



CBNRM Governance Manuals

Human Wildlife Co-Existence



Zambia Community-Based Natural Resources Management (CBNRM) Governance Manuals

Human Wildlife Co-Existence in GMAs

2023

Cover photo: Matt Sommerville/ILRG (top); Sandwe Community Forest, Matt Sommerville/ILRG (bottom).

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ACRONYMS

AMU	Area Management Unit
CBNRM	Community-Based Natural Resource Management
CRB	Community Resources Board
CS	Community Scout
DNPW	Department of National Parks and Wildlife
GMA	Game Management Area
GMP	General Management Plan
HWC	Human-Wildlife Co-Existence
HWCMP	Human-Wildlife Co-Existence Management Plan
LUP	Land-Use Plan/Planning
NGO	Non-Governmental Organization
USAID	United States Agency for International Development
VAG	Village Action Group
VLUP	Village Land-Use Plan
WPO	Wildlife Police Officer

I.0 INTRODUCTION

The Wildlife Act (Act 14 of 2015) provides for Community Resources Boards (CRBs) to be formed from representatives from the Village Action Groups (VAGs). CRBs are responsible for community management of wildlife and other natural resources in Game Management Areas (GMAs) and Open Areas. One of the important aspects of this responsibility is to facilitate the co-existence between the people living in a GMA and the wildlife. Many of the resources that people living in the GMA rely on for their livelihoods are the same resources that wildlife use.

The Board in coordination with the Secretariat carries out the day to day running and administration of the CRB and is responsible for taking action on behalf of communities of the Chiefdom. This means that the Board is also responsible for supporting the members in their efforts to co-exist with wildlife.

While the Board members cannot be expected to carry out the actions to prevent or minimize losses due to wildlife, they are responsible for making sure that there are strategies and options for communities in the Chiefdom to use to prevent or minimize damage or losses due to wildlife.

Human-wildlife co-existence is a collection of strategies and actions that support people living in GMAs and open areas to minimize losses due to wildlife.

I.1 WITH BENEFITS COME COSTS

The Wildlife Act allows the President, by statutory order, to declare an area of land to be a GMA with its purpose being the sustainable utilisation of wildlife and other natural resources to benefit the people living within the GMA and open areas. The wildlife numbers within a GMA are used to calculate a quota which enables offtake of animals while maintaining the population of the species.

Of the revenue generated from the sale of the quotas to safari operators, 5% is given to the Chief while 45% is allocated to the CRB on behalf of the communities. This money is used in the following ways: 45% for wildlife protection, 35% for socio-economic development or projects and 20% for the administration of the CRB. Along with these benefits come responsibilities. According to the Wildlife Act, it is the responsibility of the Board to promote and develop an integrated approach to the management of human and natural resources in a GMA. This is captured in the General Management Plan (GMP) for the GMA. Further, it should be noted that the 5% share allocated to the Chief as the Patron is not subject to audit processes as it is the honorarium for the Royal Highness. Similarly, the Patron cannot claim more than the 5% share, however, it is necessary the payment should firstly be agreed by the constituent VAGs at a general meeting and approved by Director of DNPW.

1.2 CONFLICT MITIGATION

People and wildlife in GMAs share the same space and resources and as a result, conflict is unavoidable.

Conflict is a serious disagreement that carries on for a long time.

These conflicts result in people living in a GMA suffering losses or damages due to living in the same area as wildlife. Losses often are linked to crops, gardens, and livestock and in some cases even loss of life. Some wildlife, like elephants may even cause damage to infrastructure like grain stores or water tanks. These conflicts result in communities becoming angry and intolerant of wildlife because their livelihoods and food security are threatened by wildlife. If the conflict is not managed, communities often resort to methods of self-help including retaliatory killings.

While it is not realistic to hope that all conflicts can be solved and made to disappear, it is possible to do things that will lessen the

impacts of these conflicts. These measures are referred to as mitigation and they aim to minimize damage or losses due to wildlife. With mitigation measures in place, communities in the GMA and wildlife can co-exist.

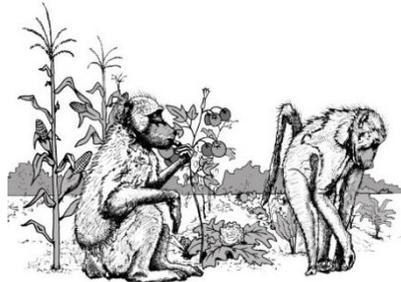
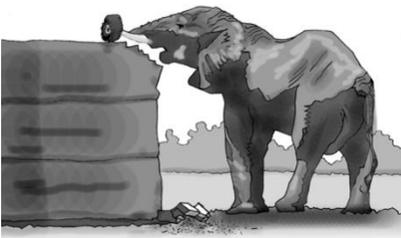
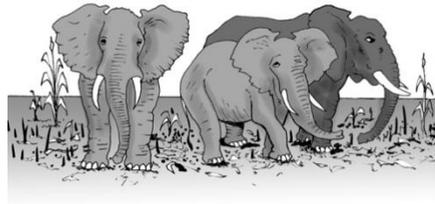


Mitigation is an action that reduces the seriousness or severity of a problem.

1.3 DIFFERENT ACTIONS FOR DIFFERENT PROBLEMS

There are different types of wildlife that are responsible for different types of damage or losses, hence require different strategies. Also, different members of the communities are impacted differently by the damage and losses because of the different roles and responsibilities they carry in society. For example, when women search for cooking firewood, they could be at risk from animal attack.

Examples of conflicts between humans and wildlife



Different approaches are needed for different problem-causing animals, and these may also vary in different GMAs.

2.0 CO-EXISTENCE STRATEGIES

GMPs follow the principle of adaptive management. This means that GMPs should be reviewed and changed as more information becomes available or as the situation in the GMA changes. Within the GMP, strategies for human-wildlife co-existence (HWC) suitable for that GMA are described. Some of these strategies aim at preventing conflicts from taking place while other strategies put processes in place for dealing with conflict when it happens. CRBs should not only contribute to updating, but continually improve their GMPs as they gain experience and knowledge with conservation partners.

A GMP will provide a general description of any conflicts the CRBs in the GMA experience and identify areas where conflicts mostly occur. Some GMAs may even develop a Human-wildlife Co-existence Management Plan (HWCMP) which can either be included as part of the GMP or can be developed even if the CRB does not have a GMP. This HWCMP plan will provide details on ways to mitigate the effects of conflict and outline ways of co-existing.

One of the key strategies for facilitating HWC is Land-use Planning (LUP) which comprises of the following components:

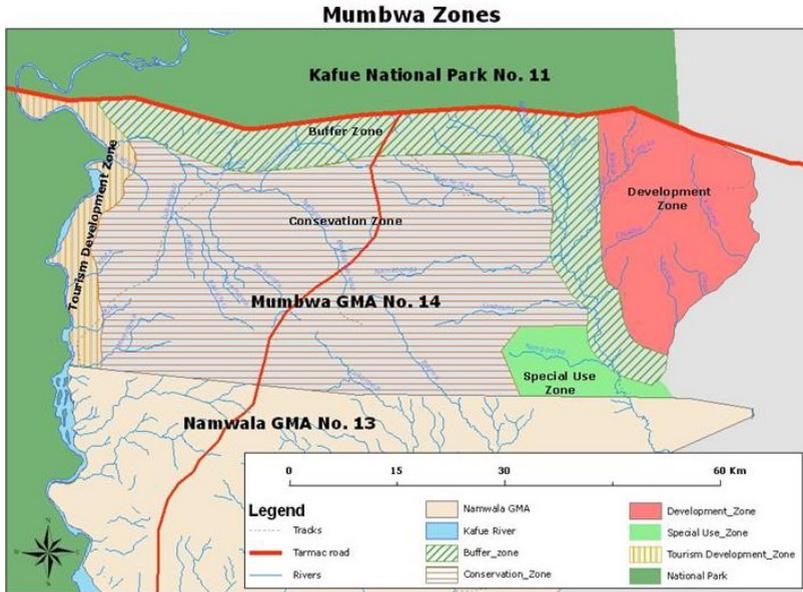
- Identifying areas with high levels of conflict;
- Promoting land-use activities that spatially separate wildlife populations and human settlement so that areas of overlap are reduced as well as possible conflicts;
- Grouping settlements and villages;
- Placing crops, gardens, and vulnerable infrastructure close to dwellings where detection and defence tactics can be easily deployed;
- Minimizing conflicting activities;

- Reducing the dependency of residents on land uses which lead to conflict; and
- Creating wildlife corridors which allow animal movement by creating or securing movement routes of wildlife.

2.1 ZONATION

Zonation is a key aspect of managing HWC. Different areas within the GMA are zoned for different land-use practices to reduce the interactions between communities and wildlife and hopefully reduce conflicts. The Wildlife Act states that a person who settles or lives in a GMA must comply with the provisions of the GMP for that GMA. This means that communities should participate in developing the zonation plan for their area and know what they need to do to comply with this plan. In the process of developing a GMP, a zonation map for the area is compiled which shows the boundaries of the different zones. The different zones are usually shaded different colours with a key identifying the name of each.

There is also usually a description of what activities are allowed within the zone boundaries. Zones may include areas for development, tourism, conservation, or a special use zone. For each zone, there is a description of what can or cannot take place in that zone. An example of a zonation map from Mumbwa GMA follows. There is also an example of the definition of the zones from the GMP of Lunga Luswishi GMA.

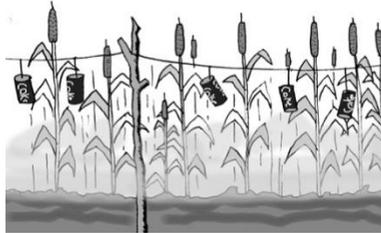


ZONE	ALLOWED	NOT ALLOWED
Natural preservation zone	Hunting, tourism and carbon trading	Mining and farming Huma settlement
Special conservation zone	Tourism	Human settlements, mining and farming
Buffer zone	Tourism and research	Human settlements, hunting, mining and farming with crops or animals
Development zone	Human settlements, hunting, sand mining, grass and timber Harvesting, farming, and fishing.	All settlements and associated activities must be within the relevant laws

A zonation map that is part of the GMP does not provide enough detail to give communities clarity on land uses at village level and for this reason, some VAGs have developed Village Land-Use Plans (VLUPs).

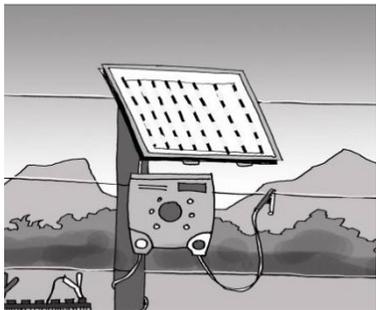
2.2 PROTECTING CROPS AND GARDENS

This strategy involves various ways of chasing away problem-causing animals or putting up structures or mechanisms which prevent them from accessing fields, gardens, livestock, or infrastructure.



Communities have developed different ways of chasing away wildlife from their fields or villages. One of the most used methods is using noise to chase off the wildlife. The success of this strategy is dependent on the owner of the field being present when the animals approach the field. Some CRBs have individuals who are appointed or volunteer as blasters—their job is to use a firearm to make a big noise to chase away the animals.

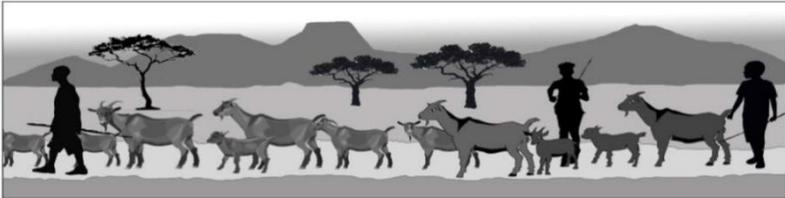
There are also different ways of preventing wildlife from accessing fields and gardens. A few examples are shown below.

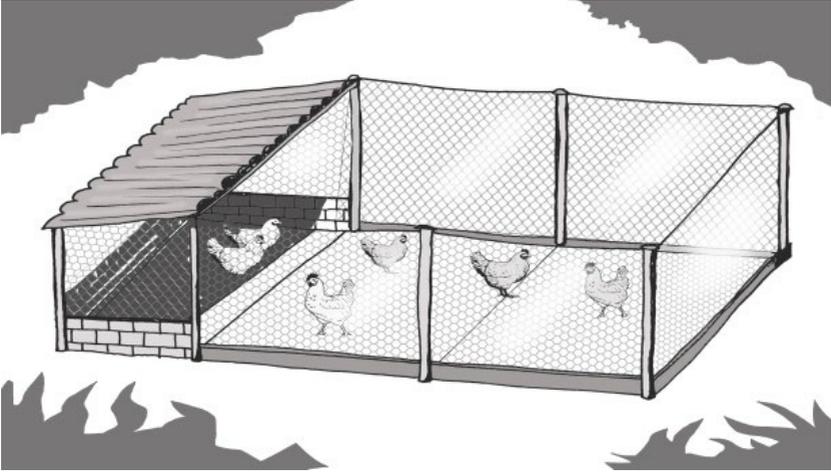


2.3 PROTECTING LIVESTOCK

Here are some strategies for protecting livestock:

- Preventing access to livestock by placing them in cages or enclosures – this is especially important at night when many predators are active. In some situations, it is best to prevent predators from seeing livestock – this increases the protection.
- Providing water for wildlife away from the village to prevent conflict.
- Herding livestock when they are grazing or browsing during the day decreases the chances of losses due to predators.
- Community awareness





2.4 PROTECTING HUMANS FROM ANIMAL ATTACKS

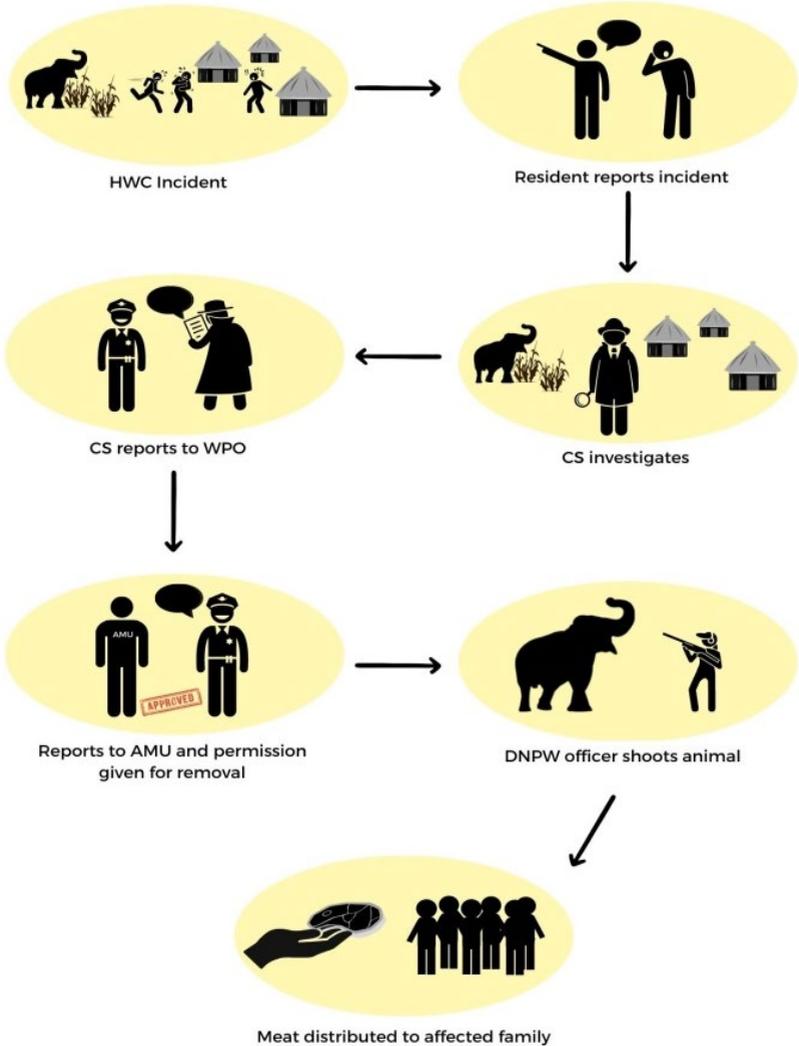
People living in GMAs should avoid doing the following:

- Walking, cycling at night in areas used by dangerous animals;
- Storing food that may attract dangerous animals in makeshift houses;
- Washing or drawing water in crocodile infested waterholes; and
- Confronting, feeding, or teasing wild animals.
- Fishing or washing in crocodile infested water.

2.5 REMOVING PROBLEM-CAUSING INDIVIDUALS

The Wildlife Act makes provision for the removal of individual animals that are repeatedly causing problems. Guidelines are given for this process which is led by the Area Management Unit (AMU) for DNPW. When an incident is reported to the Wildlife Police Officer (WPO) or a Community Scout (CS) from the nearest

Wildlife Camp will be sent to investigate the incident and assess the threat to human life or damage to property. They will report the incident to their supervisor and assist to implement the management action that is decided upon.



3.0 ROLES AND RESPONSIBILITIES

The roles and responsibilities linked to HWC are listed below. For the successful implementation of co-existence, each of the stakeholders listed below need to do their part otherwise co-existence cannot become a reality.

DNPW Extension Officer roles include:

- Sensitization meetings with VAGs on HWC strategies;
- Participate in the development of GMPs and zonation maps;
- Receiving reports of incidents and ensuring that these are investigated;
- Reporting dangerous animals to AMU and seeking approval for their removal; and
- Supporting the process of removing dangerous animals.

DNPW law enforcement officials and CS roles:

- Responding to incident reports received;
- Scaring away dangerous animals;
- Visiting the site of an incident and investigating damage and threat assessment;
- Supporting the implementation of mitigation measures; and
- Seek approval and remove a dangerous animal.

VAG committees responsibilities include:

- Supporting the development of VLUPs;
- Ensuring that local land-use rules are followed;

- Encouraging attendance of sensitization meetings;
- Facilitating information sharing on HWC issues and measures;
- Distribution of meat if problem-causing animal is shot;
- Receive reports on incidents and notify the DNPW Extension Worker; and
- Implementing human-animal co-existence measures.

VAG households' responsibilities include:

- Respecting and following the zonation requirements of the GMP as well as those of a VLUP if one exists;
- Implement measures to protect fields and livestock; and
- Report incidents to the VAG committee, CS or WPO.

CRB Board members have the following responsibilities:

- Organize sensitization meetings for VAGs;
- Contribute to the development of GMPs and zonation maps;
- Recruit and equip blasters;
- Make initial incidents assessments of threat or damage caused by a wild animal;
- Monitor HWC in the CRB and gather data to inform decision-making and management actions;
- The Natural Resources Committee (NRC) should report monthly and quarterly to the Board on HWC;
- Investigate new measures for mitigating conflicts and budget for testing and assessing these measures;
- Compile information on HWC and submit to DNPW;

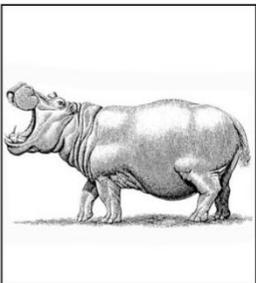
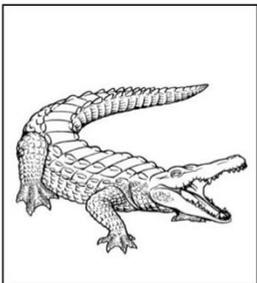
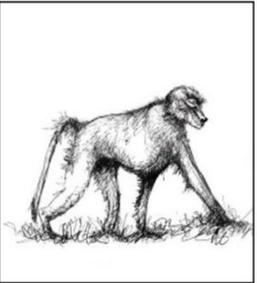
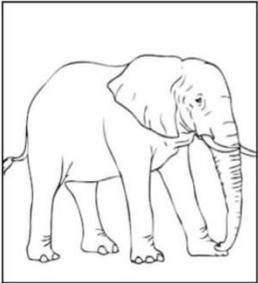
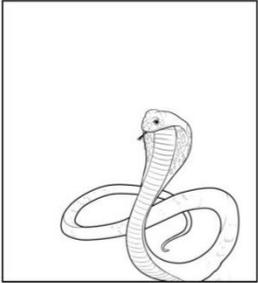
- Follow-up with DNPW on any reports of problem animals submitted;
- Allocate budget to support mitigation measures;
- Facilitate communication and information sharing between DNPW and communities;
- Support DNPW officials with the logistical arrangements for removal of a dangerous animal; and
- Notify DNPW and Zambia Police Service if a death occurs in the CRB as a result of a wild animal.

NGOs play an important role in:

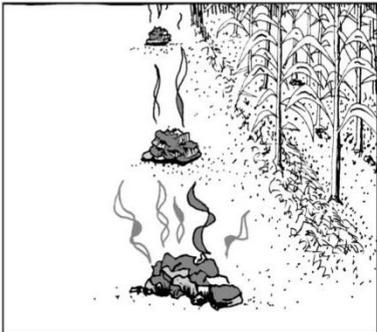
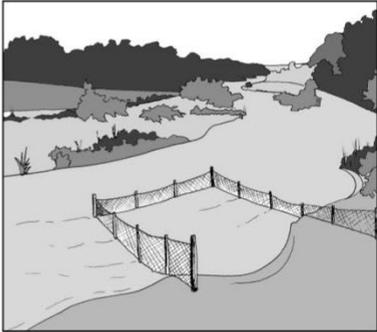
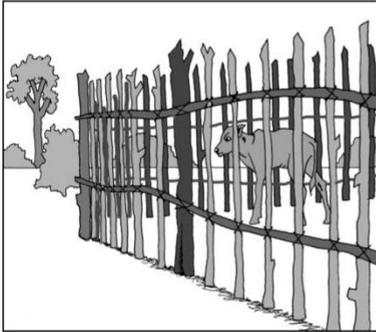
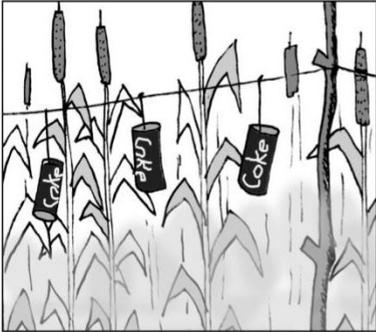
- Supporting CRBs to identify and test new mitigation measures;
- Monitoring how effective implemented measures are;
- Sharing information on innovation regarding HWC with DNPW and support organizations; and
- Arranging visits to demonstration sites where HWC measures have been successfully implemented.

4.0 IMPLEMENTING HWC

Look at the pictures below. Which of these animals present the greatest challenges to HWC in your CRB?



Which of the following strategies have been implemented in your CRB? Have they been successful?





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