Ecotourism as a vehicle for local economic development: A case of Tsholotsho District Zimbabwe

Godwin K Zingi1*, Addingtone Mpofu2, Leonard Chitongo2, Taona Museva3, Emmerson Chivhenge4 and Moline R Ndongwe

Abstract: Given that many local authorities specifically in rural areas struggle to strengthen and boost their local economies despite having vast natural resources and as such ecotourism can be a potential backbone of Local Economic Development (LED). The research examines the role of tourism as a vehicle for improving and strengthening Local Economic Development Initiatives for Rural Local Authorities in Tsholotsho District, Matabeleland Province, Zimbabwe. The sample of the study consisted of 296 participants ranging from community members and selected stakeholders in ecotourism. Data were gathered through interviews and questionnaires. The data were analysed using the Statistical Packages for Social Sciences (SPSS) version 16.0 and STATISTICA. Safari was the dominant tourism activity in Tsholotsho. There were significant variations (p < 0.05) in terms of incomes generated from ecotourism activities with craftwork selling being the most dominant. Results of the study showed that there is significant association (p < 0.05) between local economic development and tourism. The challenges faced in initiating LED are lack of funds, politicisation of natural resource governance and lack of community and traditional leadership engagement in key decision making by the Tsholotsho Rural District Council (RDC) and Safari Operators. The study recommends a grassroot-based approach to ecotourism development and strengthening of problem animal control by the RDC and that there is decentralisation and inclusivity in natural resource governance.

ABOUT THE AUTHOR
Addingtone Mpofu is local economic development enthusiast, who hold a Bsc Local Governance Studies and a BSc Special Hons Monitoring and Evaluation. He has worked as a Research Assistant at Grassroot Soccer and a Programs Assistant at Youth Network Connect. He is affiliated to various youth organisations such as Junior Chamber International (JCI) and Cowdray Park United Youth Association.

PUBLIC INTEREST STATEMENT
The transformation of institutions that harbour devolution is critical devolution towards Local Economic Development. The devolution of resources governance provides an impetus for LED based ecotourism. The research focuses on the role of ecotourism in local economic development. However, there is no conflict of interests on this article.
1. Introduction
Ecotourism is principally at the intersection of rural development and environmental conservation with a bias towards benefits trickling into the local communities. Ecotourism contributes to conservation of biodiversity, support the wellbeing of local people, emphasises participatory development and ownership of business opportunities for the locals (Nelson, 2004). In cases where people live at the edge or adjacent to the conservancies as the case of Tsholotsho ecotourism is a vital cog in thawing the conflict between people and wildlife. Benefits of ecotourism can be realised through income diversification and offsetting of risks in fragile ecosystems, multiplier effects through rural urban linkages and value addition (Manu & Kuuder, 2012; Mba'wa & Stronza, 2011). This assertion is in congruent with principles of local economic development that is anchored on management of territories by localities to enhance local quality of life and competitiveness of local activities. Since the inception of independence Zimbabwe has had local governance reforms which culminated into the decentralisation of natural resources via lower tiers of governance. The section 264 on devolution of the 2013 amended Zimbabwean Constitution create synergies between LED and ecotourism as it guarantees the right of communities to manage their own affairs and to further their development. This paper shall discuss at length the nexus between LED and ecotourism in respect to opportunities and challenges.

2. Background of the study
African rural areas are highly impoverished relative to the urban centres despite being naturally endowed with the natural resources which are used to further develop urban areas. In order to narrow the development gap between urban and rural areas, national governments have come up with rural oriented Local Economic Development (LED) initiatives. Wahab and Yacob (2019) define LED as a strategy in which multiple locally based individuals utilize resources to spearhead local economic activity for the benefit of the majority in the local community. Simba et al. (2015) further defines LED as the process in which the local government, or some agency, authority or organization on behalf of the local government, engages to enhance a community’s capacity to effect economic progress in both a quantitative and qualitative manner. Zimbabwe is a resource endowed region, in terms of renewable and non-renewable resources. Jili et al. (2017) indicated that local authorities have important roles to play in the process of economic development and these include traditional roles, provision of a secure and stable environment, provision of physical infrastructure, roads, water supply, waste management, information and communication technologies which are relevant for stimulating economic activities. Local authorities are best to drive processes that engage multiple stakeholders in programming and structuring holistic strategies, for implementing local economic development initiatives (OECD, 2018). In other words, the goal of community economic development is to diversify the local economy by engaging in development programs that result in employment opportunities for the existing labour force (Murombedzi, 1999). Local economies can be diversified through local economic development initiatives. The concept of LED is hinged on pro-poor strategies aimed at uplifting the social-economic wellbeing of economically deprived communities. This is achieved through integrated area planning, public participation and the development of sustainable resilient local institutions.

Therefore, globally local authorities have embraced ecotourism as one of the development strategies in their areas of jurisdiction. Ecotourism has the capacity to unlock the communities out of the poverty trap as it helps in community development through a diversified source of livelihood where good governance structures are in place. It aims to conserve resources, maintain biological diversity and promote the sustainable use of resources whilst benefitting communities economically. The
Zimbabwean government since 1982 has decentralized environmental governance as an alternative to centralized resources management as enshrined in The Parks and Wildlife Act of 1975 which kept the locals at bay (Koch, 1994). Various initiatives have been done by the Zimbabwean government to blend ecotourism with local economic development through the Communal based resource management, thus the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) which started as a pilot study at Chilo Mahenyë before the programme went on a full scale in 1988, to become a globally acclaimed wildlife conservation strategy, Gandiwa et al. (2013). The power has been transferred to the District councils whose lowest tiers are the Village Development Committees (VIDCOs) and the next tier is the Ward Development Committee (WADCOs). Such local government institutions facilitate power transfer and authority to indigenous people that function to improve efficiency, equity, accountability and social inclusion in resources governance and management.

The CAMPFIRE is a bottom up strategy in natural resources governance and management Frost and Bond (2006). It was designed to give control of wildlife management to rural communities so that they would invest in habitat and wildlife conservation. Tsholotsho Rural District Council (Tsholotsho RDC) has been granted appropriate authority to coordinate and implement natural resources management on behalf of people within its area of jurisdiction. The district has a huge flora and the fauna base that work as a spring board for ecotourism initiatives from abundance of wildlife, timber, river sand, pit sand, slates, soapstone, grassland and wild fruits, (Tsholotsho RDC Strategic Plan Document 2013–2018). This is in line with the resource based theory (Liang et al., 2010) which states that strategic resources as is the case of flora and fauna has the propensity to attain competitive advantage over other regions. The institutional setting of resource governance still favours state centrism in resource access and governance, despite the adoption of a new constitution under Section 264 which recognises full autonomy and devolved authority of local bodies. Such an arrangement does not improve the welfare of local citizens due to passive participation which breeds social exclusion, vulnerability and exposure to poverty hence there is need to outline the opportunities and threats of ecotourism to local economic development. Tsholotsho RDC is one of the rural local authorities grappling with resources beneficiation challenges despite being a CAMPFIRE district (Dzingirai, 1996). Moreover, despite having two safari operators Tsholotsho district has low economic activity, the highest national percentage of vulnerable and poor populations with more than 60% living below poverty datum line of less than a dollar per day as noted by the Zimbabwe Vulnerability Assessment Committee (ZIMVAC) Report (2013), which also projects a rise in that number within the coming years. Hence there is need to examine the potential of ecotourism as a vehicle for strengthening LED for rural authorities in Zimbabwe. It can also be noted that despite Tsholotsho district being resource endowed, it is located within agro-ecological fragile region 5 which persistently receive low rainfall. Therefore, it remains to be seen if ecotourism is the panacea to rural development in the dry regions of Africa.

Most studies have focused on the potential for resource driven local economic development within resource endowed regions (Zanamwe et al., 2018). Balint and Mashinya (2009) conducted a study on community based conservation but less attention has been given on the nexus between ecotourism and LED principles. However, there has been limited attention on resource governance and local economic development post 2013 constitution focussing on devolution of natural resources, against the background of centralisation and bureaucratisation of LED driven ecotourism activities by the Zimbabwean government. In cases where LED has been successfully implemented using devolved tiers of governance, it has proven to be a springboard for employment creation and poverty alleviation in resource endowed region hence there is need to study the institutional capacity of local authorities to foster territorial competition and value chain linked to ecotourism. This study therefore seeks to determine the dominant tourism activities in Tsholotsho, determine the variability of incomes generated from different LED activities, extent to which ecotourism has led to socio-economic transformation in resource rich areas such as Tsholotsho and examine the challenges for initiating LED in Tsholotsho.
3. Materials and methods

3.1. Study area
The study was carried out in Tsholotsho district, a communal area which is located in Matabeleland North province of Zimbabwe. Tsholotsho District share boundaries with Umguza, Lupane, Bulilima and Mangwe Districts. It is located in the southern political constituency of Tsholotsho District. Tsholotsho administrative centre is the business service centre of Tsholotsho which is located about 98 km north-west of Bulawayo. The district service centre is linked to Bulawayo and Lupane by tarred roads and Plumtree by a gravel road. Other roads lead through very heavy Kalahari sands (Itshebetshebe) into the Gwaai Tribal Trust areas and beyond into the forest reserves. Tsholotsho District lies between geographical coordinates 19° 46’ 0” South and 27° 45’ 0” East, with an average altitude of 1072 metres above sea level. Zimbabwe National Statistics Agency (ZIMSTAT), (2016) observes that Tsholotsho is one of the food insecure region with a food poverty prevalence of 45%. Poverty is primarily attributed to the fact that it lies within the agro-ecological region 4 and 5 characterised by low and erratic rainfall with wildlife management as the main livelihood option (Government of Zimbabwe, 2014).

3.2. Methods
The study employed both qualitative and quantitative methods to collect data local economic development initiatives in the study area. Quantitative research techniques of data collection were found useful in augmenting data obtained from qualitative techniques. A sample of 296 from a population of 1280 households in Tsholotsho district was selected. The sample size was determined by the sample size calculator (https://www.surveymonkey.com/mp/sample-size-calculator/). The calculations were based on the assumption that the population was normally distributed. The confidence interval for the sample was set at 95% and the margin of error was 5% (Chitongo, 2017). A combination of purposive and random sampling was used select the participants who took part in the study. Precisely 16 key informants were purposively selected. The breakdown of participants included 2 officials derived from the Ministry of Environment, Climate, Tourism and Hospitality, 6 Ward Development Committee representatives, 4 officials from the Department of Parks and Wildlife Management, and 4 Agricultural Technical and Extension Services (AGRITEK) officials. The Key Informant Interview enabled analytical inferences into actors’ preferences and orientations within the institutional setting of resource governance. Random sampling was used to select community members who responded to questionnaires. Questionnaires were administered to the 296 respondents. The thematic analysis was used to solicit data from key informant transcripts and interview summary sheets (See Appendix 2).

3.3. Data analysis
The data were subjected to analysis soon after fieldwork and data collection, all the information from questionnaires, interviews and secondary data sources were processed and analysed. The inferential statistics were adopted and executed in the Statistical Package for the Social Sciences software (SPSS Version 16) and STATISTICA Version 7. The Chi-square was used to test the significance of the association between ecotourism and LED initiatives. Data were tested for normality using the Kolmogorov-Smirnov test, the data on income showed a normal distribution therefore Analysis of Variance (ANOVA) tested for differences between groups (p < 0.05). The groups in this study were found by asking the respondents to indicate their sources of income as a result of ecotourism. The grouping variables identified in the study were craftwork, blacksmith, formal employment and farming and income was the dependent variable. A Fisher’s post hoc test Least Square Difference (LSD test) was used to determine which groups differed significantly from each other (see Appendix 1).
4. Results

4.1. Ecotourism activities
The tourism activities in Tsholotsho district include safari operations, rural tourism and trophy hunting (Table 1). The most dominant activity is safari operations, followed by trophy hunting and rural tourism, respectively. The safari operations are common at the Mutupa and Lodzi Hunting camps in Tsholotsho RDC whose responsibility is provided by appropriate authority guaranteed by the Parks and Wildlife Management Authority of Zimbabwe.

4.2. Variation in monetary benefits from tourism activities in Tsholotsho
There is a significant differences in the income generated by the activities indicating significant variance between groups than within groups (p < 0.05), F (3, 292) = 41.7 (Figure 2). However, it was noted that craftwork generally generated mean annual more income than the other activities (approximately USD$6500). Farming is the least income earner of all the groups. To determine which groups vary significantly from each other, a post hoc analyses using least significant difference (LSD) was used. Results in Appendix Figure 1 show that ANOVA showed that the effect of noise was significant, F (3, 292) = 245.0412, p = 0.000. Post hoc analyses using the Fisher’s LSD post hoc criterion for significance (MS = 22,756,df = 245.000) show that craftworks vary significantly from other groups such as formal employment, whilst blacksmith vary significantly with formal employment and farming.

4.3. The nexus between tourism and local economic development
A Chi-square test was performed to identify the association between ecotourism activities and local economic development initiatives (Table 2). There is significant association between local economic development and tourism (p < 0.05). There is an association between local economic development and ecotourism in form of soft and hard infrastructure and ecotourism activities such as safari hunting, trophy hunting and rural tourism. Thus, it can be noted that the identified tourism activities in the study area lead to local economic development.

Table 3 shows that 60% of the respondents indicate that road rehabilitation was conducted using benefits from ecotourism, followed by installation of tourism facilities (26.7 %) and the least was the electrification and road rehabilitation and water and sanitation at 6.7%. Findings also suggest that participants who practised farming reside in relative close proximity to natural water sources such as rivers and streams and a few have drilled their own boreholes to get enough water to carry out their gardening activities throughout the year. This shows that there are a number of benefits which are found in the study area which are as a result of ecotourism in the area.

The existence of correlation between ecotourism and LED supported by a key informant from the Ministry of Environment, Climate, Tourism who argues that:

Ecotourism facilitates Rural-Urban linkages between communities and urban consumers at micro level thereby enhancing growth and equality in the distribution of wealth

| Table 1. Ecotourism activities in Tsholotsho |
|---------------------------------------------|
| Ecotourism activities in Tsholotsho | Frequency | Percent |
| Safari operations              | 207       | 70      |
| Rural tourism                  | 38        | 13      |
| Trophy hunting                 | 51        | 17      |
| Total                         | 296       | 100     |
Table 2. Association between local economic development initiatives and ecotourism activities

|                          | Value  | df | Asymp. Sig. (2-sided) |
|--------------------------|--------|----|----------------------|
| Pearson Chi-square       | 5.942  | 2  | .004                 |
| Likelihood ratio         | 8.245  | 2  | .016                 |
| Linear-by-linear association | 1.055  | 1  | .304                 |
| No. of valid cases       | 296    |    |                      |

Table 3. Challenges in growing and strengthening tourism

| Challenges affecting growing and strengthening ecotourism | Frequency | Percent |
|----------------------------------------------------------|-----------|---------|
| Poaching                                                 | 58        | 20      |
| Institutional capacity                                   | 19        | 6       |
| Human-wildlife conflicts                                | 62        | 21      |
| Lack of funds                                            | 157       | 53      |
| Total                                                    | 296       | 100     |

Figure 1. Location of Tsholotsho District.
4.4. Challenges for effective implementation of ecotourism

The majority of respondents indicated that lack of funds is curtailing proper implementation the tourism initiatives (53%), followed by indiscriminate poaching at (20%), whilst lack of institutional capacity and human wildlife conflicts had a negative bearing on natural resource based local economic development.

Results from key informant interviews supported the findings of the data collected using questionnaires. The key informants indicated that human-wildlife conflicts are an impediment to tourism. During one of the interviews an experts from the AREX department said:

“Inyamazana zegangenzi zingithwalisa nzima iminyaka yonke ekulimeni, singayekela ukulinda asitholi lutha.” (Wild animals give us torrid times in farming. If we do not keep a constant watchman in the fields, we do not get anything).

An official from parks and wildlife management indicated that increases in elephant population are a challenge as they stray into their fields and in some cases human life is lost. So in some way animals destroy the livelihoods of the people and this affects the tourism in the area. The parks official indicated the following:

Human wildlife conflict has been accelerated by an increase in elephant (*Africana loxodonta*) population, which result in retaliatory killing potentially affecting tourism activities in the area, as the locals perceive wildlife as barrier to livelihood options.

Lack of institutional capacity anchored on inclusivity deter active participation in resource governance. Party politics tend to be a decisive factor in participating in natural resource governance. A WADCO member emphasised that:

“Nxa ungowe MDC kunzima ukuthi ungene ku CAMPFIRE,” (If you are an MDC supporter, it’s hard for you to get into the CAMPFIRE project.).
Despite the politicization of natural resources, centralisation of wildlife revenue is disincentivising the locals to take charge in resource conservation thus a mainstay of ecotourism activities. Informant from WADCO argued that:

The fiscal devolution of the wildlife revenue is yet to be realised since resources accrued ecotourism activities are recentralised by the local authority thereby affecting the territorial development. Moreover the WADCO is not a legal entity neither does it clearly defined rights in terms of resource ownership but merely a medium between the people and the council.

5. Discussion

Results of the study indicated that safari operating is the most dominant activity within the district especially in the Mutupa and Lodzi Hunting. Spatial location of Mutupa and Lodzi hunting camp has had a trickle down effect on road network, which accelerates spatial flows of goods and services. Ecotourism immensely benefits local communities as noted by the considerable number of villagers who have benefitted tourism activities in the area. Others activities which have been facilitated by spatial adjacency to ecotourism activities include face lifting of school infrastructure, rural electrification and drilling of boreholes. The results are consistent with findings of Wood (2002) who observed that ecotourism strengthens local entrepreneurs and local economic activities by strengthening and raising demand of locally produced goods and services such as cooking ingredients, cleaning and maintenance services.

Findings suggest that participants who practised farming reside in relative close proximity to natural water sources such as rivers and streams and a few have drilled their own boreholes to get enough water to carry out their gardening activities throughout the year. This has accelerated the diversification of livelihoods against fragile biophysical environmental economic development. Neumeier and Pollermann (2014) observes that the contribution of rural tourism entrepreneurs are critical for successful rural tourism development. In this regard, craftwork is a form of job diversification and creation in Tsholotsho in the face of limited livelihood options. In much of southern Africa, tourism has been widely acknowledged as critical for enhancing livelihoods of communities living outside protected areas (Biggs et al., 2019). There is variability in the sale of artefacts, with noticeable sales recorded in summer due to an increases in tourist arrivals and this buffered against fragile biophysical environment. As such, people are able to offset the risks of failed agriculture in the region although the net benefits of tourism to sustainable agriculture have been less significant owing to the agro-ecological environment which discourage sustainable crop production. Climate related stressors associated with the fragile ecosystems compounded with human-wildlife conflict threatens the existence sustainable livelihoods derived from climate sensitive crops. Job creation and poverty reduction is a variant of local economic development. In this regard relative to farming there has been job diversity as a fair share of locals are employed in the tourism sector as rangers, tour guides, menial seasonal jobs which have partially promoted pluriactivity and diversity. However, there has not been much recruitment into the formal and wage employment due to externalities which have not been creating job opportunities for full time employment. Probably this explain why there are few people employed in the tourism industry (especially by the National Parks and Wildlife Management) as trophy hunters usually come and camp in the wild requiring little if any assistance from the locals.

There are plethora of challenges identified from this study that curtail the proliferation of the tourism inspired LED initiatives within the district which can be traced to the institutional setting of the local government system in Zimbabwe for the execution and management of natural resources. The local government institutions within Tsholotsho such as the VIDCO and the WADCO are responsible for planning and management of natural resources within their area of jurisdiction with the RDC responsible for integrated area development. However, the concept of integrated area planning has not been harnessed due to weak rational nature of planning, which only gives appropriate authority to the rural district council while keeping participatory tiers of local governance at the bay of decision making. Most decisions pertaining to wildlife hunting and issuing of hunting license has remained a Tsholotsho District council affair, when locals do participate in consultative meetings, it is just
a functional participation to pacify the locals. Brown and Wyckoff-Baird (1992) observes that integrated conservation programs call for devolution of authority and local participation not only as desirable ends in themselves but also as means to promote effective natural resource management and community development. However, despite the adoption of a new constitution with Section 264 which recognizes the total devolution of local bodies the implementation of the act is still facing a lot of political resistance. Murombedzi (1999) argues that participatory development is a mortar which accelerates community development. Local economic development within Zimbabwe relative to South Africa has been curtailed by passive participation of citizens whose voices have not been recognized (Goldman et al., 2000). Despite integrated area planning being a variant of local economic development, resources conservation has remained linear dominated by the central government through the Parks and Wildlife management and Tsholotsho through a horizontal linkages. As such revenue generated from wildlife resources at local levels is channelled towards local governance finance. The grassroots people have been accusing the local authority of misappropriating funds meant for community development. This arrangement threaten any development initiative that seek to recognise the needs and aspirations of the locals who bear the brunt of living adjacent to wildlife. It has also been noted that these institutions have largely been used by government for the implementation of centrally conceived plans and programmes rather than as institutions to enhance local participation in the planning process (Murombedzi, 1999).

Findings from the study showed that active participation in resource governance is affected by party politics. The Tsholotsho rural district council is a ZANU PF dominated council. In this regard the substructure of the Tsholotsho RDC that is WADCO and VIDCOS are dominated by actors whose orientations and preferences to decision making are all inclined to ZANU PF, as such most beneficiaries to resource utilization are ZANU card carrying member. However, there has been exclusion of the MDC members who are perceived to be politically incorrect, this is despite the fact that government has been advocating for tolerance and co-existence with opposition members. Even though the government has been on path towards revitalization of public institutions premised on inclusivity, technically the patron-client relationship is still hampering the drive towards stronger institutions that can capacitate the locals towards local economic development. The lack of a stronger local government system built on the tenets of good governance, affects funding in community based intervention as most international agencies repel doing business with weak institutions subject to political party manipulation. Failure to implement the devolution which specified under the Section 264 of the Zimbabwean constitution, is also threatening the viability of resource utilization within devolved provincial and local government as most influential decision on proprietorship resides with the state. This provides an opportunity for the government to meddle in local government affairs and means no meaningful business opportunities will prevail due to lack of autonomous devolved local government system. Lack of strong and inclusive institutions result in failure to co-opt the locals in wildlife conservation is hampering effort to coordinate anti-poaching programs due to inexistence of local formal structures. As such the district has been a hot spot for poaching due to reluctance by the locals to fully engage in wildlife protection as they feel excluded in resource based development initiatives. The human-wildlife conflict has also accelerated the locals’ negative attitude towards the wildlife. This has had a negative bearing on the sustainable utilization of resources within the district, due to lack of an incentive to protect the wildlife resources from poaching or conservation of habitat.

6. Conclusion
It is a challenge to bring about Local Economic Development through ecotourism where there is centralisation and politicisation of natural resource governance. Lack of community and traditional leadership engagement in key decision making by the local authorities and Safari Operators hinders Local Economic Development. Moreover, tackling human-wildlife conflicts will improve the perception of local communities towards ecotourism driven Local Economic Development. However, the strengthening of public participation in ecotourism and effective Problem Animal Control be a spring board for Local Economic Development. Decentralisation and inclusivity in natural resource
governance must be promoted if Local Economic Development is to be realised from ecotourism. Moreover the rights of the locals within the lower tiers of governance such as the WADCO should be guaranteed as to ensure proprietorship of natural resources, since participation is the centroid of LED. The section 264 of the constitution on devolution should be implemented to accelerate competitive advantage of naturally endowed regions. The study concluded that if all the challenges and problems are fully addressed, there is certainty and potential in Ecotourism as a vehicle for improving and strengthening Local Economic Development Initiatives for rural local authorities.

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Author details
Godwin K Zingi
E-mail: zingi@gzu.ac.zw
Addingtone Mpofu
Taona Museva
Emmerson Chivhenge
Moline R Ndongwe

1 Department of Rural and Urban Development, Great Zimbabwe University, Masvingo, Zimbabwe.
2 School of Management, It & Governance, University of KwaZulu-Natal.
3 Department of Sociology and Social Anthropology, Great Zimbabwe University, Masvingo, Zimbabwe.
4 Department of Teacher Development, Great Zimbabwe University, Masvingo, Zimbabwe.

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Appendix 1 LSD test; variable income Probabilities for Post Hoc Tests Error: Between MS = 22,756, df = 293

| Activities     | Craftwork | Blacksmith | Formal   | Farming   |
|----------------|-----------|------------|----------|-----------|
| Craftwork      |           |            |          |           |
| Blacksmith     | 0.000133  |            |          |           |
| Formal         | 0.000000  | 0.002135   |          |           |
| Farming        | 0.000000  | 0.000000   | 0.001569 |           |

Bolded figures indicate significant differences between groups.

Appendix 2

| Key informant                                      | Purpose of engagement                                                                 | Key informant interview number |
|----------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------|
| WADCO                                              | To inquire on the inclusion and seclusion criteria to resource access                  | 6                              |
| AREX officials                                     | To assess the challenges associated with implementation of tourism                     | 4                              |
| Department of Parks and Wildlife Management        | To assess local proprietorship over wildlife revenue                                    | 4                              |
| Ministry of Environment, Climate, Tourism and Hospitality | To infer on the linkages that exists between ecotourism and LED                      | 2                              |
