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Resolving Human Wildlife Conflict in Botswana through Social Protection

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RESOLVING HUMAN WILDLIFE CONFLICT IN BOTSWANA THROUGH SOCIAL PROTECTION

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EXECUTIVE SUMMARY

This policy brief is based on a national tracer survey covering 66 villages in Botswana. The main aim of the study was to ascertain the magnitude and social impacts of human wildlife conflict (HWC) on victims and their families. In addition, the study sought to assess the relevance and effectiveness of the *ex gratia* compensation scheme to victims of wild animals' attack which was introduced in 2015. The key findings reveal that local people exposed to life threatening wildlife

attacks express fear and animosity towards wild animals, and also feel rejected and disappointed from a fragmented government service delivery system. Major policy recommendations to be considered by government and other stakeholders include provision of comprehensive therapeutic rehabilitation and reconstructive surgery to HWC victims, comprehensive compensation according to the severity of injuries sustained, and establishment of an *Ex Gratia* Scheme or *Ex Gratia* Tribunal.

1.0 INTRODUCTION AND BACKGROUND

During the last decade, human wildlife conflict (HWC) has become a hot issue globally (Mir *et al.*, 2015). In Botswana, the HWC has become a major long term threat to wildlife conservation and wellbeing of local people living in and around wildlife management areas (Gontse *et al.*, 2018; Blackie and Sowa, 2019; Hitchcock *et al.*, 2020). Botswana has the largest population of elephants in the world, at about 207 545 mainly spread between the two districts of Ngamiland and Chobe (Lindsay *et al.*, 2017), a situation that has the propensity to amplify HWC. There has been a public outcry in Botswana on the escalating numbers of HWC resulting in either injuries and/or loss of life. Recently, the President of the Republic of Botswana, Mokgweetsi Masisi, noted that:

“Human-wildlife conflict continues to pose a challenge to livelihoods of Batswana. The number of lives and injuries due to human-elephant conflict in particular are a cause for concern”, (State-Of- Nation Address, 2020:191).

It has been observed that interactions between wildlife and human population produces human wildlife conflict (HWC) which often result in costs to both humans and the wildlife (Mukeka *et al.*, 2019). Apart from the enormous impact on damage to property and destruction of livelihoods, the impact on humans arising from encounters with large mammalian herbivores (elephants, hippos, buffalos), carnivores (lions, leopards) as well as reptiles (crocodiles and snakes) can result in traumatic casualties (WWF-SARPO, 2005).

The HWC can be as traumatic as the events listed as having potential of being traumatic, including: combat, assault (sexual and physical), terrorist attacks, torture, natural disasters, automobile accidents, and life-threatening illnesses, as well as witnessing death or serious injury to another (APA, 2000). Climate change and other anthropogenic factors which include illegal wildlife off-take and habitat fragmentation or loss have been noted as contributing factors why the needs of wildlife encroach on those of the humans and/or vice versa (Conover, 2002; Thouless *et al.*, 2016; Schlossberg, *et al.*, 2018). It is at these interfaces between wildlife and humans that HWC emerge (Newmark *et al.*, 1994, Kinyua *et al.*, 2000).

Despite the increasing concern over human injuries and deaths occasioned by wildlife, studies on the impact of HWC in Africa in general, and Botswana in particular have only largely focused on impacts to crop damage and livestock predation (DWNP, 2013; Blackie, 2019; Gontse *et al.*, 2018; Hitchcock *et al.*, 2020). To date, no study has been undertaken to assess the social impacts¹ of HWC resulting in injuries and loss of life for HWC victims and their families in Botswana. The broad objective of this study was therefore to ascertain and explore the social impacts of HWC on victims and their families resulting in injuries and loss of life in Botswana.

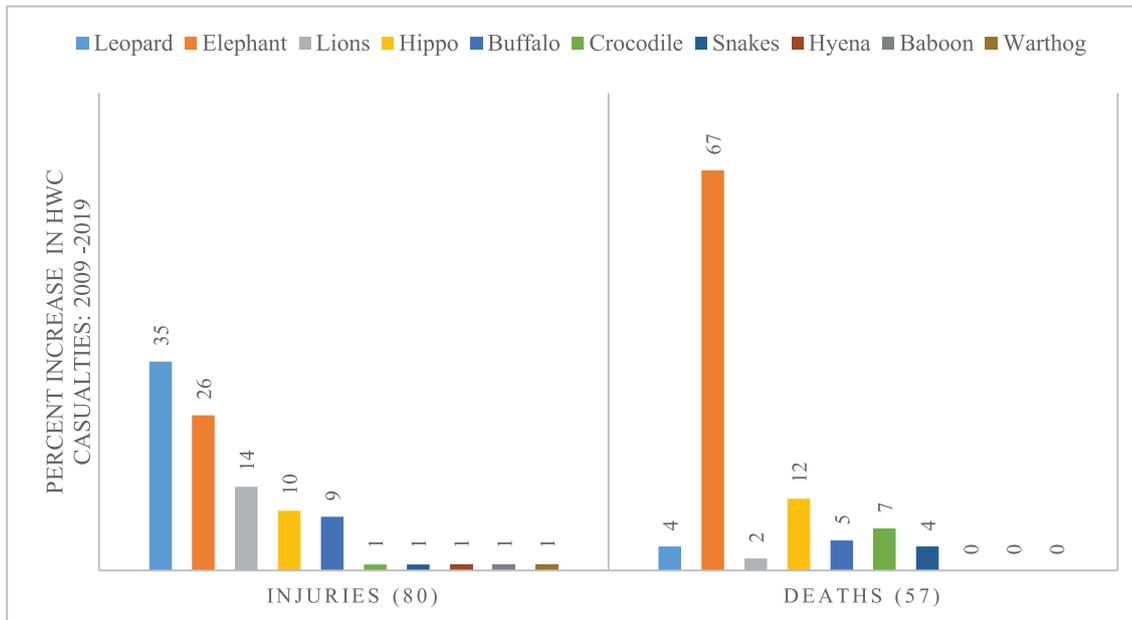
¹ Social impact refers to any changes to one of the following (people's way of life, their culture, community ties, political systems, health and well-being, personal and property rights, fears and aspirations) International Association for Impact Assessment (2019).

2.0 ANALYSIS OF FINDINGS

2.1 Human Injuries and Deaths Resulting from HWC

The study has established that a total of 80 people were injured and 57 were killed by the wildlife between the years 2009 and 2019 as shown in Figure 1.

Figure 1: Magnitude of Human Injuries and Deaths by Wildlife Species: 2009 - 2019

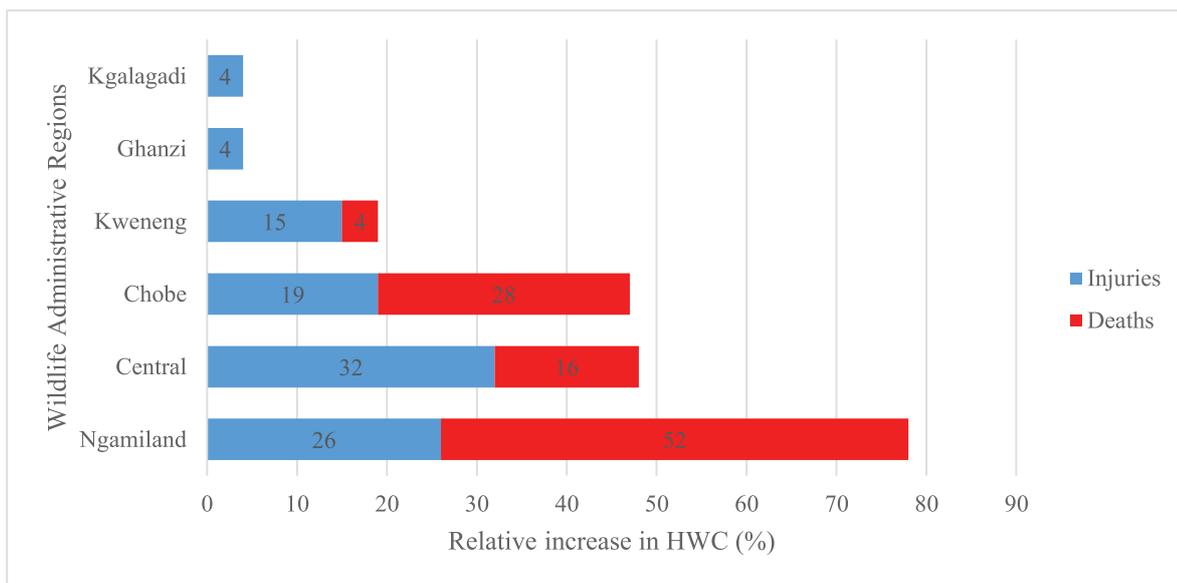


Source: Author computed from secondary data from DWNP and field data, 2020.

Most victims were injured by leopards (35 percent) and elephants (26 percent). Elephants are responsible for most (67 percent) loss of human life in instances where HWC ensues. Although snakes are currently not classified under the dangerous wildlife species which attract *ex-gratia* compensation for loss of life resulting from the wildlife, human beings continue to get injured and lose their lives due to snake bites as shown in figure 1. Although in this study most injuries and loss of human life are attributed to leopards and elephants, international literature shows that elsewhere, crocodiles and hippos are the leading causes of human injuries and deaths globally due to availability of water bodies which Botswana does not have in abundance (Georgiadis *et al.*, 2003; AWF, 2005). A number of plausible reasons explain the unique Botswana HWC scenario from the international one. Firstly, and foremost, Botswana has the largest population of elephants in the world, a situation

that tends to exacerbate the susceptibility of human beings to dangerous spatial and temporal encounters with elephants over habitat and resources. Furthermore, Botswana is one of the few remaining reserves in the world that harbour a diversity of dangerous wildlife species which include predators in large populations. For example, the Ngamiland region alone in which the Okavango Delta is found has diverse habitats sustaining robust populations of species of 1061 plants, 89 fish, 64 reptiles, 482 species of birds and 130 species of mammals (DWNP, 2012).

2.2 Human Wildlife Conflict Injuries and Deaths According to Wildlife Administrative Regions: 2009 - 2019



Source: Author computed from field data, 2020.

As shown in Figure 2, the majority (32 percent) of HWC resulting in human injuries occurred in Central (32 percent), Ngamiland (26 percent) and Chobe (19 percent) districts. The six districts in Figure 3 represent administrative districts as defined by the Ministry of Environment Natural Resources Conservation and Tourism (MENT). Over fifty percent (52 percent), of loss of human life due to wildlife conflict occurred in Ngamiland followed by Chobe (28 percent), Central (16 percent), and Kweneng (four percent). No loss of life incident was recorded in Gantsi and Kgalagadi districts between the years 2009 and 2019. It is important to note that both the Okavango Delta

and the Chobe river systems ensure the availability of a critical resource, water, in an otherwise thirsty land of vast expanses of sand. They both carry the largest herds of elephants which kill more humans than do any other wildlife species (Chase et al., 2018; Blackie, 2019). The presence of water has also ensured the existence of a rich and diverse wildlife as a resource that has supported the livelihoods of local communities for many years. However, the relationship between humans and wildlife in these areas has been noted as increasingly ambivalent because of human and wildlife population increases, competition for land and the water (Mbaiwa, 2017, Blackie, 2019).

2.3 The Gendered Impact of HWC

Findings from the study show that males (90.9 percent) are more vulnerable to incidences of wildlife injuries and loss of life than females (9.1 percent). These findings are similar to those of Flynn *et al.*, (1994) and Gustafson (1998) who showed that men's high risk appetite predisposes them to environmental risks that are responsible for their increased physiological injuries and loss of life compared to their female counterparts. Additionally, rural males are likely to encounter the wildlife in their routine agricultural activities

(Ember and Melvin, 1990). This gender disparity between men and women who are either injured or killed by the wildlife has a negative effect on the social fabric of rural communities where available poverty statistics show that rural areas' poverty level stands at 24.2 percent compared to urban areas with 13.4 percent. Female headed households comprised the 55 percent poor compared to 45 percent of those headed by males (Statistics Botswana, 2019). The HWC, is thus exacerbating an already dire situation where most

households in Botswana are female-headed and also categorised as poorer than male headed households (Statistics Botswana, 2019).

2.4 HWC and Rural Livelihoods Transformation

The study has shown that HWC is increasingly transforming rural livelihoods from dependence on arable production and livestock keeping towards dependence on government aided destitute programs and other unstable sources of livelihoods. Even so, respondents in this study revealed that it is not always easy to access social safety and/or government aided destitute programs even for qualifying victims of HWC, since potential beneficiaries are often subjected to winding, frustrating and sometimes painful rejection experience due to conflicting policies and fragmented service provision between wildlife officials, medical doctors and social welfare officers. Sometimes a medical doctor would advise and recommend that certain HWC victims (based on the nature and severity of injuries sustained) should not engage in manual labour, but only for such victims to be turned down by social services department (social workers).

2.5 Posttraumatic Stress and Psychological Impacts of HWC

The majority (72 percent) of HWC victims reported having symptomatic scars causing them to experience regular and recurring headaches, itching and other pains. Interviews with privately practicing and wildlife enlisted veterinarians revealed that predators have a lot of bacteria in their claws and mouth which gets injected deep into the body when animals bite people. Some of these could be walled off within the body and form fistulas (abnormal connections between body parts as a result of injury or surgery) if not adequately drained and flushed out during initial treatment. Also that predators are animals which are highly feared by people, every encounter generates huge emotional trauma. Victims of HWC do not only suffer physical injuries and loss of life but rather those surviving victims and their families also experience untreated psychosocial trauma². This trauma manifests from

either observing a family member being trampled or mauled, or themselves having been attacked by these dangerous wild animals resulting in a diminished personal power to protect themselves. Untreated exposure to these life threatening wildlife attacks have resulted in fear of, and animosity towards the wildlife by victims. Most of the surviving victims often present traumatic symptoms such as unexplained feelings of anger, lurking fears and a feeling of insecurity due to imagined danger. Some victims experience sleeping disorders which result in them only managing to remain asleep for fewer hours than normal or lesser hours of sleep than before experiencing wildlife attacks. Psychiatric therapy is an important aspect of treating trauma patients which could improve psychological welfare of HWC victims if included in the compensation package (Beck and Clapp, 2011).

2.6 HWC Impacts on Families

In-depth interviews with surviving male HWC victims revealed that the injuries that they have sustained had affected their sexuality as aptly stated by one of the respondents;

“Go shùle, ke dilo gela tse di senang mosula, dilo tsothe di dubegile, ke go tshela fela mo phefong ya Modimo. Gangwe fela ka kgwedi, le gone ile go itlhabisa ditlhong fela ebile mosadi o batla go tsamaya. Ga se ke ye go batla mosadi wa legong fela. Ke fela gore re tshidile mmogo lebaka a ka bo a sale a ntlogetse mme le nna ga ke mo dise le fa go le botlhoko ka gore o nyetswe ke ditlou jaanong! [It’s dead, nothing is functioning, all has been badly bruised and I am only left to just breath air from God. I sometimes engage in sexual intercourse once a month even though it would also be very disappointing, and my wife wants to desert me. Perhaps I should look for a wooden wife without feelings. It is only that we have been married for a long time otherwise she would have long deserted me by now; and I also do not selfishly guard her even though it’s painful; after all she is now married to the elephants,]” 43 years old man, permanently incapacitated male victim of elephant attack.

² Trauma refers to direct or indirect personal experience of an event that involves actual or threatened death or serious injury, with the response involving fear, helplessness, or horror (American Psychiatric Association [APA], 2000: 463).

The preceding narrative from HWC victim, suggest that the wildlife induced attacks on human beings do not only present economic consequences, but they also cause serious physiological and social impacts which are understudied. Similarly, Kreuter *et al.*, (1998) and Ponsford (2003) found that traumatic injuries often lead to reduced sexual drive and activity among victims. Despite sexuality being an important component of quality of life (QoL), rehabilitation services post traumatic experiences in Botswana and elsewhere, often do not include reconstruction surgery and sexuality which leaves victims hopeless and in great emotional pain (Connell *et al.*, 2014).

2.7 Implementation of Ex Gratia Compensation

Starting 1st July 2015, Government of Botswana introduced³ *ex-gratia* payment for loss of life to family members of victims of dangerous wildlife attacks resulting in loss of life. Currently, the *ex gratia*⁴ scheme is perceived to be only covering exceptional cases in which victims would have been killed by the wildlife, with those injured referred to government medical facilities. Respondents do not understand why and how they are being referred to government medical facilities which ordinarily, would have been their first point of call. Inadvertently, they see government medical facilities as also falling short of offering specialised and effective recovery service. Implementation of *ex gratia* has been well (72 percent) received by the citizens as having the effect of promoting coexistence between the wildlife and humans. However, the results suggest that on average respondents disagree that it is easy to access the funds (64.1 percent), payment is administered timely (60.0 percent), payment is effective in off-setting pain caused by the wildlife (49.1percent), and that amount paid is sufficient (73.1 percent).

Even though part of the *ex gratia* compensation money is aimed at assisting bereaving families to bury their loved ones, the study found that almost all (80%+) families of HWC victims received their *ex-gratia* compensation weeks after the funeral has taken place. Only in exceptional circumstances

especially with intervention from higher offices that families would receive their compensation in time (. i.e. before burial, since this process has no engineered standard). In some instances, families would have already incurred debts, and or been assisted by the Department of Social Protection under Ministry of Local Government and Rural Development. This funeral assistance being a form of double dipping as a result of misaligned government policies. Double dipping has been noted in other parts of the world to be an unfair practice since it weakens government efforts of comprehensively taking care of its deserving citizens (Burtless and Hausman 1982). Respondents⁵ disagreed with a standard package of BWP70 000 compensation per death victim which they argued is too small to sustain financial needs of either surviving victims and or families of deceased victims. In fact, the ineptly one-page guide to implementation of *ex-gratia* does not include loss of reasonable income and associated disability care which should have formed the core of the *ex-gratia* objectives of effectively assisting HWC victims following wildlife attacks. Neither has the current Wildlife Conservation and National Parks Act (WNPA) of 1992 been amended or repealed to give legal standing of the coming of *ex gratia* payment into force. Thus WNPA of 1992 (section 87) precludes a sense of obligation on the part of government for any injuries and loss of life caused by wildlife even though government is the custodian of all wildlife in the country whether in private or public areas (WNP Act,1992:82; CBNRM Policy, 2007).

1 Without gazetted into law

2 A Latin word that refers to favour.

3 Including FGD held in February 2020 in Seronga village with 5 local Chiefs including the Paramount Chief, also a member of the House of Chiefs.

3.0 POLICY IMPLICATIONS AND RECOMMENDATIONS

The HWC does not only result in crop damage and cattle predation as well as impacts on the wildlife species such as being destroyed, denied access to welfare resources such as water, forage, closure of migratory routes, shelter and breeding grounds; but also leads to social impacts on human victims of this conflict. Family members and surviving victims of HWC hardly receive closure of these terrifying and traumatic events and often experience regular flashback memories which upset and haunt them for the rest of their lives. Apart from crop destruction and cattle predation, HWC victims and mostly men have shown that these horrific and traumatic events often leave them sexually incapacitated and thus takes away their pride as men. This Policy Brief proposes recommendations to be considered by policy makers and practitioners at national, regional and global level as follows;

- Introduce Comprehensive Therapeutic Rehabilitation and Reconstructive Surgery. Failure to provide HWC victims with comprehensive therapeutic rehabilitation and reconstructive surgery in order to face their new normal post these hard times means victims will always have these scars to remind them of their unfortunate encounters with the wildlife and thus delay healing process.
- Compensation of HWC victims. It is therefore argued in this paper based on victims' experiences, that victims of wildlife injuries

should also be comprehensively compensated according to the severity of injuries sustained following established international best practice. The study also found that delays in processing *ex gratia* compensation payment militates against the effectiveness of the *ex gratia* compensation scheme.

- Establishment of Ex Gratia Scheme or Ex Gratia Tribunal. This policy brief recommends establishment of an *Ex Gratia* Scheme or *Ex Gratia* Tribunal where all HWC injuries or death incidents can be effectively dealt with. Most importantly, compensation for injured victims should consider healthcare and rehabilitation, loss of reasonable income and associated disability care as a result of being gruesomely attacked, trampled and mauled by the wild animals.

Lastly, the proposed benefits could be covered by income from monies paid under the tourism levy, hunting royalties, contribution by wildlife based CBOs, social corporate responsibilities from private sector as well as from other government revenue sources. These recommendations are aimed at giving victims of HWC a peace of mind during the challenging times of their agony, as well as infusion of humanistic approach to wildlife management in Botswana.

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