BUSHMEAT, CITES AND LIVELIHOODS

HANDBOOK FOR ASSESSING THE IMPACTS OF IMPLEMENTING CITES REGULATIONS FOR BUSHMEAT SPECIES ON THE LIVELIHOODS OF RURAL COMMUNITIES

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1 INTRODUCTION

1.1 Why a handbook on CITES, bushmeat and livelihoods?

The Conference of the Parties to CITES (CoP) has recognized since 2004 that implementation of CITES-listing decisions should take into account potential impacts on the livelihoods of poor rural communities. At the most recent meeting of the CoP held in Bangkok in 2013, the Parties took a further important step through recognizing that the implementation of CITES is better achieved with the engagement of rural communities. Two important CITES resolutions on this topic have been adopted by the Parties: Resolution Conf. 8.3 (Rev. CoP13), on the recognition of the benefits of trade in wildlife and Resolution Conf. 16.6 on CITES and livelihoods. In addition, CITES Decisions 16.17 to 16.25 relating to CITES and livelihoods were also adopted at CoP16 in Bangkok in 2013. These decisions put forward a roadmap on how these questions could be tackled between CoP16 and the following CoP17, at the end of 2016 in South Africa. Basically, they call for the creation of a set of tools for assessing the impacts of CITES listings on livelihoods; the preparation of guidelines on the prevention and mitigation of negative impacts; and the performance of case studies, both specific studies on each species and thematic studies.

Photo 4

In response to the foregoing, in February 2015 the General Secretariat of the Organization of American States (OAS), through its Department for Sustainable Development (DDS), and the CITES Secretariat organized a workshop on "Assessing and addressing the impacts of CITES decisions on subsistence livelihoods" in Cispatá, Colombia. The purpose of the workshop was to present successful experiences and encourage the exchange of lessons learnt on the links between livelihoods and CITES-listed species. Furthermore, a handbook was produced jointly by the DDS of the OAS and the CITES Secretariat, based on documents drawn up by the Working Group on CITES and Livelihoods and on the inputs given at the Cispatá workshop:

- **Part 1:**
  https://cites.org/sites/default/files/eng/prog/Livelihoods/Guia_Parte1_CITES_eng_final.pdf

- **Part 2:**
  https://cites.org/sites/default/files/eng/prog/Livelihoods/Guia_PART2_CITES_ENG_FINAL.pdf

This handbook facilitates the rapid assessment by multiple stakeholders and beneficiaries of the impacts on the livelihoods of poor rural communities of implementing CITES regulations; it also offers ways to identify mitigation or adaptation strategies to address the impacts of implementing the various CITES decisions.

Durning the workshop in Cispatá, bushmeat was specifically identified by the CITES and Livelihoods Working Group as a case study for which the general handbook should be adapted. Bushmeat trade is indeed recognized by the CITES Bushmeat Working Group, as a potential threat to the wild populations of CITES-listed species, as well as to food security and the livelihoods of communities which are dependent on wild fauna. The issue of bushmeat trade was specifically tackeled during the joint CBD-CITES event in Nairobi 2011 by the CBD Liaison Group on Bushmeat and the CITES Central Africa Bushmeat Working Group (Nairobi, June 2011) and at the most recent CBD CoP, specifically through Decision XI/25 CDB-CoP on Sustainable use of biodiversity: bushmeat and sustainable wildlife management (5 December 2012), and Decision XII/18 CBD-CoP12 on the same topic (17 October 2014). Also, the CITES Standing Committee at its sixty-sixth meeting revised Resolution Conf. 13.11 on bushmeat and will submit the outcomes and recommendations for consideration by the seventeenth meeting of the Conference of the Parties. In the recommendations arising from that revision, the Standing Committee urges the Parties to determine the geographical areas or communities affected by international trade in bushmeat and to support the creation and dissemination of tools to identify the CITES-listed species that are traded as bushmeat. It also urges the Parties to adapt the Handbook on CITES and Livelihoods and to encourage communities to carry out trade in bushmeat legally and sustainably under CITES.
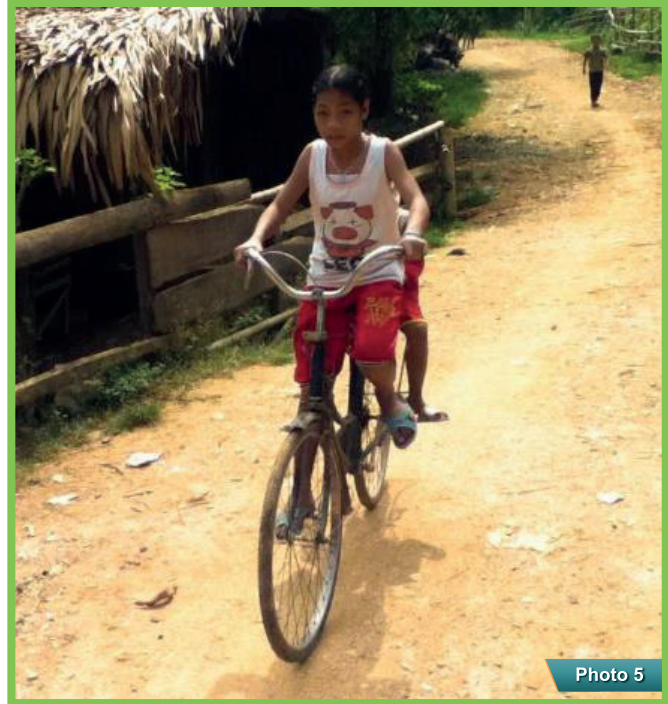
Photo 5

In response to these recommendations, the Secretariat engaged the Center for International Forestry Research (CIFOR) to produce a Handbook on Bushmeat and Livelihoods, inspired by the Handbook on CITES and Livelihoods, which would enable the member States to carry out a rapid assessment of the geographical areas, species and actors involved in the international trade in bushmeat, as well as a general assessment of the impact of listing those species in the CITES Appendices and identification of corrective measures.

Photo 6

1.2 What is so specific about bushmeat species in the context of CITES?

1.2.1 The scale of bushmeat international trade of CITES listed species is not well known

International trade in bushmeat is relatively insignificant in comparison with local or national trade. However, the majority of the countries are unaware of the scale of bushmeat trade going on accross their borders, including the trade of bushmeat species listed in CITES appendices.

The official data on seizures is limited, and when available, it does not specify the intended use of the species confiscated. Generally speaking, no record is kept of whether the species was intended as a pet, for the trade in skins, for medicinal purposes or to be used for its meat. Moreover, since a great portion of the trade is illicit, it is difficult to estimate its size with certainty or to monitor the quantities and species involved. The illega-

Photo 7

lity of the bushmeat trade in most countries entails the trade chains operating in secret. The lack of knowledge about this trade is largely what causes it to be considered insignificant by the authorities and the scientific institutions. These circumstances largely hinder the countries from comprehending the current and potential impacts, on economies, wildlife populations and human health, of implementing the CITES regulations.

The illegal trade in bushmeat at international level varies in response to a number of factors:

1. **Differences between countries:** these may arise from varying abundance of wild fauna, differences in population density and in financial means, differences in political systems and in governance, differences in capacities to implement the laws protecting wildlife, or differences in levels of civil conflict.

Photo 8

Photo 9

2. **Market demand:** the international trade exists primarily owing to the profit potential of the market and the ongoing demand from urban consumers. In areas adjacent to borders, differences in the value of the currency of the originating country relative to that of the receiving country have an influence on the purchasing power available for bushmeat.

3. **Geographical characteristics:** the international trade frequently takes place in regions with borders that have little or no presence of State control due to their geographical characteristics (e.g coastlines, remote islands, parcels of isolated forest, wide rivers).

4. **Weak environmental policies:** the laws and regulations on wild fauna do not adequately cover or do not cover at all illegal trade in meat coming from hunting.

4. **Corruption:** The customs and wildlife authorities often play a key role in facilitating illegal trade of bushmeat species. In some regions, illegal trade is very closely linked with national conflict and the interests of international security, including wildlife trade financing the activities of belligerent groups, stoking social conflict.

6. **Lack of public awareness:** particularly in the receiving countries, most of the population are unaware whether a species has been imported legally or illegally, or if it is threatened or in danger of extinction.

1.2.2 The international trade of bushmeat is most often transboundary and subsistence based rather than long distance and luxourious

A large portion of the international trade in bushmeat is in fact transboundary trade along very short supply chains and for local subsistence and food security purposes (for example, python meat is traded from Viet Nam to China, lizard meat from Chad to Nigeria, antelope meat from Liberia to Côte d'Ivoire, and tapir and paca meat from Peru to Brazil and Colombia). In those contexts, borders are considered "artificial" as members of the same family or community may have been separated by the history of official borders. This type of international trade is in fact a local trade (e.g. across the river, across the road, to the neighboring community, etc), carried out for subsistence and local commercial purposes. As a result, this type of trade is often overlooked in studies on international trade in wildlife, even though it is taking place between countries.

There are however some examples of bushmeat trade occurring though long international trade chains (for examples from West Africa to the United States (Brake Bair et al. 2014), from Central Africa to Europe (Chaber et al., 2010). These imports fuel an organized luxury trade different from the transboundary trade decribed above.

Despite this, both trade types are undifferentiated in the context of CITES. Indeed, article 1 of CITES defines "trade" as "export, re-export, import and introduction from the sea". This definition encompasses all types of trade between two countries disregarding the type of trade, the stakeholders involved and the economic value of the goods traded.

Photo 12   Photo 13

1.2.3 Bushmeat is not clearly defined by CITES

At the present time there is no official text by the Parties on the definition of the term "bushmeat" within the remit of the Convention. However, in Document 11.44 of the eleventh meeting of the Conference of the Parties held in Gigiri, Kenya, bushmeat was defined as "meat for human consumption derived from wild animals". This definition has a very broad scope and can lead to confusion in determining limits to the concept (for example, it includes fish, insects etc). On the other hand, the CBD uses the definition of bushmeat introduced in the report of the joint meeting of the CBD Liaison Group on bushmeat and the CITES Central Africa (https://www.cbd.int/doc/meetings/for/lgbushmeat-02/official/lgbushmeat-02-04-en.pdf): "the harvesting of wild animals in tropical and sub-tropical countries for food and for non-food purposes, including for medicinal use." This definition leaves out all the wildlife harvested in countries outside the tropical or sub-tropical region. Both definitions seem to exclude bushmeat species reared in ranching or mini livestock systems.

The lack of an official definition of bushmeat in the scope of the CITES convention, and the difference between the definitions used by CITES and CBD, creates a difficulty in determining the species which are part of this con-

cept. The lack of clarifty in the definition also reflects the complexity of establishing precise limits to the concept. In this Handbook we use the definition used by the CBD because it is more precise, but restricts the scope of this document to tropical and sub-tropical forests.

1.2.4 Bushmeat hunting and national trade are illegal or unclearly regulated in many countries

Many countries in tropical and sub-tropical regions possess laws that forbid hunting in specific areas, prohibit some hunting practices, ban the harvest of certain vulnerable species and ban bushmeat trade (with a few exceptions like Guyana). The possibility to hunt or trade is often unclear in many legal frameworks, the possibilities offered by one decree potentially being undermined by another decree in the same legal framework (van Vliet et al., 2016). Hunting and trade laws are considered vital for the protection of these species (Bowen-Joes et al., 1999; Caspary, 2001; Rose, 2001; Wilkie & Carpenter, 1999). However, the implementation of these hunting laws is challenging since most of tropical and sub-tropical countries lack the financial and human resources necessary to regulate (Caspary, 2001 ; Brown et al., 1999). Law enforcement measures often apply indistinctively to all types of hunting, failing to differentiate between subsistence and local commercial use of wildlife (vital for ensuring food security) and the purely lucrative and organized trade often involving high-value charismatic species and large volume of wild meat. Often, wildlife law enforcement measures fail because they ignore the real drivers of poaching and illegal trade such as rising prices, the growing relative poverty between areas of supply and centres of demand, as well as increased involvement of organized criminal groups (Challender and MacMillan, 2014). Many authorities also face the problem of bureaucracy in a corrupt context, a situation of "covenants with broken swords" (Sundström, 2015) that distorts law enforcement and where few sanctions are imposed on hunters' non-compliance of regulations. Current regulations pay little attention to ensuring that the hunting rights granted to local communities are respected, and that public structures are in place that support those rights (e.g. structures in charge of issuing permits, monitoring, agents that solve conflicts when community boundaries are not respected by outsiders). The adequacy of the existing national-level legislations in these countries to respond to wildlife conservation and poverty reduction strategies can be questioned (Mallon et al., 2015), either because hunting rules imposed have no ecological basis or because they undermine local user's needs.

1.3   Objective of the handbook on Bushmeat, Cites and livelihoods

The objective of the present document is to propose a methodology for applying the Handbook on CITES and Livelihoods to the case of bushmeat. This handbook is designed as a national-level diagnostic tool to: first, assess the areas, species, supply routes and actors involved in the international trade in bushmeat; second, assess the impacts on the livelihoods of rural communities of listing bushmeat species in the CITES Appendices; and third, explore mitigation approaches to reduce the negative impacts and promote the positive effects of CITES implementation. This handbook uses the definition of Bushmeat adopted by the CBD, in the absence of an official definition from CITES and, as such, is restricted to tropical and sub-tropical regions. However, this handbook may provide some recommendations relevant to other regions and lessons learnt from elsewhere may also complement the guidelines proposed in this document.

It is hoped that this handbook will be of benefit to a wide range of stakeholders at both global and national level, and that it may be used by the Scientific and Management Authorities responsible for implementing CITES, by the coordinators responsible for the implementation of other conventions having to do with biodiversity, by regional and international organizations, civil society organizations and local and municipal authorities, as well as by research institutions working on areas that link the use of wildlife and local livelihoods. In order to track the use of this handbook, all Parties, authorities, organisations using this handbook are kindly requested to inform the focal point for the CITES and Livelihoods group.

2 APPROACH USED IN THIS HANDBOOK

2.1   Definitions

2.1.1 Bushmeat

This handbook uses the definition of bushmeat from the report of the joint meeting of the CBD Liaison Group on bushmeat and the CITES Central Africa (https://www.cbd.int/doc/meetings/for/lgbushmeat-02/official/lgbushmeat-02-04-en.pdf): **"the harvesting of wild animals in tropical and sub-tropical countries for food and for non-food purposes, including for medicinal use."**

2.1.2 CITES Appendices

CITES applies certain controls to international trade in specimens of certain species. Any import, export, reexport or introduction of the species protected by the Convention must be authorized by means of a system of issuance of permits or authorizations. The species protected by CITES are listed in <u>three Appendices</u>, depending on the degree of protection that they require:

Appendix I: This Appendix lists the species that are threatened with extinction. Any kind of international trade in these species is prohibited, except in cases where import is claimed to be for non-commercial purposes, such as for example scientific research. In exceptional cases, such as the example mentioned earlier, the international transaction can be performed under an import and export permit, or a reexport certificate.

Appendix II: Appendice II lists the species that are not threatened with extinction but that might become so if their trade is not regulated. Also listed here are the so-called "look-alike species", i.e. species that are not impacted by trade, but which have to be listed because they look like species listed for conservation reasons. International trade in these species may be carried out under an export permit.

Appendix III: This Appendix lists those species that have been included at the request of one of the Parties to the Convention, because that Party regulates trade in the species within its own jurisdiction and needs the cooperation of the other Parties to control the trade. Import of species from the country requesting the inclusion of the species to Appendix III, or export or reexport of the species from that country, may occur only with the requisite permits.

2.1.3 Livelihoods

According to the Handbook on CITES and Livelihoods, "livelihoods" refers to the means that enable people to earn a living. "This includes the capabilities, assets, income and activities people require in order to ensure that their basic needs are covered." In the same document, a livelihood is considered sustainable "when it allows people to cope with, and recover from, setbacks and stress (such as natural disasters and economic or social upheavals), and improve their welfare and that of future generations without degrading the environment or the natural resources base".

The Sustainable Livelihoods Framework (SLF) is a conceptual framework widely recognized by international development organizations that advocates for a broader understanding of livelihoods, one that allows them to move away from reductionist notions that basically have to do only with their economic aspects. The SLF is based on the "Five Capitals" approach (Figure 1):

- **Human capital:** including formal and informal skills, knowledge, education and good health;
- **Natural capital:** this includes the stocks of natural resources that are the origin of the flows of resources and services useful to livelihoods, such as agricultural and pastoral fields, forests and non-timber forest products, wildlife and water.
- **Physical capital:** covering the basic goods and infrastructure that are needed to support livelihoods, including among others control over accommodation, production goods and infrastructure.
- **Financial capital:** this is the most conventional capital related to measurement of poverty; it represents the resources that are used by people to secure their livelihoods, taking into account both reserves and flows.
- **Social capital:** this capital comprises the networks of individuals or institutions such as political and civic bodies, including formal and informal institutions, associations, extended families and local mutual support mechanisms.

The SLF analyzes the potential impacts (positive or negative) of policies, institutions, structures (private sector and government) and processes (institutions, culture, politics and laws), on families' capital and their context of vulnerability, thereby determining the strategy for life and the results anticipated for the family (or the analytical unit under consideration).
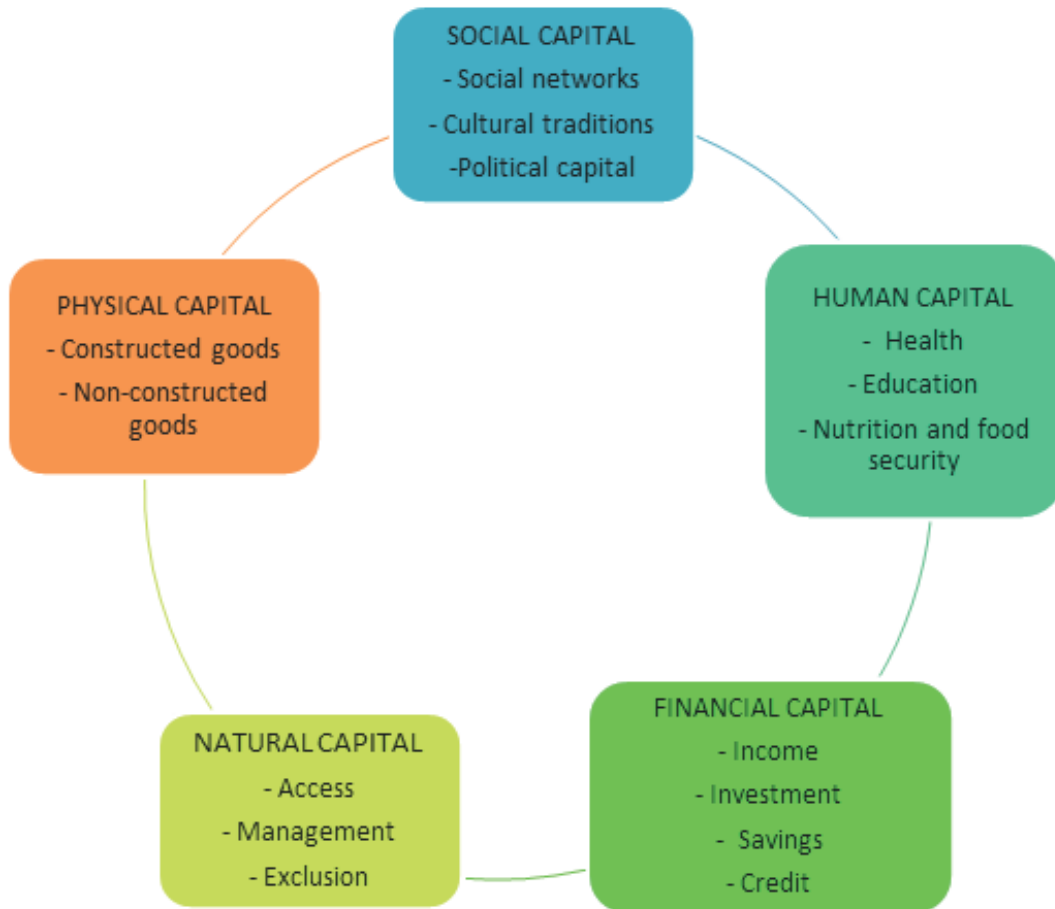
Figure 1: Conceptual framework illustrating the five capitals of livelihoods

2.1.4 Rural communities

Although the term "rural communities" has been widely used in the context of CITES and livelihoods, there is no precise definition covering its scope and specificities. While the concept of rural communities has been approached from different fields of knowledge specific to rural studies, it is evident that there is not a basic consensus on the definition. Basically, what is defined as a rural community is rooted in two main descriptors: size and location (Flora and Flora, 2007). Rural communities are usually characterized by being small and close to rural surroundings. A high level of ethnic diversity may be posited depending on their situation and location. The concept of rural communities makes explicit reference to the place, in this case rural surroundings, in which different individuals interact on a basis of mutual benefit.
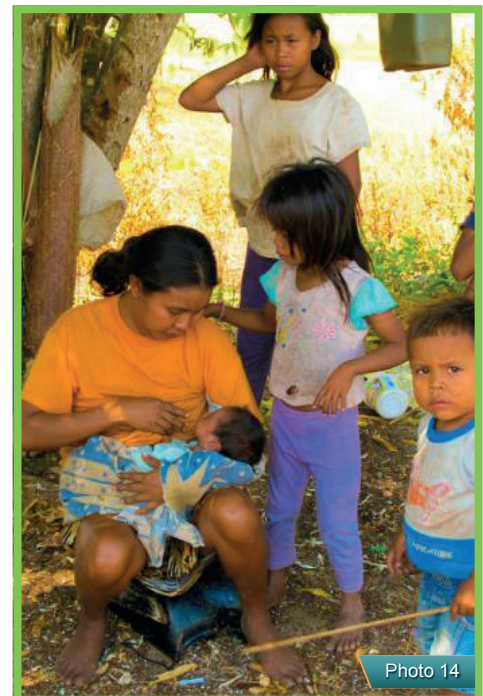
Photo 14

2.2   General description of the approach

The present handbook proposes three stages in the approach (see Figure 2).

1. National level diagnosis of bushmeat trade across borders: geographical regions, species, actors and supply routes

2. Rapid assessment of the impacts of CITES regulations on the local livelihoods of rural communities

3. Addressing and mitigating the impacts of CITES regulations on the livelihoods of rural communities

Figure 2: Stages proposed for the approach

Photo 15

Photo 16

Photo 17

*2.2.1 **First stage**: National level diagnosis of bushmeat trade accross borders*

The first stage involves the rapid assessment of the geographical regions where the international trade in bushmeat takes place, the species traded, the main trade routes and the stakeholders involved.
The results of the diagnosis may include:

- A list of species traded (particularly those listed in CITES Appendices I, II and III) with place of origin and place of destination, prices and quantities when possible (or at list a ranking on those species that are mostly traded).
- A national map showing the main supply routes
- A description of stakeholders involved in the trade (selling sites, ethnic origin of the sellers, rural or urban sellers, other activities performed by these actors)
- The list of prices of bushmeat species across each border and prices of alternative sources of protein
- A photographic report
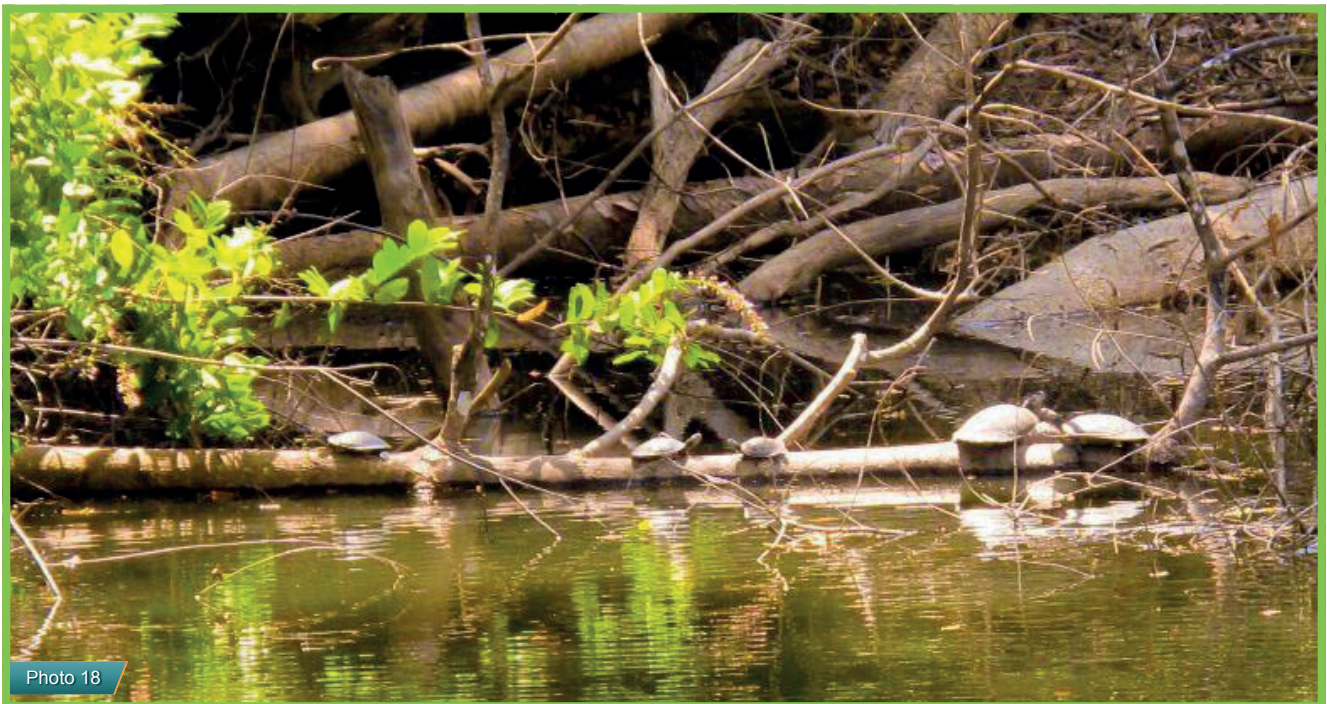
Photo 18

*2.2.2 **Second stage:** National level analysis of the impacts of CITES regulations for bushmeat species on local livelihoods*

The utilization of bushmeat is important to livelihoods, and plays multiple roles (Nasi et al., 2008). However, in most instances, only a few members of a community directly rely on bushmeat for their income or food security. In most cases, they hunt or trade bushmeat as part of a diversified economy where farming, eco-tourism, trade in timber and non-timber forest products, fishing, etc. are their main source of income. In some contexts, bushmeat trade might be easily replaced by the other activities carried out for livelihoods. However, in many others, bushmeat trade might continue to play an important role even when its contribution to income becomes minimal. While the rural community as a whole might benefit only indirectly from bushmeat, it is important to clearly differenciate

the importance of bushmeat trade for the stakeholders directly benefiting from it and the indirect benefits generated for the community. Indeed, the contributions made by hunting and bushmeat trade go beyond the purely financial benefits. They can be summarized using two main categories, defined as: (a) socioeconomic functions and (b) sociocultural functions.

Socioeconomic functions: hunting has three primary economic functions: (i) it contributes to food security; ii) creates direct or indirect incomes through the sale of the meat and other subproducts, or from a recreational industry in places where bushmeat is a subproduct of sport hunting or the exploitation of skins, and (iii) it makes an indirect contribution by lowering losses in the growing of crops, through controlling destructive animals.

Sociocultural functions: the social functions of hunting relate primarily to the development and retention of social capital and respect, prestige and status, in other words symbolic capital. Wildlife and hunting are closely linked to tropical forest cultures throughout the world. Even if in some cases the meat is of little nutritional significance, there are major social and cultural values connected with foodstuffs and medicines obtained from resources originating in wildlife. Consequently, while hunting does provide meat and income, it also continues to be an important social and cultural tradition for many peoples (in developed countries as well as developing ones).
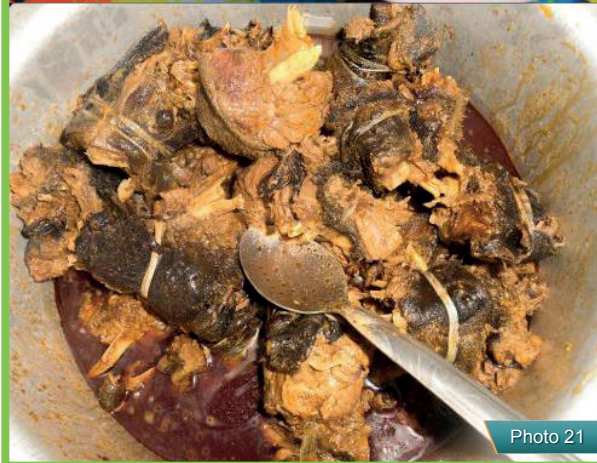

Photo 19

Photo 20

Photo 21

Photo 22

As such, the second stage of this approach consists on a rapid assessment of the impacts of CITES regulations on the livelihoods of those people who depend upon the sale of bushmeat at the key entry and exit points indentified at the national level, taking into account a borad understanding of livelihoods.

This analysis should include:

- A qualitative assessment of the significance to the livelihoods of rural communities of bushmeat international trade in terms of social, financial, human and natural capital, based on the perception of experts and the stakeholders involved. This assessment is performed using indicators for each one of the five capitals. A good indicator must meet the following requirements: be easy to use; be usable based on the data available; be easy to understand and interpret; simplify the complex phenomenon and facilitate communication of the information; be limited in number; take into account the information that is important for the actors. Table 1 suggests a list of criteria that can be used to derive indicators to measure the contribution of bushmeat use to different livelihood capitals.

- A description of the perceived impacts that would arise from listing a given species in the CITES Appendices also based on the perceptions of the stakeholders involved, or alternatively on experts knowledge. The analysis of impacts should mention if there is no impact, positive impact or negative impact for each of the livelihood capital with a detailed description of the nature of the impacts.

Table 1: List of criteria that can be used to derive indicators to measure the contribution of bushmeat use to different livelihood capitals

NATURAL CAPITAL	HUMAN CAPITAL	SOCIAL CAPITAL	FINANCIAL CAPITAL	PHYSICAL CAPITAL
Wildlife abundance and trends	Access to health	Internal capacity to organize and take commonly agreed management decisions	Savings capacity	Constructed assets (housing, community facilities)
Distribution and trends in natural habitats (e.g. forests)	Access to education	Possibility to exclude other people from the use of the resource	Sent and received remittances	No constructed assets (working tools, means of transport, access to media, clothing, etc.)
Access to other natural resources	Food security (availability, access, utilization, quality and stability)	Maintenance of cultural traditions	Access to credit	
			Investment in assets	

Photo 23

*2.2.3 **Third stage:** Addressing and mitigating the impacts of CITES regulations for bushmeat species on the livelihoods of rural communities*

The third stage generates national-level recommendations to mitigate the negative impacts of CITES regulations on the livelihoods of people trading bushmeat species listed in CITES appendices, and bolster the positive impacts generated. The type of mitigation measure will vary depending on local contexts and local aspirations. Participatory approaches will help identify the type of mitigation measure that bests suits the local context. The two examples of mitigation measures presented below are only indicative but the range of mitigation measures can by no means be limited to those.

 Example 1: Develop alternative sources of income

The diversification of sources of income for forest-dwellers having few resources may be viewed as an alternative to the commercial exploitation of bushmeat, under the assumption that hunters will invest their time in a more lucrative activity, abandoning hunting, if they are provided with alternative sources of income (van Vliet et al., 2011). However, in many cases, the alternatives can be successfully adopted without this entailing replacement of bushmeat trade, which means that alternatives become sources of diversification rather than substitution (Wicander and Coad et al., 2015). The design of alternatives must adress the reasons for hunting or trading the species in question and the conceptual basis of the alternative should be developed in accordance to local people's aspirations. It is also important to assess the potential environmental costs of alternatives in order to ensure that those are less detrimental than hunting activities.

The capacity of an income-generating activity to replace the trade of a given species is related to its relative profitability. Profitability depends on costs of production but also on markets and prices. In areas where wildlife is abundant, the "costs of production" of bushmeat will probably be lower than those of any other production system (agriculture, stock-raising, etc.). By contrast, in locations where wildlife is becoming scarce, various alternative sources of income could offer production costs lower than those of hunting.

In some contexts, bushmeat trade dynamics are deeply rooted in society and therefore the effectiveness of the alternatives will require major institutional efforts. Constant monitoring is highly recommended to guarantee their effectiveness and compliance by rural communities. It is important to verify that the bushmeat trade, has been effectively replaced by the proposed alternative. On the other hand, it is important to monitor the implementation of alternatives, to identify the main obstacles and problems, as well as the successful cases that can be replicated in other contexts.

Example 2: Regulation of a national bushmeat market for non CITES listed species

While regulatory frameworks of most countries do permit the use of wild animals for subsistence purposes, they consider trade in products derived from them to be illegal (RAS et al. 2016, Forest Stewardship Council 2016, Wildlife Friendly 2016, Marine Stewardship Council 2016). The regularisation of the trade for non-CITES listed

species to the national market could reduce the need to trade CITES-listed species across borders if the stakeholders saw real benefits in shifting to the national market. The criteria for a species to be included as a commercial species should be based on its protection status, its biological parameters, its population trends and its demand at the local level. Regulations must be accompanied by awareness campains and measures to promote the sustainable use of the species within national boundaries. The authorities could give incentives to those who are interested in becoming legal. In the long term, countries might implement some other measures to promote legal sustainable markets certification and ecolabelling of wildlife products. These options have been recommended by the Working Group on Bushmeat of the Convention on Biological Diversity. Certification of wildlife products could lead to a sustainable trade and sound management of wildlife, thus helping to ensure the livelihoods of the local and indigenous communities on a sustainable basis (SCBD 2011). Eco-certification comprises a process of strict control that guarantees compliance with legality, sanitary measures and environmental and social sustainability.

Photo 24

Photo 25

3 TOOL BOX

To cover these three stages of the approach proposed, a combination of six tools are proposed:

1. Unstructured discussions with experts;
2. Literature review;
3. Analysis of official information supplied by the environmental authorities or those with related functions;
4. Field visits to entry and exit points.
5. Semi-structured interviews with experts and stakeholders
6. Local and national workshops with experts and stakeholders

The first three components provide a general overview of the international bushmeat trade routes, pointing out the regions where the trade is occurring and targeting the main entry and exit points. Once the areas of interest have been identified, the field visits will allow to describe with more detail the trade at these entry and exit points, in terms of species, routes and actors involved. The semi-structured interviews will allow to generate detailed information on the contribution of bushmeat trade to local livelihoods and the impacts of CITES regulations. The workshops will open participation to explore mitigation options. Each of the six steps is described in detail in the following sections.

Photo 26

3.1 Structured discussions with experts

Fundamentally, these structured discussions seek to gather expert knowledge on the bushmeat species traded internationally, their significance for local livelihoods and the steps that are necessary to reduce the potential

Photo 27

negative impacts. The list of experts should encompass scientists, practitioners and staff from governmental institutions that have worked on bushmeat in various regions of the country. The open discussions will guide the expert to describe (a) data on species traded internationally for their meat in the different regions of the country, (b) supply routes (c) stakeholders who benefit from this trade, from the hunter to the end consumer (d) significance of those species for the livelihoods of rural communities, and (e) possible actions to reduce the impacts, arising out of the implementation of CITES decisions, on the rural communities that depend on selling bushmeat for their subsistence

3.2 Literature review

The literature review comprises the three following activities:

1. Systematic search of publications available in Google scholar. The following combinations of key words may be used for the search:
   - "bushmeat" AND "Country X" AND "trade" AND "international"
   - "bushmeat" AND "Country X" AND "trade" AND "transboundary"
   - "wildmeat" AND "Country X" AND "trade" AND "international"
   - "wildmeat" AND "Country X" AND "trade" AND "transboundary"

It is suggested to supplement this search with a combination of words using each specific species present in the country and listed in the Appendices (e.g "Species X" AND "Country X" AND "trade" AND "International". Indeed, many studies focus on specific species but do not mention the word bushmeat or wildmeat.

2. Filter the documents relevant to the topic

3. Systematically enter into a data-base constructed for that purpose the information concerning: 1. authors; 2. year of publication; 3. type of document; 4 type of data used (seizures, monitoring, surveys, eac.); 5.location; 6.species traded as bushmeat from or into the country under study, 7. CITES appendice to which the species corresponds; 8. main trade routes (origin and destination of bushmeat; 9. ethnic background of the stakeholders or rural community concerned; 10. other livelihood activities practiced by the stakeholders; 11. whether there is a reference to the significance of the bushmeat trade to livelihoods, community culture, food security, sources of income or social linkages.

3.3 Analysis of official information provided by relevant authorities

Official information can be obtained by sending letters of request through regular and electronic mail, and by consultation of official websites, where possible. The information gathered should cover at least the following points:

- Species traded as bushmeat into or from the country under study.
- Principal trade routes.
- Geographical regions of the country where such trade operates.

In order to obtain data at national, regional and local level, it is important that the requests for information cover both central and decentralized environmental entities. The databases on seizures may prove to be an important input to the study, provided that they have the information necessary for determining the destination of the species (e.g. was it sold to the international market?) and whether it was intended to be consumed as bushmeat. It may also be useful to examine reports from the police and other control bodies recording the trafficking routes, both

national and regional, as well as the areas where the trade operates with the greatest frequency, and the species most traded as bushmeat. Also, information on criminal or administrative proceedings arising from environmental offences may be very useful to the study, given that the description of the facts obtained through the investigations may produce information on the place of origin of the species covered by the offence, its final destination and whether it was being traded as bushmeat.

3.4   Field visits

The field visits can be carried out by two or more teams working simultaneously and comprising three or more persons, spending approximately 5 to 6 days at the different exit or entry points identified based on the results of the discussions with experts, the literature review and the information sent by the environmental institutions. A special focus should be placed into visiting towns close to the borders, fluvial and maritime harbors and airports.

The methodology in the field should combine the following activities:

1. Visits to potential selling sites (harbours, markets, restaurants, shops, etc.), participant observation, and open conversations with the inhabitants of the site, enabling the identification of the network invol-ved in the trade, the selling sites and the species most frequently traded.

2. Informal conversations with stakeholders involved in the trade to understand their motivations in the trade and obtain information on the ethnic origin of the traders, whether they are rural or urban, the other activities that form part of their livelihoods, the

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supply routes, the species most traded, the species traded internationally, and the significance of the bushmeat trade for the culture, economy, health and food of their family. In addition, it will be possible to ask whether there are other stakehodlers involved in the trade using a "snowball" approach to cover all stakeholders in each location.

3. Participant observation to understand the importance of bushmeat for local livelihoods including the identifica-tion of the diversity of income sources available locally and the alternative sources of protein (availability and prices).

4. Meetings with local experts: community representatives, NGOs, corporations, etc., to complement the available information.

3.5 Semi-strucured interviews with experts and local stakeholders

The semi-strucured interviews can be performed during field visits to the places previously identified or via web questionnaires depending on what may work best in each context. The stakeholders to be interviewed comprise experts (scientists, practitioners, staff from governmental institutions) and those involved in the trade (hunters, intermediaries and end consumers). The questions in the semi-structured interview should gather information on the livelihood activities important in the region, the scale of the international bushmeat trade in the region, the importance of the international bushmeat trade for local livelihoods, the perceptions on the impact of CITES regulations on each of the five capitals: social, human, financial, physical and natural (see Annex 1 for an example).

3.6 Local workshops

Local workshops may be a useful way to present, validate or amend the results obtained during the previous steps of the methodology, as well as to stimulate participation in the design of actions directed towards reducing the negative impacts CITES regulations and propose actions that allow to capitalize over the positive impacts. Local workshops should be held in strategic locations, chosen perhaps because of the presence of a significant international trade or because of the vulnerability of the communities involved in it. Participants at the local workshops may comprise local experts (scientists, practitioners, staff from governmental institutions, etc), hunters, traders and consumers. It may be useful, in some instances to organize the expert workshop separatly from the stakeholder's workshop to allow for a more open discussion.

The workshops can be structured in three phases:

1. Presentation of the results from the diagnosis phase, discussion, adjustments and validation

2. Assessment of the contribution of the international trade of CITES listed species to livelihoods in the local context

3. Strategies for mitigating negative impacts and bolstering positive impacts. Here the discussions should take into account the legal contexts in which the trade is occu rring. Part II of the handbook on CITES and livelihoods (https://cites.org/sites/default/files/eng/prog/Livelihoods/Guia_PART2_CITES_ENG_FINAL.pdf) may provide very usefull guidance to understand the factors that will locally enable the implementation of mitigation measures and the options that may be explored to mitigate the negative impacts taking into account the local legal contexts.

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2 ANNEX

1. Example of semi-structured interview for a harvester/trader of bushmeat species

a) Survey data and identification of the actors

- Name of the person
- Place (country, province, town)
- Survey date
- Location (e.g. market place, port, restaurant.)
- Position of the actor in the value chain (harvester, trader, consumer)
- Identification of the actor (ethnic origin and living place)
- Sex
- Age
- Highest educational level achieved
- Main livelihood activities
- Main source of income

b) Linkage between the person surveyed and the trade in, hunting of or consumption of species of wild fauna coming from or going to other countries

- Do you trade species coming from/going to other countries?
- If so, what species?
- Identify origin and destination of each species
- Identify means of shipment for each species (air, river, sea, land)

c) Significance to livelihoods of bushmeat species coming from/going to other countries

- How much does the trade in these species impact/contribute to the abundance and trends in wildlife species?
- How much does the trade in these species indirectly impact/contribute to the current distribution and trends in natural habitats?
- How much does the trade in these species impact/contribute to your access to other natural resources?
- How much does the trade in these species impact/contribute to your or your familie's health?
- How much does the trade in these species impact/contribute to your or your familie's education?
- How much does the trade in these species impact/contribute to your or your familie's food security?
- How much does the trade in these species impact/contribute to the internal capacity of the community to get organized and take commonly agreed management decisions?
- How much does the trade in these species impact/contribute to exclude other people from the use of the resource?
- How much does the trade in these species impact/contribute to maintain cultural traditions?
- How much does the trade in these species impact/contribute to your saving capacity?
- How much does the trade in these species impact/contribute to remittances?
- How much does the trade in these species impact/contribute to your access to credit?

- How much does the trade in these species impact/contribute to invest in other assets?
- How much does the trade in these species impact/contribute to constructed assets? (housing, community facilities)
- How much does the trade in these species impact/contribute to non-constructed assets? (working tools, means of transport, access to media, clothing, etc.)

d) Positive and negative impacts on livelihoods of the regulations on international trade in bushmeat

- How much do CITES regulations over the trade in these species impact/contribute to the abundance and trends in wildlife species? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species indirectly? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to the current distribution and trends in natural habitats? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your access to other natural resources? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your or your familie's health? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your or your familie's education? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your or your familie's food security? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to the internal capacity of the community to get organized and take commonly agreed management decisions? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to exclude other people from the use of the resource? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to maintain cultural traditions? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your saving capacity? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to remittances? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to your access to credit? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to invest in other assets? (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to constructed assets? (housing, community facilities) (very negative; negative; indifferent; positive; very positive)
- How much do CITES regulations over the trade in these species impact/contribute to non-constructed assets? (working tools, means of transport, access to media, clothing, etc.) (very negative; negative; indifferent; positive; very positive)

e) In your opinion, how can the negative impacts be mitigated? (respond to this question for each of the impacts where negative and very negative impacts where identified)

f) In your opinion, how can the positive impacts be boosted? (respond to this question for each of the impacts where positve and very positive impacts where identified)