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Ecotourism in Mount Maculot as assessed by the Host Community: Basis for Sustainable Development

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Abstract

This paper assesses the ecotourism in Mount Maculot, Philippines and outlines the directions for sustainable development. The study is descriptive in nature and uses a survey questionnaire for gathering data. A major result of the study is the general agreement of the age-, sex-, and education-disaggregated respondents on all items presented to them for assessment in relation to environmental, economic and socio-cultural aspects of ecotourism. Areas of immediate concern however, include the increasing number of tourists, the conservation of the mountain, the sluggish growth of local businesses, and the revitalization of local ethnic and cultural identity.

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The paper suggests that the national and local governments, as well as all other stakeholders, consider the following guidelines or directions for sustainable ecotourism in Mount Maculot: adherence to internationally accepted principles on ecotourism; development of long-term plans and policies; environmental education and consciousness and community cooperation for the protection of environment and preservation of local culture; empowerment of the community through involvement in planning and decision making; and designation of Mount Maculot as a reserve or protected area.

Keywords: ecotourism; mountain tourism; sustainable development; environment and biodiversity; economy; socio-cultural; Mount Maculot Philippines; Cuenca Batangas

1. Introduction

Mountains around the world are rich in biological diversity. However, many mountains are increasingly under stress due to unplanned tourism and other forms of unsustainable economic development. As an alternative to mass tourism, ecotourism in the mountain areas seems to have a certain appeal for those concerned with mountain development and conservation. In the past years, the global market for ecotourism has grown significantly, with a gradual shift in worldwide travel patterns and preferences [1]. Consequently, the ecotourism sector has to manage its resource supply and demand relationship in a sustainable way. This link between ecotourism and sustainability is essentially what sets ecotourism apart from mainstream tourism but at the same time creates a dilemma for this market sector [2].

Ever since the term was coined in the mid 1980s, *ecotourism* has been of special interest to policy and decision-makers, academics, and the business communities both at the local and international levels [3]. Hector Ceballos-Lascurain, who is credited for introducing the term *ecotourism*, defined it as *traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas [4]. The International Tourism Society formulated its definition of <i>ecotourism* in 1991: *Ecotourism is responsible travel to natural areas that conserve the environment and sustains the well-being of local people.* While terms like *mountain tourism*, nature tourism and cultural tourism are describing specific tourist market segments, the term *ecotourism* refers to a set of desirable outcomes that chime in with the principles of environmental, socio-cultural and economic sustainability [5].

Historically, all over the world, mountain areas have been attracting people – pilgrims, ascetics, naturalists, explorers and, in recent years, mountaineers, trekkers and cultural tourists from near and far-off. Mountain areas are belonging to the few natural spaces of the world that offer a unique blend of breathtaking natural beauty. But mountain ecosystems are also among the world's most vulnerable biological and geographical domains [6].

These make mountains to be destinations for ecotourism activities that usually take place in nature surroundings which is often related to protection and conservation of such areas on one hand and

provision of alternative livelihood opportunities for people on the other hand. Mountain ecotourism will therefore be an important sector in developing these areas for it can minimize environmental degradation and can reduce poverty incidence.

Many communities around the world have promoted ecotourism to ameliorate problems of environmental degradation and underdevelopment. Although there is no agreement on what ecotourism is or should be, it is generally believed that ecotourism in the mountains will foster responsible tourist behavior, conservation of important wildlife habitats and ecosystems, appreciation of local cultures and traditional life styles, and provision of sustainable forms of livelihood for people living in the area. However, there are dangers in promoting mountain ecotourism, especially if there is no strategic focus on the type and intensity of activities to be promoted, the benefits and the beneficiaries, and the decisions related to governance, control and regulations. Some of the major environmental impacts with direct implications to local communities include overcrowding, noise pollution, garbage pollution, fire hazard and extraction of valuable resources, e.g. collection of rare plant specimens [1].

Ecotourism, in Philippine context, refers to a form of sustainable tourism within a natural and cultural heritage area where community participation, protection and management of natural resources, culture and indigenous knowledge and practices, environmental education and ethics as well as economic benefits are fostered and pursued for the enrichment of host communities and satisfaction of visitors [7]. The Philippines is regarded as one of the top 25 biodiversity hotspots in the world in view of high percentage of endemic plants and animals which are threatened by extinction. Recognizing the diverse natural and cultural resources of the country, Executive Order No. 111 was issued on June 17, 1999 to establish the guidelines for ecotourism development in the country. This Order called for the formulation of National Ecotourism Strategy (NES) to provide an integrated management plan for the development of ecotourism. NES viewed ecotourism not as an imported concept but a direct response to real needs and circumstances in the country. Ecotourism rests on the following: (1) sustainable management of natural and cultural resources; (2) environmental education and conservation awareness; (3) empowerment of local communities; and (4) development of products that will satisfy visitor needs and position the country as a globally competitive ecotourism destination [8].

The NES is founded on the vision to advocate, foster, coordinate, monitor and mobilize support for ecotourism. It specifically aims to: (1) promote and mobilize support for ecotourism from all sectors – government, businesses and general populace; (2) develop a culture of tourism among the local people; (3) institutionalize community participation in planning, development, implementation and monitoring of ecotourism projects; (4) promote environmental education and ethics; (5) develop capability of local government units and local entrepreneurs; (6) facilitate domestic and foreign investments to fill in facilities requirements; and (7) develop globally competitive ecotourism products for quality visitor experience and ensure benefits redound to the local community [8]. The way forward in the Philippines is set out in the Vision and Mission Statements for Ecotourism [9]:

Vision: A world-class ecotourism destination with a balanced ecosystem and a rich cultural heritage where empowered and committed stakeholders, guided by environmentally sound policies, pursue sustainable practices for the best interests of the present and future generations

Mission: Our mission is to position the Philippines as a leading ecotourism destination in the world centered around a network of complementary ecotourism experiences to ensure total visitor satisfaction. To this end, we will work towards providing a favorable investment climate for both domestic and foreign partnerships with multi-stakeholders who formulate appropriate policies and guidelines that promote the conservation of our natural and cultural resources as well as ensure socio-economic benefits to host communities. We will pursue all these, through sustainable development, to improve the quality of life for present and future generations of Filipinos.

The ecotourism framework in the Philippines demonstrates the inter-relationship and inter-dependence among stakeholders, the environment and the tourists. These three elements will provide the impetus to propel the development of ecotourism in the country. The term *stakeholder* refers to any party or group whose interests are directly affected by any ecotourism-related activity. Stakeholders include the communities directly or indirectly affected by any development, civil society groups present, in the area, local government units that have political and administrative jurisdictions over the particular site, and local branches of national line agencies, particularly those of tourism and environment departments. The tourists, or eco-tourists, are the market for ecotourism destinations. They differ from ordinary tourists as they seek to establish a deeper understanding, even communion, with the places and people they visit. The environment is the unique physical features or attributes of a locality that serves as its primary attraction, including its distinct socio-cultural patterns [9].

The influx of tourists to an ecotourism destination generates revenue. The interaction between the locals and visitors also serve as an informal process of cultural exchange which contributes to the international understanding and cooperation among people of different nations. The beauty of the natural environment enhances the quality of visitor experience and a deeper understanding of the ecosystem and socio-cultural character of the community is usually sought by tourists. Positive ecotourist experiences offer opportunities for generating funds for environmental protection and management [9].

One of the most popular mountain destinations at the south of the Capital City of Manila, Philippines is Mount Maculot. This mountain is located in the Province of Batangas, near the world-renowned Taal Volcano. It is popular among mountain climbers and campers and it is the major tourist destination in the town of Cuenca. The mountain is about 947 m (3,107 ft) tall and is adjacent to Taal Lake. Mount Maculot and its 700 m (2,300 ft) high volcanic rock wall called *The Rockies*, is said to be part of Taal Caldera's crater rim [10]. A caldera is a large and roughly circular depression of volcanic origin and may be formed during a single eruption or series of very violent eruptions. Based on studies on Taal, it is believed that the ancient Taal Cone was formed by build up of large volume dacitic pyroclastic materials more than 140,000 years ago. Several major catastrophic eruptions probably between 27,000 to 5,000 years ago destroyed this greater Taal Cone and ultimately formed the 25 km by 30 km (16 mi by 19 mi) wide depression now known as Taal Caldera. This depression was filled by water, thus forming a lake. The younger Taal Volcano Island was formed by numerous explosive hydrovolcanic eruptions in the middle of the lake after the collapse [11].

Mount Maculot is a favorite because of its well-established trail, wide camp grounds, fine views atop and just enough degree of difficulty in climbing. Its main attraction is *The Rockies*, a rocky outcropping overlooking Taal Lake and its famous Taal Volcano. It takes a bit of rock climbing skills to reach the top of the Rockies, but definitely, the effort is well rewarded by the breathtaking vista above it. The *Camp Site* is located atop the mountain's shoulder. It is usually busy on weekends and there is not much privacy. The wind is moderate to strong and quite chilly at night. The *Summit* is another hour away from the camp site, although an alternative trail, the *Grotto* trail, can be taken, traversing the mountain from the other side and then descending to the shoulder camp site. Views from the *Summit* are obscured by forest growth and there is minimal camp space available. But its popularity has unfortunately brought about alarming levels of pollution up its slopes. Too much unregulated and irresponsible camping has resulted in plenty of garbage left all over the camp grounds. Refuse such as empty gin bottles to abandoned fire rings litter the place. Little is being done to address this environmental concern. Moreover, the mountain has yet to come under the protection of the Department of Environment and Natural Resources [12].

Mount Maculot is also one of the few remaining forests of the Philippines. It serves as a watershed of the town of Cuenca and windbreaker shielding the town from harsh north winds. It has rich biological diversity that inhabits plants and wildlife. Though there is no record of the exact area, the mountain has a vast forest or plant cover. Conservation of a wide variety of plant species can be justified on the grounds that since they are of direct economic importance to people, a program for their sustainable use has to be continued. Although fruit trees have become sources of supplemental income as well as sources of food and other materials, the strict regulation of the local government on prohibiting illegal transfer of the forest products from the mountain has abated its destruction and helped in its conservation. The local government fully supports the conservation of the mountain and the people are made aware on the detrimental effects of a disturbed forest, hence take part in the conservation. However, just like any other forest in the country, the mountain is facing threats of habitat loss due to logging and agricultural expansion. Another threat to the area is the Holy Week activities in the Grotto trail. Expansions of trails and trekking areas also bring environmental destruction via garbage problem [13].

In view of the above, the focus of this study is to determine how the local community in the Mount Maculot area assessed the ecotourism in the mountain in relation to environmental, economic and socio-cultural aspects. An analysis on the mean differences of the assessments of the different groups of respondents according to their age, sex and educational attainment is also included in the study. The results are then assumed to be good bases for the sustainable development of the mountain and its community.

2. Methodology

This study employed descriptive method of research and utilized a survey questionnaire developed by the researchers as its data gathering instrument. The questionnaire has basically two parts: the first part is for the demographic profile of the respondents while the second part is for the assessment on the ecotourism in Mount Maculot. The assessment tool uses a four-point semantic differential Likert scale. This questionnaire was validated by faculty and research experts of Batangas State University and industry experts in the field of tourism. A trial run and reliability analysis for the validated questionnaire were also made resulting to a reliability coefficient or Cronbach's alpha of .8687.

The participants for the study were 120 residents of the Mount Maculot community, who were at least 13 years old and were selected through convenience sampling, i.e. those who were readily available during the conduct of enumeration. Each respondent spent about five to ten minutes in answering the questionnaire. To avoid language barrier, the questionnaire was translated into Tagalog (the local dialect) for those respondents who had difficulty in understanding English. Prior to survey, permissions for the conduct of survey were sought from local government and host community authorities.

Appropriate statistical techniques via SPSS were employed in the data analysis. Although this study had its limitations, it is hoped that such limitations could suggest and encourage directions or guidelines for future study. These limitations include the use of cross sectional data instead of longitudinal data, the limited attributes used as variables, and the samples taken from nonrandom sampling.

3. Results and Discussion

Table 1 shows the demographic profile of the 120 respondents in terms of age, sex and educational attainment. Most of the respondents belong to the young adulthood stage (18 - 39 years old), females and high school graduates.

Demographics	Frequency	Percent
Age		
13 to 17 years old	16	13.3
18 to 39 years old	68	56.7
40 to 59 years old	32	26.7
60 years old and above	4	3.3
Sex		
Male	56	46.7
Female	64	53.3
Educational Attainment		
Elementary	32	26.7
High School	54	45.0
Technical / Vocational	27	22.5
College	7	5.8

Table 1. Demographic profile of the respondents

3.1. Assessment of Mount Maculot ecotourism

Table 2 shows the assessment of the host community or the mean responses with corresponding interpretations base on Likert scale used regarding Mount Maculot ecotourism in relation to environmental aspect.

Generally speaking, the host community had expressed their agreement to all environmental aspects of Mount Maculot ecotourism. The respondents had their highest degree of agreement in the diversification of Mount Maculot's natural resources, in the increase of awareness of people on the beauty of the mountain due to the arrival of tourists, and on the mountain's being a good habitat for birds and animals. Conversely, they had lower degree of agreement that Mount Maculot has enough space to accommodate tourists and that tourists help them in the conservation of the mountain for future sustainable use.

Table 2. Assessment of Mount Maculot ecotourism in relation to environmental aspect, n = 120

Environmental Aspect	Mean	Interpretation
1. Mount Maculot has good and well-diverse natural resources.		Strongly Agree
2. Mount Maculot is a good habitat for birds and forest animals.	3.56	Strongly Agree
3. Mount Maculot has good places for ecotourism activities.	3.51	Strongly Agree
4. Mount Maculot has enough space to accommodate the growing number	3.47	Agree
of tourists arriving in the area.		
5. Mount Maculot has conserved resources for tourism purposes.	3.51	Strongly Agree
6. Balance between limits and usage of Mount Maculot is evident.	3.52	Strongly Agree
7. Arrivals of tourists increase people's awareness on the beauty of Mount	3.57	Strongly Agree
Maculot.		
8. Visits of tourists provide reason for the preservation of Mount Maculot.	3.52	Strongly Agree
9. Tourists help in the conservation of Mount Maculot for future	3.47	Agree
sustainable use.		
10. Short staying tourists see the scenic beauty of Mount Maculot and	3.53	Strongly Agree
enjoy their stay without damaging the mountain.		
Overall	3.52	Strongly Agree

Table 3 shows the assessment of the host community or the mean responses with corresponding interpretations base on Likert scale used regarding Mount Maculot ecotourism in relation to economic aspect.

Table 3. Assessment of Mount Maculot ecotourism in relation to economic aspect, n = 120

Economic Aspect	Mean	Interpretation
1. Mount Maculot has plenty of agricultural products like fruits and	3.42	Agree
vegetables that can be sold to tourists.		
2. Mount Maculot provides materials for the manufacture of indigenous	3.38	Agree
products.		
3. Mount Maculot catches the attention of the local government of Cuenca	3.36	Agree
to promote the tourism industry.		
4. Mount Maculot attracts tourists to visit the town of Cuenca.	3.38	Agree
5. Mount Maculot attracts investors to invest in Cuenca.	3.39	Agree
6. Mount Maculot exerts a pull on the government to provide new	3.36	Agree
infrastructures such as roads.		
7. Mount Maculot provides livelihood opportunities for the residents.	3.38	Agree
8. Due to the popularity of Mount Maculot, local businesses are growing	3.32	Agree
and expanding.		
9. Mount Maculot facilitates strong linkage among tourism, agriculture,	3.44	Agree
environment and economic development.		
10. Mount Maculot facilitates the boost for provincial and regional	3.36	Agree
development.		
Overall	3.38	Agree

As a whole, the host community also agreed in all economic aspects of Mount Maculot ecotourism but not as high as the degree of their agreement to its environmental aspects. But still, the highest agreement among these economic aspects is in the perception that Mount Maculot facilitates strong linkage among tourism, agriculture, environment and economic development and lowest in the observation that local businesses are growing and expanding due to the popularity of the mountain.

Table 4 shows the assessment of the host community or the mean responses with corresponding interpretations base on Likert scale used regarding Mount Maculot ecotourism in relation to socio-cultural aspect.

Socio-cultural Aspect	Mean	Interpretation
1. The tourists understand the culture, beliefs and values of the people of	3.61	Strongly Agree
the host community.		
2. The host community residents and the tourists have harmonious	3.48	Agree
relationships.		
3. Despite the interaction with tourists, the host community residents had	3.45	Agree
their cultural identity preserved.		
4. The host community is committed to conserve the mountain for the	3.45	Agree
future generations.		
5. The arrival of tourists to Mount Maculot creates medium for social	3.38	Agree
change and multi-cultural understanding.		
6. The tourists help towards the improvement of the living conditions of	3.38	Agree
the host community residents.		
7. The tourists promote new knowledge and use of their languages to the	3.43	Agree
local folks of the host community.		
8. The tourists help for the improvement of health conditions and control	3.43	Agree
of diseases in the host community.		
9. The stay of the tourists facilitates the understanding and adjustment to	3.43	Agree
the culture of each other.		
10. The cross-cultural communication between tourists and the host	3.37	Agree
community revitalizes local ethnic and cultural identity.		
Overall	3.44	Agree

Table 4. Assessment of Mount Maculot ecotourism in relation to socio-cultural aspect, n = 120

In totality, the host community further agreed in all socio-cultural aspects of Mount Maculot ecotourism. However, the respondents had their highest agreement only in the view that the tourists understand the culture, beliefs and values of the local people while they had lower degree of agreement in saying that the cross-cultural communication revitalizes local ethnic and cultural identity; that the arrival of tourists creates medium for social change and multi-cultural understanding; and that the tourists help towards the improvement of the living conditions of the host community residents.

3.2. Differences on the assessments of Mount Maculot ecotourism

Table 5 presents the differences on the assessments of Mount Maculot ecotourism when the respondents are grouped according to age.

At a significance level of .05 and with 3 and 116 degrees of freedom, results of one-way analysis of variance (ANOVA) wherein all p-values are higher than .05 indicate that there is no significant difference on the assessments of Mount Maculot ecotourism in all aspects when the respondents are grouped according to age. The responses of all age groups are almost the same with only four

respondents belonging to the old age (60 years old and above) having a little higher degree of agreement in all aspects that the rest of the younger respondents.

Aspect	Age	n	Mean	F-value	p-value
Environmental	13 to 17 years old	16	3.38	1.264	.290
	18 to 39 years old	68	3.55		
	40 to 59 years old	32	3.51		
	60 years old and above	4	3.67		
Economic	13 to 17 years old	16	3.41	.605	.613
	18 to 39 years old	68	3.35		
	40 to 59 years old	32	3.41		
	60 years old and above	4	3.58		
Socio-cultural	13 to 17 years old	16	3.50	1.474	.225
	18 to 39 years old	68	3.44		
	40 to 59 years old	32	3.38		
	60 years old and above	4	3.78		
Overall	13 to 17 years old	16	3.43	.759	.519
	18 to 39 years old	68	3.45		
	40 to 59 years old	32	3.43		
	60 years old and above	4	3.68		

Table 5. Differences on respondents' assessments of Mount Maculot ecotourism when grouped by age, $\alpha = .05$, df = 3, 116

Table 6 presents the differences on the assessments of Mount Maculot ecotourism when the respondents are grouped according to sex.

Table 6. Differences on respondents' assessments of Mount Maculot ecotourism when grouped by sex, $\alpha = .05$, df = 118

Aspect	Sex	n	Mean	t-value	p-value
Environmental	Male	56	3.46	-1.697	.092
	Female	64	3.57		
Economic	Male	56	3.37	208	.836
	Female	64	3.39		
Socio-cultural	Male	56	3.38	-1.644	.103
	Female	64	3.49		
Overall	Male	56	3.41	-1.402	.164
	Female	64	3.48		

A two-tailed independent samples t-test, at significance level of .05, reveals that there is no significant difference on the assessments of Mount Maculot ecotourism in all aspects when the respondents are grouped into males and females. Though females have a little higher degree of agreement in all aspects than males, the two groups still have basically the same responses.

Table 7 presents the differences on the assessments of Mount Maculot ecotourism when the respondents are grouped according to educational attainment.

The one-way ANOVA in testing the difference on the assessments of Mount Maculot ecotourism when the respondents are grouped according to the level of educational attainment resulted to a p-value of .019 in environmental aspect and .011 in overall. This implies that at a significance level of .05 there is significant difference on the assessments. Looking at the mean for each group of respondents, mean differences are basically between the respondents with College as educational attainment, having the highest degree of agreement in general, and the respondents with Technical / Vocational as educational attainment, having the lowest degree of agreement.

Aspect	Educational Attainment	n	Mean	F-value	p-value
Environmental	Elementary	32	3.41	3.428	.019
	High School	54	3.59		
	Technical / Vocational	27	3.46		
	College	7	3.77		
Economic	Elementary	32	3.36	2.497	.063
	High School	54	3.42		
	Technical / Vocational	27	3.26		
	College	7	3.66		
Socio-cultural	Elementary	32	3.40	2.622	.054
	High School	54	3.49		
	Technical / Vocational	27	3.31		
	College	7	3.70		
Overall	Elementary	32	3.39	3.861	.011
	High School	54	3.50		
	Technical / Vocational	27	3.34		
	College	7	3.71		

Table 7. Differences on respondents' assessments of Mount Maculot ecotourism when grouped by educational attainment, $\alpha = .05$, df = 3, 116

4. Conclusions

Based on findings or results of the study, the following conclusions were drawn:

4.1. On the assessment of Mount Maculot ecotourism

- Mount Maculot has good and well-diverse natural resources and a good habitat for birds and forest animals. The visits of tourists to the mountain increase the awareness of people on its beauty and provide reason for its preservation. Two areas of concern however are: (1) accommodating a great number of tourists in the future may be a problem, and (2) such tourists may not be willing to help in the conservation of the mountain for future sustainable use.
- Another good thing is that there is a strong linkage among tourism, agriculture, environment and economic development due to Mount Maculot ecotourism. However, this may not really help a lot for the growth of local businesses in the area.
- Tourists who had visited Mount Maculot understand the culture, beliefs and values of the host community but the cross-cultural communication doesn't really revitalizes local ethnic and cultural identity.

4.2. On the mean differences of group assessments on Mount Maculot ecotourism

• The different age groups have almost the same assessments on environmental, economic and socio-cultural aspects of Mount Maculot ecotourism, with the old age group having only a little higher degree of agreement than the rest of the other age groups.

- Males and females, as well, have almost similar assessments on environmental, economic and socio-cultural aspects of Mount Maculot ecotourism, with the feminine group having a little higher degree of agreement than the masculine group.
- There is significant difference on the respondents' assessments of Mount Maculot ecotourism, especially in environmental aspects, when they are grouped by educational attainment. The College group has the higher degree of agreement in environmental, economic and socio-cultural aspect than the Technical / Vocational group, High School group and Elementary group.

5. Future Directions

The following as some directions that need to be considered for the sustainable development of Mount Maculot ecotourism:

- It is a must that ecotourism management and development in Mount Maculot be in accordance with internationally accepted principles. As provided in the Guidelines on Ecotourism Planning and Management in Protected Areas of the Department of Environment and Natural Resources [7], the said principles are as follows: (1) conservation and sustainable use of biodiversity; (2) ownership by the local communities providing them business opportunities to sustain their well-being; (3) gender responsiveness and adherence to inclusive growth that considers women, children, indigenous people and informal sector activities; (4) promotion of learning experience and conservation awareness; (5) responsible action on the part of tourists and the tourism industry; and (6) delivery to appropriate number of participants and businesses that observe and follow ecotourism and conservation concepts, ensuring appropriate development and visitor control.
- Efforts must also be focused on developing long-term plans and policies necessary for successful ecotourism implementation in Mount Maculot. The key elements of sustainable ecotourism development policies, according to Sanjay Nepal [1], include sustainability criteria; diversity; institutional reforms; gender equity; local, regional and global economic integration; local financial incentives; and peace and security.
- The relationship between the stakeholders and the environment is anticipated to result in better environmental education and consciousness, as well as increased community cooperation for protection of the environment, and preservation of local culture at ecotourism sites [9]. To ensure environmental protection in Mount Maculot, appropriate policies and guidelines from the Philippine government as well as from the provincial government of Batangas and local government of Cuenca must be formulated, issued and implemented to the fullest. Policies and guidelines must also be made to contribute for the preservation of cultural heritage and indigenous knowledge, practices and systems.

- Further, the participation and empowerment of the Mount Maculot community must be given emphasis. The involvement of all sectors of the host community; i.e., young and adult; male and female; educated and not educated; in the planning and decision making activities usually builds the foundation for sustainable development. For Judith Kloiber [6], to ensure economical benefits for the community and to ensure that reinvestment is done, there is a need of strong interest in the area and an active leadership by a group of local people.
- Aside from economical development, nature protection is another big challenge of Mount Maculot ecotourism. A sustainable utilization of natural resources and the minimization of disturbance or destruction of the biodiversity is a key issue in almost all mountainous regions [6]. Hence, the designation of Mount Maculot as reserve or protected area must be seriously considered by the government.

In general, the intensive plans, measures and actions by the different stakeholders of Mount Maculot ecotourism are expected to bring about an empowered community characterized by improved quality of life of the local people, an enhanced visitor experience, and an enriched biodiversity that is safeguarded and protected by both the host community and ecotourists. Cooperation, volunteerism, partnership and networking among all sectors should be integrated to the day-to-day ecotourism activities in the mountain.

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