

**THE CONTRIBUTION OF TOURISM DEVELOPMENT TO
THE CONSERVATION OF FLORA AND FAUNA:
EMPIRICAL RESULTS FROM ZIMBABWE**

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Abstract

This paper critically examines the contribution of tourism development to the conservation of floral and faunal species in Zimbabwe. The perceptions and views of practitioners and students in the tourism industry were collected through a structured questionnaire leading to the conclusions and recommendations contained herein. The key observations were that tourism contributes to environmental conservation in a significant way in Zimbabwe. It is also noted that information dissemination about conservation needs to be increased by the relevant stakeholders in order to uphold the standards set by Government policies. The paper concludes by proposing recommended action plans and steps that enhancesustainable tourism development.

Key Words: Tourism,environment, conservation,sustainable development

1.0 Introduction

Tourism is the world's largest industry, employing, according to the World Tourism Organization (WTO, 2008), 10% of the global workforce. Tourism is also of major importance to the economy of Zimbabwe, particularly in terms of foreign currency earnings and job creation (Zimbabwe Tourism Authority Statistics 2007). The study critically analyses the instrumentality of tourism as a tool for conservation in Zimbabwe by assessing the extent to which tourism development has contributed to the conservation of plant and animal species.

2.0 Literature Review and Theoretical Framework

Tourism involves traveling for recreation, leisure or business. It entails staying away from your usual place for not more than a year but without earning a salary for living. When a person travels for tourism they engage in two major types of tourism which are consumptive and non-consumptive actions (Devlin 1999). Figure. 1 below explain the extent to which a tourism activity can be classified as consumptive or non-consumptive

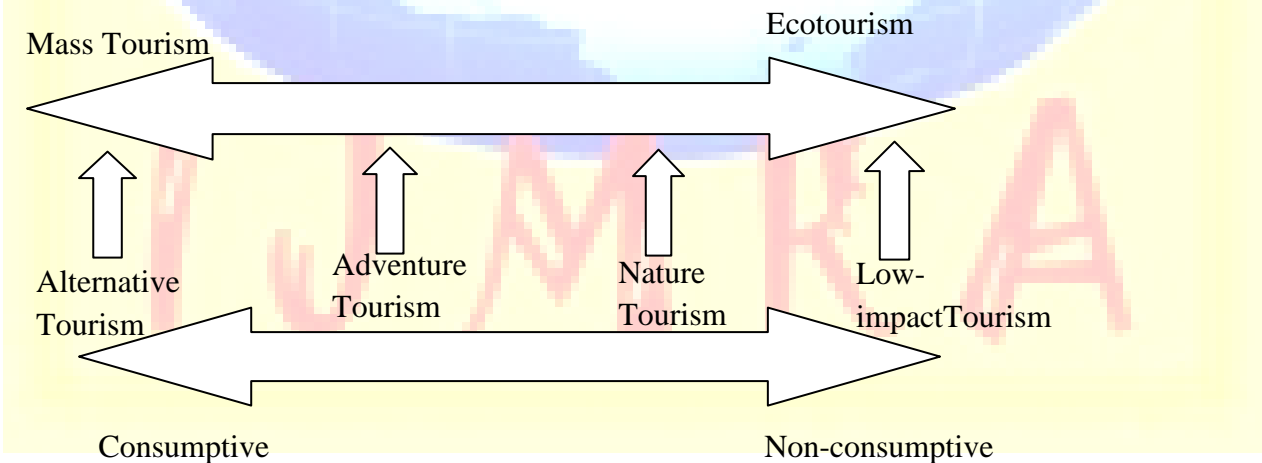


Figure. 1 Ecotourism Development in Eastern and Southern Africa: Source Devlin J, (1999).

2.1 Consumptive tourism

Whether an activity is consumptive or non-consumptive depends on the frame of mind with which implementation is approached (Devlin J. 1999). One major example of consumptive tourism is hunting, it is considered highly consumptive. Consumptive tourism sees an attraction as an object through which the recreational activity is achieved. For example a mountain is seen as an obstacle to be climbed upon rather than as an aesthetic and ecological marvel to behold. In hunting, animals are seen as objects to kill and win trophies rather than as aesthetic and biological marvel.

From the diagram in fig. 1 above major types for consumptive tourism are **alternative tourism** and **adventure tourism**. These two are characterised by mass tourism were many visitors visit the attraction/destination at once. There is high demand to control the carrying capacity of the destination for tourism to act as a tool for conservation in this regard. If not controlled, more visitors continue to visit the attraction leading to attraction extinction or rapid depreciation.

2.2 Non-consumptive tourism

On the non-consumptive side, the natural resources, specific attraction or destination is considered by the tourist as the subject to be viewed, studied and analysed (Devlin J 1999). One major example of non-consumptive tourism is ecotourism. This is nature based. The visitor is deeply involved in nature based tourism trying to understand how nature behaves. Major activities according to Devlin J (1999) are viewing, studying and analysing. This includes bird watching, scenery viewing, analysing the environment and photographic tourism.

Boo (1990) and Lindberg (1991) define ecotourism as tourism that involves traveling to relatively undisturbed or uncontaminated nature areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural activities. Scace (1992) and Wight (1994) suggest that ecotourism is nature travel that actually contributes to conservation. There are principles which were developed by Wight (1994) which ecotourism must be developed upon and these include:

- Ecotourism should not degrade the resources and should be developed in an environmentally sound manner.
- It should provide long-term benefits to the resources, to local community and industry
- It should provide first-hand, participatory and enlightening experience
- It should involve education among all parties that is local community, government, non-governmental organisation, industry and tourists.
- It should encourage all-party recognition of the intrinsic value of the resources
- It should involve acceptance of the resources on its own terms, and in recognition of its limits, which involves supply orientation management
- It should involve understanding and involve partnerships between many players which could include government, non-governmental organisations, industry, scientists and locals
- It should promote moral and ethical responsibilities and behaviours towards the natural and cultural environment by all players

It is very difficult to reach complete non-consumptive tourism, but the greatest need is to reduce physical consumption. If not well planned both consumptive and non-consumptive tourism can result in negative impacts to the environment in which it is being practiced. The purpose of lower Zambezi National Park was to conserve and protect the wildlife and Zambezi River valley ecosystem, the high bio-diversity of fauna and flora, the water catchment for the Zambezi River system and the area's cultural heritage (Devlin 1999)

2.3 Sustainable Tourism Development

According to the World Commission on Environment 2012 sustainable tourism implies the meeting of the needs of the present without compromising the ability of the future generations to meet their own needs. Sustainable tourism goes on to the extent of management of resorts in such a way that economic, social and aesthetic needs can be fulfilled while maintaining the integrity and essential ecological processes.

If well planned sustainable tourism development will lead to:

- Minimizing negative social and cultural impact

- Optimizing economic benefits
- Concern for the environment
- Long term planning
- Visitor management
- Full local community participation

Sustainable tourism development is an umbrella term for many other types to tourism which include ecotourism, geo-tourism, new tourism, ethnic tourism, alternative tourism and justice tourism.

The government of Zimbabwe has been called upon to put in place a framework for sustainable tourism and establish benchmarks for monitoring its contribution to the Gross Domestic Product (The Herald, 20 October 2010). The country has considerable competitive advantage in tourism in respect of attractions that include culture, art, music, natural landscapes, wildlife and climate.

Sustainable tourism development must have a positive impact on the society's wealth and living conditions. Definition of sustainable development was criticised by many scholars taking it as more general, vague, rhetorical and impractical (Redclift 1992). Sustainable development must meet three aspects of economic development, social development and environmental protection (United Nations, 1997). Therefore the definition of sustainable development in the context of tourism was defined by Butler (1993) as:

“ tourism which is developed and maintained in an area in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment (human and physical) in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes.”

2.4 Conservation

Conservation in tourism is defined as tourism which makes a net positive contribution to the continuing survival of threatened plant, cultures, traditions and animal species(Conservation Tourism,2011). There are a number of different possible mechanisms for positive contributions to conservation, but the key issue is to calculate net outcomes after subtracting the negative

impacts. Many definitions of ecotourism do include contributions to conservation, but there are very few companies that can demonstrate if their overall net contribution at global scale is positive. So, conservation tourism is a very small sub-sector of ecotourism, which is itself a small sub-sector of the multi-trillion dollar tourism industry. Budgets for conservation are small and stretched, especially in developing nations. Conservation tourism, while very small, is very important as there are several rare species where significant populations are protected in private reserves funded by tourism.

There are some programmes and projects which enhance conservation in the tourism industry in Zimbabwe, and these include:

- Conservancies
- Cultural tourism projects
- National parks
- Botanical gardens
- Museums
- Protected areas – wetlands, dams, etc.

2.5 CAMPFIRE Programme

CAMPFIRE stands for Communal Area Management Program for Indigenous Resources. This is a development initiative established by the Department of National Parks and Wildlife Management and other collaborative groups, which sought to empower local communities through greater participation of local communities in the tourism sector in Zimbabwe (Muzvidziwa, 1999). The major objective of CAMPFIRE was to combine conservation and development interests in Zimbabwe's communal areas.

According to Muzvidziwa, et al. (1999), sustainable tourism rests on willing local communities and residents whose attitude towards tourism and perceptions of its impact on community life must be continually assessed. CAMPFIRE was discovered to be an important tool for natural resource conservation and management of the environment in rural areas. It seeks to encourage to local communities to have a sense of respect for the environment and natural resources in their areas.

Major attractions for CAMPFIRE projects are trophy hunting, bird watching, attending to local festivals like **mabiramakuru**, game driving, staying in cultural houses and village walks. These products motivate locals to be proud of who they are and guard it carefully. The locals are involved in decision making, given opportunities to work in the tourism projects in their communities. Monetary benefits are channelled back into the community through the building of schools, roads, dams and clinics.

2.6 Case studies- Tourism as an instrument for conservation

The following are some of case studies where tourism has left a mark as a conservation tool.

- In Botswana and Namibia, Wilderness Safaris, a reputable conservation company has brought over a million hectares of land, principally community land, into conservation use.
- In South Africa, Conservation Corporation Africa (ACC Africa) has successfully established a considerable number of private conservation reserves funded through tourism and has pioneered restoration, restocking and wildlife relocation techniques. (ACC Africa, 2008)
- In Sabi Sands area, tourism funds the private reserves which has effectively added 65 000 hectares to Kruger National Parks in South Africa and the Madikwe private reserve adjacent to the Botswana border post.
- In Botswana funds were made available for re-introduction of rhino previously poached to local extinction into the publicly owned reserves.
- In India through a joint venture known as Taj Safaris CC Africa has recently built 4 tourism Lodges to support tiger conservation. It is currently providing technical expertise to relocate gaur, the endangered Indian wild ox, as part of a continent-wide conservation program (Conservation Corporate Africa, 2008).
- In Zimbabwe the program called Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) has helped many of Zimbabwe's poorer rural communities. Through CAMPFIRE, foreign visitors buy licences to hunt wildlife within certain quotas. As well as keeping wildlife numbers at sustainable limits, the profits from these licences and the sale of meat and skins of the animals is ploughed back into local communities to build new schools, wells and health clinics. (Muzvidziva, 1999)

- Save Valley and Bubi Conservancies in Zimbabwe, since their formation, not a single rhino has been poached and black rhino numbers are growing in Zimbabwe for the first time in decades. Today, these conservancies are dramatic testimonials to the power of private conservancies (Goodwin, 1997).
- Red Sea Sustainable Tourism Initiative (RSSTI) in Egypt is one of first tourism programs in the Middle East to adopt principles of sustainable development; this programme was funded by USAID. The Tourism Development Authority (TDA) in Egypt plans to build approximately 200,000 new hotel rooms in the next 15 years near and around the Red Sea and Sinai Peninsula (source: greenhotelier). The RSSTI has a mandate for sustainable tourism and advocates their mission by working with the TDA and encouraging environment and socially responsible projects which involve local participation in decision making, eco-efficiency, the use of EIA', Environmental Management Systems, etc. In addition, a set of economic instruments have been developed to encourage developers to be more responsible.
- Chumbe Island in Tanzania is the first privately established and managed Marine Park in the world and takes serious note in its sustainability operations. Its income from eco-friendly visitors finances conservation and environmental education programs for local schools and other groups.
- Vamizi Island in Mozambique offers luxurious eco-lodges, made up of ten low-impact beach houses. The lodge tries to sustain livelihoods by providing a boat for islanders to patrol the waters for illegal fishing, and steps are being taken to manage the elephant population so that human and pachyderm can coexist. The construction uses almost entirely local materials - timber, thatch and stone all come from the mainland or the islands themselves - thus providing help to the local economy.
- Samati Nature Reserve, Costa Rica was built without the use of heavy machinery, no clearing of land or cutting of trees, the retreat only employs local people and aims to give money back to the local community. Offering eco and adventure trips, the retreat has undertaken multiple measures to become more sustainable.

The foregoing literature review has shown the benefits and disadvantages of tourism. It has also shown areas where conservation has taken place and resulted in tourism attractiveness of the

areas. However, it is not clear which precedes the other, tourism or conservation. The literature does not also show the compatibility of conservation and tourism, do the two terms go hand in hand, because where there is tourism, there is some form of consumption – erosion, environmental degradation, resource exploitation, food/water/energy consumption, and cultural erosion. This study therefore seeks to explore the relationship between tourism and conservation, and establish how tourism can be utilized as an instrument for conservation.

3.0 Methodology

This research was done using the survey strategy. A sample of key informants was used. This was derived from Zimbabwe Tourism Authority, Ministry of Tourism, University Of Zimbabwe Lecturers, Chinhoyi University of Technology Lecturers as well as Great Zimbabwe University lecturers. Robson (1993) defines population as all cases/units target for research. There are two types of population, namely the target population and the study population. The target population is the universe to which the researcher expects to generalise results and the study population is the population of subject who are actually available to the researcher. The target population for the study comprised Tourism players. It is from this target population that a study population was derived. Purposive sampling was used in this study. “Purposive sampling involves handpicking cases to be included in the sample on basis of judgement of their typicality”, (Cohen & Manion, 1989:103). The cases under study were picked by virtue of their typicality, that is, by virtue of their being players in the tourism industry. A total number of 28 respondents were purposively selected for the study. Data was collected using a structured questionnaire. The questionnaires were personally delivered to the sample and personally collected resulting in 100% return rate. Data was presented and interpreted qualitatively.

4.0 Findings

The respondents to in the research, which were randomly selected during a United Nation World Tourism Organisation (UNWTO) symposium held at Chinhoyi University of Technology in Zimbabwe were made up of students, lecturers and players in the tourism and hospitality industry. The findings of the research represented by the analysis of responses are presented in

table 2 below. The responses per question are analysed in relation to the pattern of responses across the different respondents.

Tables 1 to 6 below show the demographic characteristics of the participants in this study in terms sex, age, education and marital status.

Table 1: Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	15	53.6	55.6	55.6
	Female	12	42.9	44.4	100.0
	Total	27	96.4	100.0	
Missing	System	1	3.6		
Total		28	100.0		

Table 2: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30 Years and below	20	71.4	74.1	74.1
	31-40 Years	3	10.7	11.1	85.2
	41-50 Years	3	10.7	11.1	96.3
	50 Years and above	1	3.6	3.7	100.0
	Total	27	96.4	100.0	
Missing	System	1	3.6		
Total		28	100.0		

Table 3: Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Masters	7	25.0	25.0	25.0
	Bachelor	19	67.9	67.9	92.9
	Diploma	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

Table 4: Designation

		Frequency	Percent	Valid	Cumulative
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			Percent	e Percent
Valid	Lecturer	10	35.7	35.7
	Administrato r	1	3.6	39.3
	Manager	2	7.1	46.4
	Student	15	53.6	100.0
	Total	28	100.0	100.0

Table 5: Nature of Organisation

		Frequency	Percent	Valid Percent	Cumulativ e Percent
Valid	University	23	82.1	82.1	82.1
	College	1	3.6	3.6	85.7
	Parastatal	3	10.7	10.7	96.4
	Government Department	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

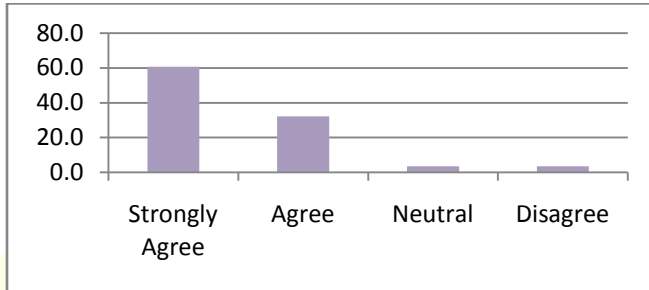
Table 6: Experience in Tourism

		Frequency	Percent	Valid Percent	Cumulativ e Percent
Valid	2 Years and below	13	46.4	46.4	46.4
	3-5 Years	12	42.9	42.9	89.3
	5-10 Years	3	10.7	10.7	100.0
	Total	28	100.0	100.0	

4.1 Research Findings

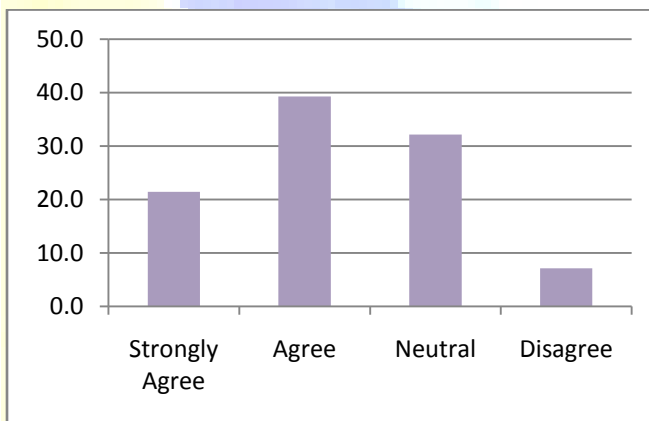
The research was guided by ten (10) questions regarding the relationship between tourism development and environmental conservation. The questions, which were inspired by popular hypotheses and the literature review allowed the researchers to explore the knowledge, attitudes and practices of the range of respondents who took part in the study. Responses to the questions were treated using the statistical package for social sciences, resulting in the following findings.

Bar Chart 1: Tourism promotes the conservation of flora and fauna



More than 90% of the respondents agreed with this statement, with more than 60 % agreeing strongly. This is an indication that respondents appreciate the value addition brought by tourism to conservation efforts in Zimbabwe. The few that disagreed and those that were neutral could be coming from the school of thought that is seeking to challenge the tourism sector to do more than it is currently involved in.

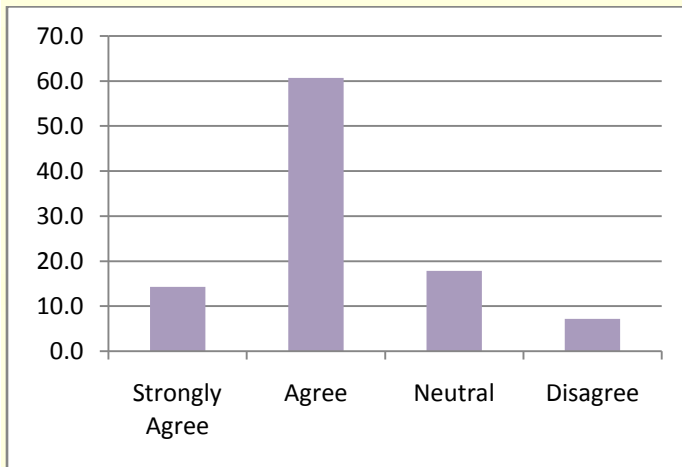
Bar Chart 2: Tourism players in Zimbabwe support conservation efforts



There were mixed reactions to this statement with more than 30% of the respondents choosing to remain neutral. Above 5% disagreed with the view that tourism players in Zimbabwe support conservation efforts. Such responses from sample used in this research should be a wake-up call to players in the industry, in light of the close relationship between tourism and the ecological environment. What it could mean is that stakeholders are no satisfied with the extent to which players in the tourism industry are supporting conservation initiatives. Interviews with some

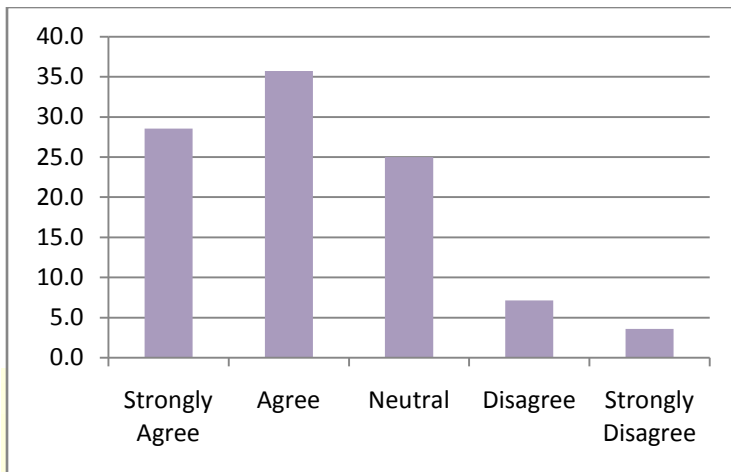
stakeholders indicated that it is almost only the big players who are engaging in significant conservation initiatives, while smaller operators are doing very little or nothing at all. This discovery could explain the 40% or so that is either neutral or disagrees.

Bar Chart 3: Tourism development in Zimbabwe takes conservation principles into consideration



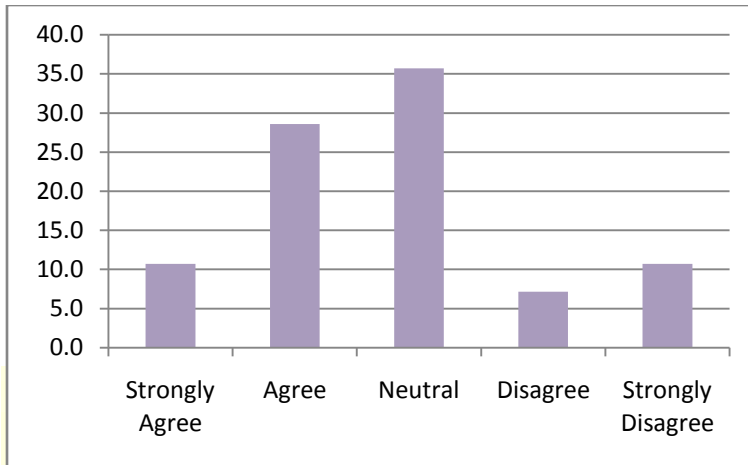
More than 70% of the respondents agreed that tourism development in Zimbabwe takes conservation principles into consideration, which is quite encouraging for a country in which tourism is closely linked to the natural environment. It is however the meaning of the few that disagree with this statement that is worrying. Could this mean that there are areas where tourism development is occurring without the environment in mind or are the responses pointing to a new development that might continue growing? Such questions should inspire research in this area so as to nip the problem in the bud, if ever it exists.

Bar Chart 4: Government policies support environmental protection



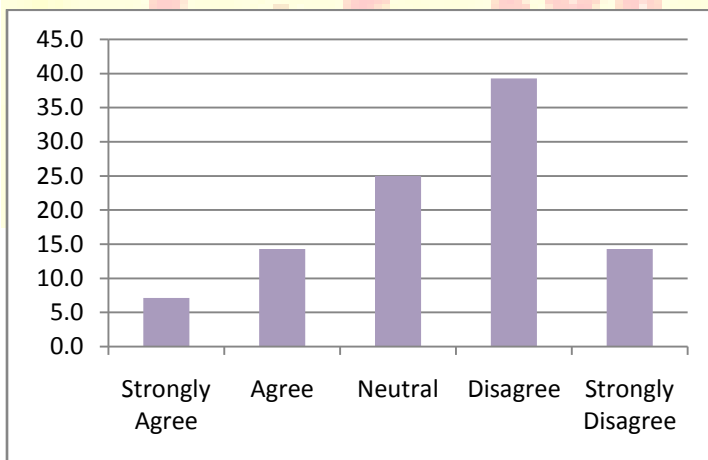
The Zimbabwean government has been quite serious about conservation issues from the attainment of independence in 1980. This saw the establishment of a ministry specifically focusing on environmental management which also had tourism under its portfolio. Though more than 50% of the respondents agreed with this statement, the 30% or so which was neutral or disagreed with the statement is a cause for concern. This research came at a time when Government separated the ministry of tourism and hospitality Industry from the ministry of Environment. Could this separation be linked to the views that Government policies do not support environmental protection or are there other areas not within the scope of this research that could have inspired such responses? Further research on such issues could help in answering such questions.

Bar Chart 5: Tourism activities result in the depletion of plant and animal species



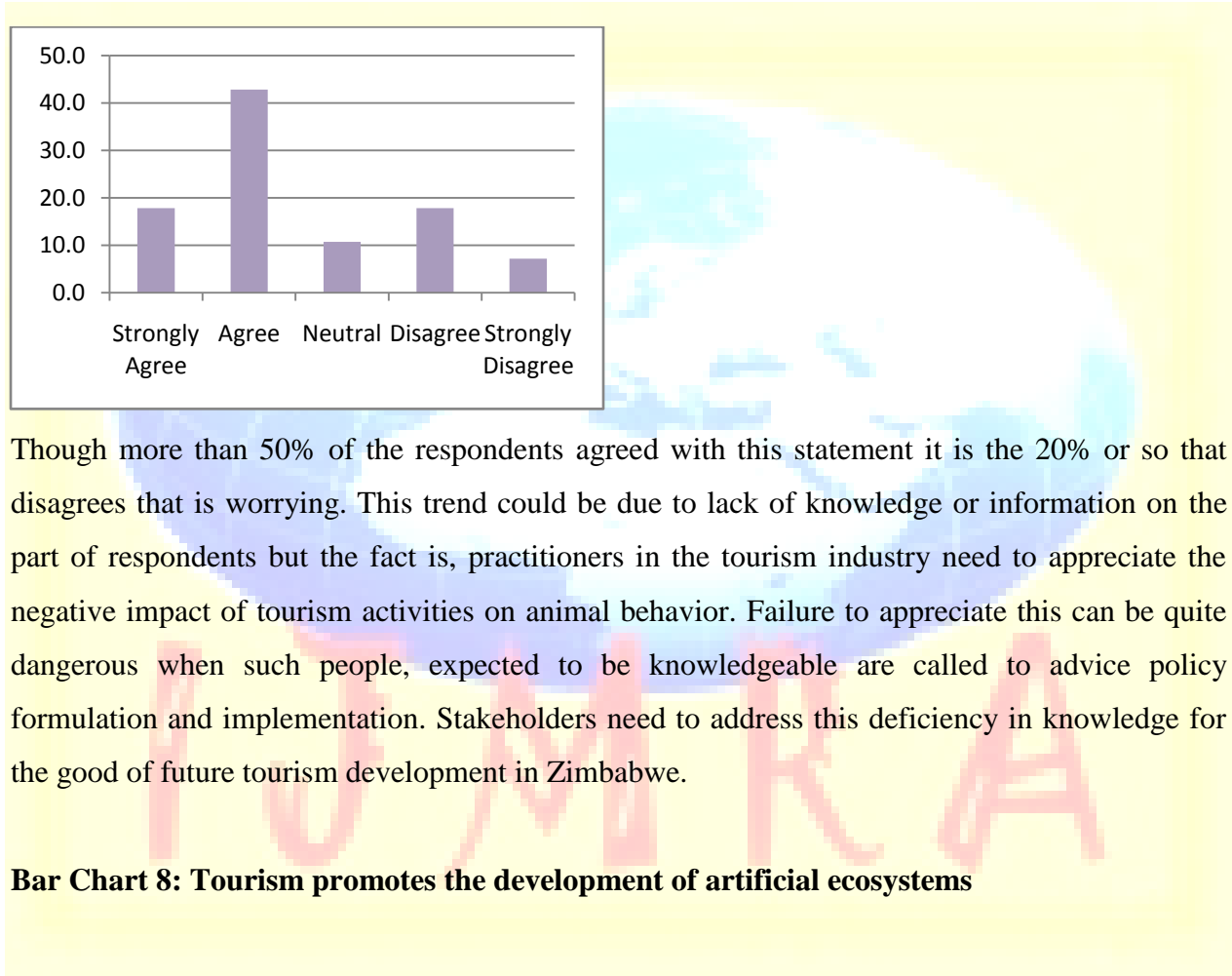
The distribution of responses to this statement is consistent with the writings of popular researchers in tourism development and the environment. It is indeed a fact that tourism contributes to the depletion of plant and animal species, though on the other hand tourism development helps protect species under threat of extinction in a significant way. Practitioners in the tourism industry need to appreciate the importance of ensuring that tourism development does not focus more on income generation at the expense of the environment.

Bar Chart 6: There is adequate information dissemination and civic education on the importance of conservation



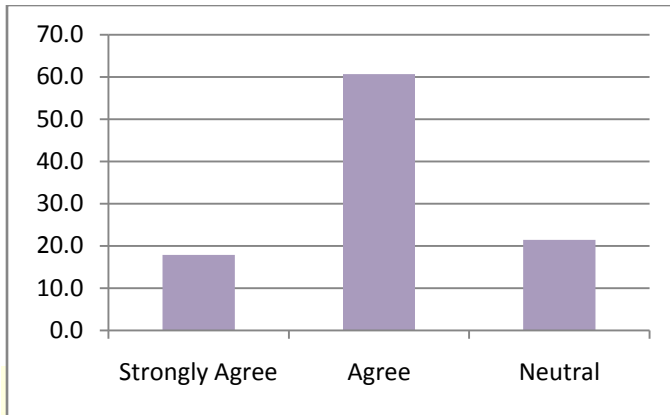
From the pattern of responses to this statement it could be concluded that stakeholders in the tourism and conservation sectors need to do more in the dissemination of information about environmental protection. More strategies need to be devised to ensure more effective propagation of information around the country.

Bar Chart 7: Tourism disrupts animal behaviour and plant species diversity



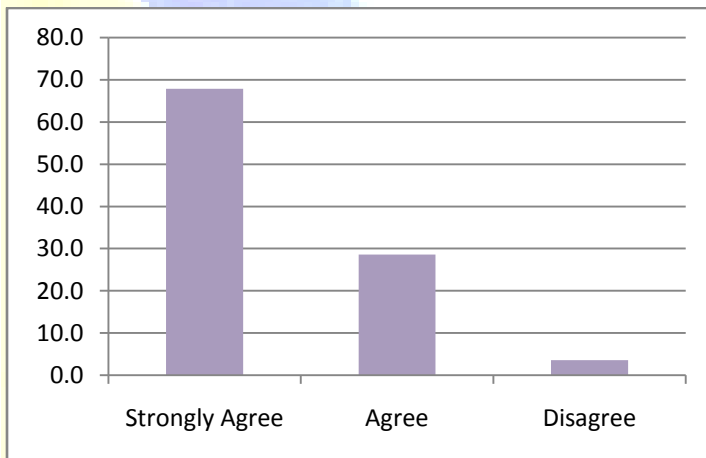
Though more than 50% of the respondents agreed with this statement it is the 20% or so that disagrees that is worrying. This trend could be due to lack of knowledge or information on the part of respondents but the fact is, practitioners in the tourism industry need to appreciate the negative impact of tourism activities on animal behavior. Failure to appreciate this can be quite dangerous when such people, expected to be knowledgeable are called to advice policy formulation and implementation. Stakeholders need to address this deficiency in knowledge for the good of future tourism development in Zimbabwe.

Bar Chart 8: Tourism promotes the development of artificial ecosystems

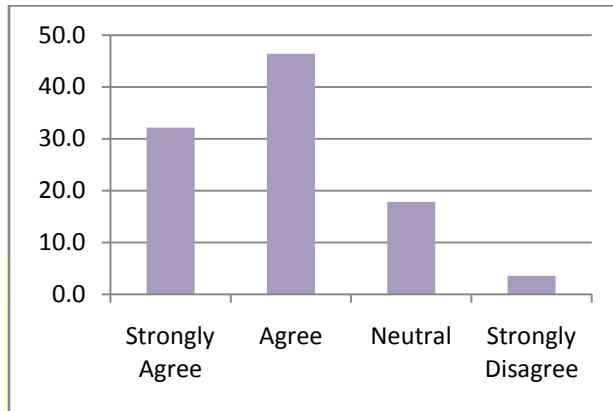


The response pattern although generally positive, calls for environmental conservation sensitization and information dissemination efforts to be doubled to enhance knowledge amongst practitioners.

Bar Chart 9: Tour operators and guides have a role to play in the conservation of the environment



The response pattern to this statement is a message to tour operators and guides that they are expected to play a leading role in environmental conservation, given that they are the ones always on the ground. The fact that they operate in the environment on a daily basis means that they are capable of monitoring and evaluating developments with regards to floral and faunal species as well as geo-physical aspects of the environment.

Bar Chart 10: Without tourism a lot of plant and animal species would be extinct by now

This last statement and the response pattern comes as a big acknowledgement of the important role tourism plays in the conservation of plant and animal species around the world. Indeed without tourism some species would not be respected or even recognised leading to their extinction without anyone noticing it. Tourism has contributed significantly to conservation initiatives around the world (Butler, 1991).

5.0 Conclusions

The following conclusions could be drawn from the findings of this research

- Tourism development significantly contributes to the conservation of flora and fauna in Zimbabwe.
- Though some tourism operators in Zimbabwe support conservation initiatives more still needs to be done especially amongst small and medium scale operators.
- The government of Zimbabwe needs to uphold the principles of environmental protection to ensure that tourism development does not exceed the capacity of the natural environment.
- All stakeholders in the tourism industry need to appreciate that, if not closely watched, tourism can lead to the destruction of the very same environment which sustains it. (Butler, R.W. 1991)
- Government and other stakeholders need to work together to effectively propagate information about the conservation of natural resources and sustainable tourism development.
- Tour operators and guides need to enhance their efforts towards conservation of the environment.

6.0 Recommendations

- Stakeholders in the tourism industry need to form smart partnerships to enhance environmental conservation initiatives around the country.
- Futuristic tourism development in Zimbabwe should mainstream environmental conservation ahead of revenue maximisation.
- The Ministries of Tourism and Hospitality Industry and that of the Environment and Natural Resources should work closely to ensure that the principles of environmental conservation are upheld as tourism development progresses around Zimbabwe.
- Further research needs to be carried out amongst tourism players around the country to establish the extent to which they are contributing to sustainable tourism development initiatives.
- There is need for further research on the positive and negative impacts of tourism on the environment in all tourist areas in Zimbabwe so as to up-date existing information in this regard.

References

Boo, E. (1990): Ecotourism: The Potentials and Pitfalls. Maryland: World Wildlife Fund.

Butler, R.W. (1993) Tourism- an evolutionary perspective. Department of Geography Publication Series No. 37, University of Waterloo, Waterloo Ontario, 27-43.

Butler, R.W. 1991. Tourism, Environment, and Sustainable Development in Environmental Conservation 18 (3): 201-209.

Cohen, L & Manion, L (1989) Research Methods in Education. (3rd Ed) London. New York. Routledge Company. 866 Avenue, New York.

Devlin, J. (1999) Ecotourism Development in Eastern and Southern Africa. Wearver Press Avondale, Harare, Zimbabwe

Goodwin H,J (1997) Tourism, Conservation and Sustainable Development. Volume 4, The South East Lowveld, Zimbabwe (Unpublished)

Goodwin, H. (1996) In pursuit of ecotourism, Biodiversity and Conservation, vol5, 277-292

Harrison, L,C. Husbands, W. (1996) Practicing Responsible Tourism, International Case Studies In Tourism Planning Policy, and Development. Ryerson Polytechnic University Toronto, Ontario, Canada

Holden, A. (2000) Environment and Tourism. Published by Routledge New York

Lindberg, K. (1991): Policies for Maximizing Nature Tourism's Ecological and Economic Benefits. Washington: World Resources Institute.

Middleton, V, T, C. Hawkins, R. (1998) Sustainable Tourism. A Marketing Perspective. Oxford Boston Johannesburg.

Muzvidziwa V, N. Mamimine P, W. (1998) The state of eco-tourism in CAMPFIRE Districts (Zimbabwe). CASS (UZ) Consultants and funded by USAID

Redclift, M. (1992) The meaning of sustainable development, Geoforum, vol23, 395-403

Robson, C. (1993) Real World Research: Resources for Social Scientists an Practitioners-Researchers. Oxford. Cambridge. Blackwell.

Scace, R., Grifone, E. and Usher, R. (1992) Ecotourism in Canada Ottawa: Canadian Environmental Advisory Council, Supply and Services Canada.

Spenceley, A. (2008) Responsible Tourism. Critical Issues for Conservation and Development. Earthscan in the UK and USA.

Wight, P.(1994) Environmentally Responsible Marketing of Tourism. In Ecotourism: A Sustainable Options? Chichester: John Wiley & Sons.