b. Agen Perjalanan (afiliasi: _____) Posisi _____
- c. Akomodasi operator (afiliasi: _____) Posisi _____
- d. Warga (Bunaken / Tankoko) No _____ (nomor yang sama jika keluarga yang sama) Walikota: _____
- e. Lain(afiliasi: _____) Posisi _____

Daftar pertanyaan (Questionnaire)

Survei ini dilakukan dengan tujuan untuk memahami situasi ekowisata di Sulawesi Utara saat ini. Data yang di kumpulkan dari hasil survei tida akan digunakan untuk tujuan lain. Kami menghargai kerja sama Anda.

.....

1. Apakah Anda tahu istilah “ekowisata” ? Silakan pilih jawaban Anda dibawah ini:

- a) Saya tahu.
- b) Saya tidak tahu.

2. Diantara manfaat yang diharapkan dari wista yang sukses berorientasi Alam / Budaya (ekowisata), apa keuntungan yang Anda anggap paling penting. Silakan pilih 2 jawaban di bawah ini:

- a) Efek ekonolni yang dibawa oleh para wisatawan yang berbelanja di toko-toko lokal.
- b) Peluang kerja seperti menjadi pemandu wista (guides), manajer, pekerja konstruksi atatu sejenisnya.
- c) Menarik wisatawan yang mencari pengalaman alam / budaya, dengan demikian, melestarikan lingkungan alam.
- d) Interaksi dengan wisatawan yang datang dari luar dengan bersama-sama berpartisipasi dalam wisata yang sukses berorientasi Alam / Budaya (ekowisata) atau sejenisnya.
- e) Re-evaluasi terhadap budaya lokal dengan memperkenalkan gaya hidup lokal dan warisan leluhur kepada para wisatawan.
- f) Lainnya: _____
- g) Tidak add di atas.

3. Sehubungan dengan menerima wisatawan, apa kekhawatiran yang Anda pikirkan paling penting? Silakan pilih 2 jawaban di bawah ini:

- a) Peningkatan sampah yang dibawa wisatawan.
- b) Kerusakan pada alam dengan pembangunan yang berlebihan untuk menerima wisatawan.
- c) Efek yang tidak diinginkan pada lingkungan aiam akibat kegiatan wisata di alam.
- d) Perubahan gaya hidup lokal yang disebabkan oleh menerima wisatawan.
- e) Lainnya: _____
- f) Tidak ada di alas.

4. Jika wisata yang berorientasi Alam / Budaya (ekowisata) akan dipromosikan secara local, apa yang akan menjadi sikap Anda? Silakan pilih 1 jawaban di bawah ini:

- a) Saya akan berpartisipasi atau bekerjasama dengan antusias.
- b) Saya akan berpartisipasi atau bekerja sama untuk beberapa hal.
- c) Saya tidak pasti / ragu-ragu.
- d) Saya tidak akan berpartisipasi atau bekerjasama.
- e) Saya akan menentang sepenuhnya.

Silakan sebutkan alasan Anda : _____

5. Jika wisata yang berorientasi Alam / Budaya (ekowisata) akan dipromosikan, apa yang akan menjadi antisipasi Anda? Silakan 2 jawaban di bawa ini:

- a) Saya berharap banyak wisatawan akan datang dan memberikan kontribusi untuk merevitalisasi ekonomi lokal dan situasi kerja.
- b) Saya berharap bahwa lingkungan alam tidak akan rusak oleh pembangunan fasilitas berlebihan.
- c) Saya harap penjelasan yang memadai akan diberikan kepada penduduk lokal tentang promosi wisata yang berorientasi Alam / Budaya (ekowisata).
- d) Saya berharap akan ada kesempatan bagi penduduk setempat dan wisatawan untuk berinteraksi dengan satu sama lain.
- e) Saya berharap langkah-langkah sistemik akan diambil dalam rangka untuk melestarikan lingkungan alam melalui promosi wisata yang berorientasi Alam / Budaya (ekowisata).
- f) Saya berharap bahwa aturan-aturan tertentu akan ditetapkan bagi wisatawan untuk mencegah sampah.

g) Lainnya: _____

h) Tidak ada di atas.

Bagian akhir ini terdiri dari pertanyaan-pertanyaan tentang diri Anda

- Di mana Anda tinggal? (Nama Desa / Kota _____)
- Apa pekerjaan Anda? Silakan lingkaran item yang paling menggambarkan pekerjaan Anda (dalam tiga): Petani, Nelayan, Tukang kayu, Buruh bangunan, Karyawan perusahaan, Pemilik bisnis, Pengurus rumah tangga, Pelajar, Tidak ada pekerjaan, yang lain (sebutkan : _____)
- Silakan lingkaran umur Anda: remaja, dua puluhan, tiga puluhan, empat puluhan, lima puluhan, enam puluhan, tujuh puluhan, delapan puluhan
- Silakan lingkaran salah satu hal berikut. Jenis kelamin Anda adalah : Pria / Wanita

.....
Pedoman diwawancarai kasus

Upah panduan / sab kali : _____ Panduan gaji (jika pekerjaan) : _____

Frekuensi Pedoman / bulan : _____
.....

TERIMA KASIH UNTUK KERJASAMA ANDA

Janny Kusen Profesor Ph.D.

Departemen Perikanan, Universitas Sam Ratulangi

Tanggal: _____ 2010. Jam: _____

Survey No. _____ Nama Survey Manager _____