Impacts of Climate Change to the Resorts and Attractions in the 1st District of Batangas, Philippines

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Abstract - *Climate change and weather form at tourist destination and tourist producing countries can necessarily influence the tourist case and their travel preference. This study assessed the impact of climate change to the resort and attractions of Batangas Province (District I), Philippines. Specifically, it presented the profile of resort and attraction in terms of its type of destination, location, length of operations and average monthly arrival. It determined the impacts of climate change to the selected resorts and attractions of Batangas in terms of environmental, economic and social aspect. Lastly, the researchers proposed a plan based on the result of the study. The researchers used a descriptive method in this study with the owners/managers/employees of resorts and attractions as respondents. Results revealed that The impacts of climate change to the resorts and attraction in the 1st district of Batangas, Philippines have moderate extent impact to environmental, economic and social aspects. In environmental aspects there is a significant difference when grouped according to profile variables in terms of type of destination, location and average monthly arrival. In economic aspects there is a significant difference in terms of average monthly arrival while in social aspects there is a significant difference in terms of type of destination, location, length of operations.*
Keywords: Climate Change, Resorts & Attractions, 1st District of Batangas

INTRODUCTION

Climate is the weather average over an extended time, and efficiently it depicts the conditions that one would predict occurring at a particular time and destination. It is define by the Intergovernmental Panel on Climate Change as the statistical characterization in terms of the variability and mean of significant amount over a period

of time grazing from months to millions of years. Climate change is a statistically important difference either in the mean climate state or in its variability, continuing for an extended period of time. The earth's climate dramatically changes through natural cycles such as rock cycle, carbon cycle, nitrogen cycle and water cycle. From this, the world is more bothered from the activities of human that increases the occurring change that occur. There are two categories that cause climate change, those that created by man and the natural causes.

The climate change affects the ecosystem and society in different approach. Climate change can modify influence crop yields, rain fall, affect the health of humans, source of change to the forest and the other ecosystem and affect the supply of energy.

For tourism, Climate is an important resource, and particularly for the nature, beach and winter sport tourism portion. Climate change and weather form at tourist destination and tourist producing countries can necessarily influence the tourists' ease and their travel preference. Changing demand form and flow of the tourist will effect on the businesses of tourism and on the host communities, as well as knock off effects on connected sectors, such as constructions, agriculture and handicrafts. In developing countries and small island states, where tourism is a dominant economic activity, any significant decline in tourist arrivals will have deep employment affects and produce further poverty. Tourism industry contributes to the economic activity of the community that provides certain level of quality of life and develops deeper awareness on Filipino values and culture (Aguba, et al., 2013; Azote et al., 2013; Buted et al., 2014; De Castro et al., 2014; Felicen et al., 2012; Kalalo et al., 2014; Mejia et al., 2013; Tamayo, 2014; Ylagan et al., 2014).

Nowadays, tourism is being viewed as one major sector of global economies that are least ready for Climate Change (Scott, Hall, & Stefan 2012). Climate change for tourism is not an out-of-the-way events, but a phenomenon that already influence the sector and certain destinations in specific, mountain regions and coastal destinations among others. Simultaneously, the tourism sector is providing greenhouse gas emissions (GHG), particularly through the shipment of tourists.

Climate and weather are essential determinants in tourist's decision making and it is also a clout to the profitable operation of tourism businesses. Climate is defined as the dominant condition recognized as a long term average in a location. In comparison, weather is the epitome of climate at a particular point in place and time. So, while the tourists might anticipate certain climatic circumstances when they go to different places, they will occur the existing weather, which might depart quite essentially from the average conditions. Thus, in the first place tourist and the business in tourism are likely to

affect by the conditions of weather, although in the long term these will chase systematic revisions as projected under different climate change scenarios.

In the example given by Scott and Becken (2010), surface and sea temperature are mainly forecast to grow, rain patterns will switch with some areas converting wetter and others driers, and the circumstances of extreme events is likely to increase. Therefore, tourist destination will gain from understanding potential climatic changes in their area and how their operations might affect.

The impact of climate change has progressively turned out to be noticeable in various locales around the globe. Nowadays, the results of climate change have been more frequent in resorts and attractions. This research benefited the owners, the managers and the staff of resorts and attractions in the 1st district of Batangas by following the proposed plan in eliminating or to lessen the effect of climate change to their resorts and attractions. Therefore, prevention and action will be taken regarding the negative impacts of climate change. It also benefited the University by giving the students the insights about the present and future impacts of the climate change and to raise their awareness on how to help community to lessen the effect of it. And lastly, it will benefit the future researchers by making this paper as one of their references in terms of searching for the impacts of climate change. It gave them information about how climate change could affect the community in terms of economic, environmental and socio-cultural aspects.

OBJECTIVES OF THE STUDY

This study assessed the impact of climate change to the resort and attractions of Batangas Province (District I). Specifically to present the profile of resort and attraction in terms of its type of destination, location, length of operations and average monthly arrival; to determine the impacts of climate change to the selected resorts and attractions of Batangas province in terms of environmental, economic and social factors; to test the significant difference on the impact of climate change when grouped according to profile variable and to propose a plan based on the result of the study

METHODS
Research design

The researchers used the descriptive method in this study to gather relevant information in order to determine the impact of climate change to resort, attraction and community of selected town in the 1st district of Batangas. Descriptive research was used to describe characteristics of a population or phenomenon being studied. It affects

analysis of an exceeding wide range of phenomenon; its conclusion is a comprehensive presentation and interpretation of statistical tabulation of data yielded by a survey (Marshall & Rossman, 2010).

Participants

The participants of the study were from the resorts/resort-hotels/attraction in the 1st District of Batangas and they are the owners/managers/employees per resorts and attractions with the total of 32 respondents. The respondents were chosen based on the resorts/attractions monthly arrivals presented by the Provincial Tourism.

Instruments

The research study used a self-made questionnaire which cited from thesis entitled "Impact of Climate Change of District 1". The researcher used reliability test to validate the questionnaire. The questionnaire had two parts: Part 1, the demographic profile of the resorts and attractions that composed of the type of operations, location, length of operations, average monthly average arrival and Part 2 is the Impacts of Climate Change to the resorts and attractions in the 1st district of Batangas which is composed of three variables, Environmental, Economic, and Social. The instrument has undergone validation, revised and finalized.

Data Gathering Procedure

The researchers gathered information and sought the advice of their Thesis Adviser pertaining to the probability of the topic to be continued after the lungful reading and typing finally the researchers got the ideal topic and continued the study. Impacts of Climate Change to the Resorts and Attraction in the 1st District of Batangas were the topic that was approved by both the thesis advisor and the dean. Then, there are rigorous data gathering continued, collecting different information from books, internet and even past thesis. With the help of a great research foundation the researchers made the skeletal outline of their study making it a much more attainable. From rationale, objective and introduction, slowly the researchers manage to construct the body which was the review literature and the related studies until the researchers constructed the instrument that will be answered by their target respondents. Furthermore, after the survey was done, the researchers tallied the result and then submit the summation of the tally to the assigned statistician and finally completing paper with the statistical output.

Data Analysis

Data analysis followed after collection of information and proceeded to interpretation and discussion. Statistical tools such as frequency percentage distribution was used to determine the demographic profile of each resorts and attractions in district 1 and the weighted mean was used to assess the impact of climate change in terms of Environmental, Economic and Social Aspects. ANOVA was used to test that the significant differences of climate change.

RESULTS AND DISCUSSION

Table 1. Percentage Distribution of Resorts and Attraction in Batangas Province according to Profile (N = 32)

Profile Variables	f	%
Type of Destination		
Resort	12	37.50
Resort-Hotel	8	25.00
Tourist Attraction	12	37.50
Location		
Taal	8	25.00
Lemery	4	12.50
Balayan	2	6.30
Calatagan	4	12.50
Lian	2	6.30
Nasugbu	12	37.50
Length of Operations		
3-5 years	4	12.50
6-8 years	2	6.30
9-11 years	2	6.30
12 years and above	24	75.00
Average Monthly Arrival		
Less than 500	10	31.30
500-999	2	6.30
1,000-1,499	8	25.00
1,500-1,999	2	6.30
2,000 – 2,499	6	18.80
2,500 – or more	4	12.50

Table 1 shows the frequency distribution of resorts and attraction in Batangas province according to profile. It can be seen from the table that majority of the type of destination in district 1 are resorts and tourist attraction with 12 or 37.50 percent. However, only 8 or 25.00 percent was classified as a resort-hotel. Majority of the destination in district 1 are resorts and tourist attraction because district 1 is consists of 8 towns and the towns in district 1 are near in the beaches and it is also known for heritage sites.

In terms of location, Nasugbu has the highest item with 12 or 37.50 percent followed by Taal with 8 or 25 percent. And the lowest item is Balayan and Lian with 2 or 6.30 percent. Majority of the respondents are from Nasugbu because Nasugbu is honoured with a portion of the finest shorelines in the area of Batangas with 131,113 populations according to 2015 census.

In terms of years of operation, most of the respondents fall to 12 years and above with 24 or 75.00 percent and the lowest are 6-8 and 9-11 years with 2 or 6.30 percent. The result shows that majority of the resorts and tourist attraction in district 1 are operating the business for long time and despite in long time resort business industry, they are still competitive and they are more veteran than new resorts arising nowadays.

And lastly, in terms of average monthly arrival, most of the resorts and attractions in district 1 are having less than 500 guests per month with 10 or 31.30 percent while the lowest got 2 or 6.30 percent. Nowadays, most of the tourists prefer to visit the resorts and attraction during the summer season that's why some resorts and attraction are having less than 500 per month.

This can be supported by the study of Zhang and Kulendran (2016) Climate factors assume a predominant part in molding occasional variety in respect to season and nation. The change of vacationer numbers starting with one season then onto the next is resolved not just by atmosphere factors.

According to Brooks (2011) there are other natural factors affecting climate change most specifically the profile percentage distribution of the resorts in some areas. Regional wind patterns or current can also increase the risk of climate change in resorts or attractions affecting the arrival of visitors which greatly affect the destination, location and operation of the certain destination in the province of batangas. Most of the researchers say that profile variables could affect the destination and human activities which largely responsible for the continued increase in average global temperature, which causes climate change.

Table 2 presents the impacts of climate change as to environmental aspects with an overall composite mean of 2.84 and generally interpreted as to a moderate extent.

Table 2. Impacts of Climate Change as to Environmental Aspects

Environmental Aspects	WM	VI	Rank
1. There is decrease in the property size and value of the resort/attraction. (e.g. smaller beach fronts)	2.75	To a Moderate Extent	6
2. The forestry, plants and wildlife are more prone to deadly infestations.	2.31	To a Least Extent	10
3. There is a sudden change in the temperature from the usual.	3.28	To a Moderate Extent	1
4. There are unexpected storms and continue to become stronger and more frequent.	3.19	To a Moderate Extent	2
5. There are changes in the number of available areas that can accommodate visitors.	3.13	To a Moderate Extent	3.5
6. Scarcity of water supply.	2.81	To a Moderate Extent	5
7. There are frequent need for structural repairs due to damages from storms and other natural events.	3.13	To a Moderate Extent	3.5
8. There are changes in quality of infrastructure directly affecting the operations of resort/attraction.	2.59	To a Moderate Extent	8
9. Lessen attractiveness of the environment within the resort/attraction premises.	2.59	To a Moderate Extent	8
10. There are changes in the natural landscape/physical features of the resort/attraction	2.59	To a Moderate Extent	8
Composite Mean	**2.84**	To a Moderate Extent	

Legend: 4.50 – 5.00 =To a Very Great Extent; 3.50 – 4.49 = To a Great Extent; 2.50 – 3.49 = To a Moderate Extent; 1.50 – 2.49 = To a Least Extent; 1.00 – 1.49 = Not at All

Among the items cited, a sudden change in the temperature from the usual that has the highest mean of 3.28. This was followed by the experiences of unexpected storms that has continued to become stronger and more frequent with a computed mean of 3.19, and there are changes in the number of available areas that can accommodate visitors and also there are frequent need for structural repairs due to damages from storms and other natural events with weighted mean of 3.13, both interpreted as to a moderate extent. There's a sudden change in temperature from the usual because of human activities that

driving the atmosphere framework toward a limit and in this manner expanding the shot of unexpected atmosphere changes happening.

This can be supported by the study of Alley (2013) a sudden change in temperature happens when the atmosphere framework is compelled to move to another atmosphere state at a rate that is controlled by the atmosphere framework vitality adjust, and which is more quick than the rate of progress of the outer constraining. Global warming and human exercises might be moving the world quicker toward sudden, durable atmosphere changes.

Forestry, plants and wildlife are more prone to deadly infestations had a verbal interpretation of to a least extent with a computed mean of 2.3. Other items were verbally assessed to have a moderate extent of impact on the changes in the quality of infrastructure directly affecting the operations of resort/attraction with a weighted mean of 2.59 and to the natural landscape/physical features of the resort/attraction with 2.59. It was also found out that climate change lessen attractiveness of the environment within the resort/attraction premises with 2.59.

When the researchers made a survey in the 1st district of Batangas, the researchers noticed that most of the resorts and attractions are more on structural building than on forestry, plants and wildlife. Attractions on district 1 are more on museums while resorts are more on building structures. But some museums, historical sites and buildings are affected by insect pests.

According to Stout (2015) insect pets are responsible of generous harm to exhibition hall objects, notable books and in structures like royal residences or historic houses. Distinctive wood boring beetles, the cigarette beetle, different dermestides, the biscuit beetle, and moths like the webbing garments moth and booklice can harm materials, objects or building parts. Most important insect pests happening in exhibition halls, files, libraries and memorable structures in central Europe are examined with a portrayal of the materials and objects sorts that are generally plagued and harmed.

Table 3 reveals the impacts of climate change as to the economic aspect with the total composite mean of 2.99 with the verbal interpretation of to a moderate extent.

It was found out that there is need in the cost of maintenance and repair of the resort/attraction that got the highest weighted mean of 3.28 followed by the changes in the arrival patterns during the peak and lean season (3.25) increase in the requirements for the promotion strategies of the resort/attraction (3.25)

The most widespread mood to come up with the economic aspect of climate change must maintain the good condition of the surrounding most especially the

establishment that help boost the profit of the community or hospitality industry for the better opportunities that can maximize the income of the establishment or industry.

Table 3. Impacts of Climate Change as to the Economic Aspect

Economic Aspect	WM	VI	Rank
1. It reduces the number of tourist arrivals of the resort/attraction.	2.69	To a Moderate Extent	9
2. There are changes in the arrival patterns during the peak and lean season.	3.25	To a Moderate Extent	2.5
3. There are changes in the revenue of the resort/attraction	2.97	To a Moderate Extent	7
4. There are changes in the operation costs of the resort/attraction.	2.91	To a Moderate Extent	8
5. There is need in the cost of maintenance and repair of the resort/attraction.	3.28	To a Moderate Extent	1
6. Reduce the interest, development, and investment opportunities for the resort/attraction.	2.44	To a Least Extent	10
7. Necessitates a better development planning for the resort/attraction.	3.00	To a Moderate Extent	6
8. There are changes in the man-power needs of the resort/attraction	3.06	To a Moderate Extent	4.5
9. Increase in the requirements for the promotion strategies of the resort/attraction.	3.25	To a Moderate Extent	2.5
10. There are changes in the supply of materials and services needed by the resort/attraction.	3.06	To a Moderate Extent	4.5
Composite Mean	**2.99**	To a Moderate Extent	

Legend: 4.50 – 5.00 =To a Very Great Extent; 3.50 – 4.49 = To a Great Extent; 2.50 – 3.49 = To a Moderate Extent; 1.50 – 2.49 = To a Least Extent; 1.00 – 1.49 = Not at All

Tourism action likewise includes monetary expenses, including the immediate expenses caused by tourism organizations, government costs for infrastructure to better serve tourists, and in addition blockage and related expenses borne by people in the group. Group choices over tourism regularly include banters between industry defenders touting tourism's monetary effects (benefits) and spoilers stressing tourism's expenses. Sound choices lay on an adjusted and target evaluation of both advantages and costs and a comprehension of who profits by tourism and who pays for it (Stynes, 2011).

On the other hand, reduce the interest, development, and investment opportunities for the resort/attraction got the lowest weighted mean of 2.44 having a verbal interpretation to a least extent. It was followed by reduces the number of tourist arrivals of the resort/attraction with the weighted mean of 2.69 with the verbal interpretation of to a moderate extent and then followed by changes in the operation costs of the resorts/attraction with the result 2.91 with the verbal interpretation of to a moderate extent.

It reveals that economic is negatively affected by change in development. Reduction of interests, development and opportunities for the resorts and attractions hasn't affected much of the owners/managers of the resort. They can develop basic infrastructure through construction of roads, facilities that economy can benefit. They can support their need and not influenced by the climatic change.

The foreseen development in universal guest entries and residential travel developments is required to achieve a comparing increment in limit prerequisites and interest for new items, offices and administrations, along these lines making ready for neighborhood and remote venture openings. End product to this is the change and redesigning of value, aptitudes and capabilities of the required frontlines. Lodgings, resorts and different sorts of convenience offices particularly in the districts should be worked to address the hotel necessities of both outside and residential voyagers. The requirement for enhanced availability will in like manner open venture openings in air, water and land transport operations (Evangelista, 2013).

Table 4 shows the impacts of climate change as to the social aspect with the total composite mean of 2.77 with the verbal interpretation of to a moderate extent.

It was found out that there is a decrease in the number of job openings due to climate change that got the highest weighted mean of 3.13 with the verbal interpretation of to a moderate extent. It was followed by limited product offerings to be served for the tourists with the result of 2.91 with verbal interpretation of to a moderate extent and then followed by increase in the demand for new products and services which are not available with the result of 2.91 with the verbal interpretation of to a moderate extent.

Job availability follows on the climate change pattern. We are now seeing the loss of lives and vocations in view of extraordinary climate occasions and evolving seasons. Working individuals are on the bleeding edges of climate change, with more than 2.5 million individuals dislodged from their homes. Furthermore, specialists will be on the forefronts of the mechanical change that is a need for a zero-carbon future.

Regardless of seen changes and effects of environmental change on nearby job exercises, basically farming, there are various stressors that the groups confront which

additionally influence their jobs. Additional confirmation based research is required to unravel environmental change impacts on occupations, including job impacts emerging from communications of atmosphere and non-climatic components (Nhemachena, 2014).

Table 4. Impact of Climate Change as to the Social Aspects

Social Aspect	WM	VI	Rank
1. There is decrease in the number of job openings due to climate change..	3.13	To a Moderate Extent	1
2. There is decrease in the number of types of Jobs or Positions due to climate change	2.53	To a Moderate Extent	9
3. There is a limited product offerings to be serve for the tourist.	2.91	To a Moderate Extent	2.5
4. There is decrease in the diversity of customer preferences	2.88	To a Moderate Extent	4
5. There is decrease in the distinguishing cultural characteristics of the people in the local area.	2.56	To a Moderate Extent	8
6. There is increase in the number of domestic residents in the local area.	2.84	To a Least Extent	5
7. There is increase in the number of foreign residents in local area.	2.81	To a Moderate Extent	6.5
8. There is an increase in the demand for new products and services which are not available before.	2.91	To a Moderate Extent	2.5
9. There is decrease in the demand for old products and services affecting the livelihood of the people.	2.38	To a Moderate Extent	10
10. There is a decrease in the amount of cultural heritage activities which alters social norms in the locality.	2.81	To a Moderate Extent	6.5
Composite Mean	**2.77**	To a Moderate Extent	

Legend: 4.50 – 5.00 =To a Very Great Extent; 3.50 – 4.49 = To a Great Extent; 2.50 – 3.49 = To a Moderate Extent; 1.50 – 2.49 = To a Least Extent; 1.00 – 1.49 = Not at All

On the other hand, decrease in the demand for old product and services got the lowest weighted mean of 2.38 having a verbal interpretation to a least extent. It followed by followed by decrease in the distinguishing cultural characteristics of the people in the local people with the result 2.56 with the verbal interpretation of to a moderate extent.

And then reduces the number of tourist arrivals of the resort/attraction with the weighted mean of 2.69 with the verbal interpretation of to a moderate extent.

The preference of the tourists depends on the climate change. Change of the expectation for everyday comforts has, in addition to other things, created the ascent in variance of tourists which has gotten along the expansion traveller's spending, i.e. the pay from tourism. New visitor's conduct is the most essential consider the new tourism improvement. Along these lines the point of the examination is to discover the fundamental components and results of tourism request changes.

Response of the society in every measurement of global climate change is intermediate culture. Anatomizing of new research over the social sciences to introduce that climate change threatens the cultural dimensions of lives and livelihoods included the material and lived angle of culture, identity, community cohesion and sense of place. There are important cultural measurements to how societies react and adapt to climate related risks (Adger, 2012).

Table 5 reveals the summary of the responses of the participants on the impact of coastal tourism in the District 1 of Batangas, in terms of Environmental, economic and social aspects with a composite mean of 3.49 with a verbally interpretation of a moderate extent.

Table 5. Summary Table on the Impacts of Climate Change

Indicators	WM	VI	Rank
Environmental Aspect	2.84	To a Moderate Extent	2
Economic Aspect	2.99	To a Moderate Extent	1
Social Aspect	2.18	To a Moderate Extent	3
Composite Mean	**3.49**	**To a Moderate Extent**	

Legend: 4.50 – 5.00 =To a Very Great Extent; 3.50 – 4.49 = To a Great Extent; 2.50 – 3.49 = To a Moderate Extent; 1.50 – 2.49 = To a Least Extent; 1.00 – 1.49 = Not at All

The summary of table on impact of climate change on economic aspect being ranked as the top 1 with a weighted mean of 2.99 verbally interpreted to a moderate extent. Environmental aspect ranked as the 2nd with a weighted mean of 2.84 verbal interpreted as to a moderate extent. As the lowest rank on social aspect had a weighted mean of 2.18 verbally interpreted as to a moderate extent.

It provokes changes in the national and international commodity process that basically has a negative impact in the agriculture of the Philippines and the overall economy of the country. It affects the agricultural of domestic production feed, security and consumption.

The impact of climate change on the economic aspect ranked as the top 1 in the result of our study. Eboli (2010) economic growth had been affected the economy in numerous and complex ways, the change in productivity, production, resources endowments and consumption patterns.

Climate change sharpens equity of social and cultural issues such as disparities in location, education, income, health, gender and age; made even quick by increased levels of forced and voluntary migration within and even more in future island country boundaries.

Social aspect ranked as the lowest on the impact of climate change it hadn't been the most affected aspect on our variable. Adger (2010) assumed that the world is continuously facing the increasing risks of climate change that are the boundaries of human experience, there is a necessity to learn from the past and present strategies to know both of the processes which adaptation takes and the boundaries of the various agents of the climate change-states, markets and civil society in the society.

As the table 6 depicts the difference responses on the impact of climate change on environmental aspects when grouped according to profile variable that the p-value computed for the profile variable 0.11, 0.005 and 0.009 is lower than the 0.05 alpha levels except on that of the length of operations. This result indicates that there is a significant difference on the environmental impacts of climate change when group according to the stated variables (destination, location and average monthly arrival)

Impact of climate change on environmental aspect in the type of destination which is the tourist attraction obtained a mean of 3.1667. It is cause one of the important aspects that a tourist or a group of tourist is considering in choosing a destination. As to LaMondia (2010) the mode of constants and destination preferences, travel characteristics, holiday travel preferences and perception are the several things that the tourist is considering when choosing a destination.

Table 6. Difference of Responses on the Impact of Climate Change on Environmental Aspects When Grouped According to Profile Variable

Profile Variables	F - value	p - value	Interpretation
Type of Destination	5.291	0.011	Significant
Location	4.379	0.005	Significant
Length of Operations	2.409	0.088	Not Significant
Average Monthly Arrival	3.933	0.009	Significant

Legend: Significant at p-value < 0.05

Taal is considered as the most significant variable in terms of location with a mean of 3.3500. Tourist prefers a more environment friendly surrounding, they intend to

select and consider a place where they can enjoy and maximize resources while delighted by nature. Yumul (2011) it is easily harmed by the unfavourable impact of constantly changing of climate. It has been seen that we are experiencing drought, heavy rainfall or strong typhoons that causes flash floods and landslide.

On average monthly arrival of guest 2,000-2,499 are being affected by the environmental aspect of climate change with the mean of 3.4667. That determines the flow of tourist coming to a destination. Thus, storm surges flood low-lying areas, damage property, disrupt transportation system, destroy habitat, and threaten human health and safety is connected to the arrival of the tourist on a certain destination (Moser, 2014).

Table 7. Difference of Responses on the Impact of Climate Change on Economic Aspects When Grouped According to Profile Variable

Profile Variables	F - value	p - value	Interpretation
Type of Destination	2.528	0.097	Not Significant
Location	2.061	0.103	Not Significant
Length of Operations	2.826	0.057	Not Significant
Average Monthly Arrival	4.174	0.006	Significant

Legend: Significant at p-value < 0.05

It can be observed on table 7 shows that the difference of responses on the impact of climate change on economic aspects when grouped according to profile variable. Average monthly arrival had a p-value of 0.006 interpreted as significant. The destination, location and length of operation have the same level of influence on the economic aspect of the resorts and attraction.

In terms of average monthly arrival 1,500-1,999 influence by the climate change on economic aspect with a mean of 4.200. It clarifies that the said variable is affected by the climate change and as finding of Lilleor (2011) namely income level, differential between origin and destinations and wage inconsistency.

Table 8. Difference of Responses on the Impact of Climate Change on Social Aspects When Grouped According to Profile Variable

Profile Variables	F - value	p - value	Interpretation
Type of Destination	5.283	0.011	Significant
Location	3.353	0.018	Significant
Length of Operations	12.337	0.000	Significant
Average Monthly Arrival	1.813	0.145	Not Significant

Legend: Significant at p-value < 0.05

Table 8 proves that the difference responses on the impact of climate change on social aspect when grouped according to profile variable. Destination, location and length of operations obtained computed p-values of 0.011, 0.18 and 0.000 respectively.

Tourist attraction got the highest mean of 3.2333 on the type of destination being significant. People nowadays especially millennial tend to prioritize a destination that suites their personality as an individual or as a group. Rastogi (2011) safety, economic and comfort were found influencing the choices of tourist.

Balayan Batangas considered as significant with a mean of 3.700 in terms of location. Increasing rates of infectious disease including cholera, cryptosporidiosis and typhoid fever after flood events. According to Bartlett (2011) climate change concluded that climate change will increase the burden of diarrhoeal diseases Climate change is also likely to alter the incidence and geographical range of malaria densely populated urban areas this effect is likely to be accentuated.

On the length of operations 3-5 years had the highest mean of 3.7000. This is one of the important factors to consider a place. It measures how a specific destinations appeal tourist and offers a wide variety of amenities and services. People tend to stay and comeback for the hospitality of the personnel. Kreag (2012) the long period of operation enriches the opportunities to meet interesting people, make friendship, lean about the world and expose themselves to new perspectives.

CONCLUSION

Most of the destinations in district 1 are resorts and tourist attractions and were operating for almost 12 years and above. In average monthly arrival, most of the resorts have less than 500 guests per month. Selected resorts and attraction in the 1st district of Batangas climate change has an impact in the need in the cost of maintenance and repair of the resort/ attraction, a sudden change in the temperature from usual and decrease in the number of job openings investment opportunities for the resort/attraction has the highest impact. In terms of environmental aspects there are significant variable in type of destination, location and length of operations. In terms of economic aspects, average monthly arrival has the significant variable and lastly, in terms of social aspects, type of destination, location and average monthly arrival has the significant variable. The researchers were able to propose an action plan based on the study.

RECOMMENDATIONS

Resorts manager/owners may secure the economic states of resorts and attractions in the 1st district of Batangas and furthermore to encompassing communities, extending

year-round operations, innovating new ways to keep guests visiting the resorts and attraction must be practice. Local government officials may conduct local adjustment practices may be promoted and preserved by the resorts managers. Local government officials may conduct awareness on climate change and its impact may be raised on the communities. Future researchers may conduct an in-depth study on climate change using qualitative methods with new variables.

Table 9. Proposed Action Plan to Minimize the Impact of Climate Change to the Resorts/Attractions in District I Batangas Province

Key Result Areas/ Objectives	Strategies/ Activities	Outcomes
Environmental Aspects. • To protect and to increase growth of forestry, plants and wildlife of District I Batangas province.	The owners/managers/employees of the resort will propose a plan of limiting the use natural resources accordingly, so that it can decrease the severity of the forestry being prone to deadly infestations.	Being aware with this matter will improve the part of nature as a wellspring of answers for the future needs and difficulties of humankind.
Economic Aspects. • To improve the Resorts in terms investment opportunities for the resort/attractions	The owners/managers/employees will give a decent comprehension of the arrangement of convictions, interests, or decide that impact environmentalism or expert natural activity. Monitoring and addressing tourist attitudes should be an ongoing part of the management the interest, development effort. To be able to attract or motivate the tourist to visit the resorts/attractions they must know the tourist preference in any type of climate.	This presumes if schools teach in kids positive qualities and states of mind towards ecological protection they would play a dynamic part in rationing the earth and its assets and consequently preserve them for the future era.
Social Aspects. • To decrease in the demand for old products and services.	The owners/managers/employees will cultural tourism is preserving the old heritage site, they can improve it but cannot totally change it to maintain the essence of being a cultural heritage. Proper introduction to the tourist is the best way to recognize and appreciate this kind of attraction	This resulting the increasing number of people and helps in creating jobs and taxes and stimulates entrepreneurialism in heritage destinations.

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