

Implementation of CITES for bushmeat species and its impacts on local livelihoods in Colombia

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Key messages

- In 2016, the Center for International Forestry Research (CIFOR) and the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) developed a handbook to guide parties in the rapid evaluation of bushmeat trade across their borders, to rapidly assess the impacts on local livelihoods of CITES regulations for bushmeat species, and to identify relevant mitigation measures.
- Between January and June 2016, CIFOR, in coordination with the CITES focal points for Colombia, applied the handbook to Colombia. This involved a systematic review of available literature; consultations with national and regional authorities; semi-structured interviews with experts; field visits; and regional workshops with stakeholders of the bushmeat trade, local authorities and experts.
- In Colombia, bushmeat trade operates across boundaries of neighboring countries, in places where geography does not allow for proper institutional control. The transboundary trade occurs in a few specific sites across four main trade routes: three of them in the Amazon and one in the Caribbean.
- The bushmeat species most commonly traded across Colombian borders are listed in the CITES Appendices: paca, agouti, peccaries and turtles; therefore, the application of CITES could generate negative impacts on the livelihoods of people who depend on this trade.
- Participants of workshops said that despite the development of alternatives, bushmeat trade will continue given the small costs of hunting compared to any other domestic meat production. Also, they pointed out that bushmeat consumption is rooted in local cultures, creating a potential barrier for any alternative activity to replace bushmeat use.
- CITES needs to differentiate transboundary trade at local scale between communities of neighboring countries (as in Colombia) from the luxury international trade occurring at larger scales (e.g. from Central Africa to Europe, or from West Africa to the United States) to measure the impacts of CITES regulations on local livelihoods.

Introduction

In 2015, the Organization of American States (OAS) and the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), developed a handbook for the rapid evaluation of how CITES regulations affected the livelihoods of poor rural communities. In addition, the CITES bushmeat working group recognized that illegal bushmeat trade may threaten wild populations of species listed in CITES, as well as the food security and livelihoods of rural communities that depend on wildlife.

In 2016, drawing on this general handbook developed by OAS and CITES, the CITES Secretariat and the Center for International Forestry Research (CIFOR) developed a handbook called *CITES, Bushmeat and Livelihoods*. The handbook guides parties in the rapid evaluation of

bushmeat international trade across their borders, including the geographical regions involved, the species traded and the stakeholders involved in the trade chains. Moreover, the handbook also enables a rapid assessment of the impact of CITES regulations on the local livelihoods of rural communities and the identification of mitigation measures.

With the aim of applying the *CITES, Bushmeat and Livelihoods* handbook, CIFOR developed a case study for Colombia between January and June 2016, in coordination with the CITES focal points of the country. During that period, a rapid assessment identified the trade routes, stakeholders and species traded across the border from or to Colombia. Moreover, the impacts of CITES regulations for bushmeat species on the livelihoods of rural communities were analyzed and measures to mitigate those impacts were identified.

The methodology followed several steps. First, we systematically reviewed the literature. Second, we consulted widely with local, regional and national environmental authorities, requesting their data and knowledge about the issue. Third, based on the first two steps, we identified the main entry and exit points and conducted field missions to 12 main locations near border towns and key harbors that were considered potentially relevant for bushmeat trade. The field visits allowed us to identify those areas with significant flows of international bushmeat trade: Leticia and Maicao. Fourth, we organized workshops with experts, local authorities and stakeholders in the trade to identify how international bushmeat trade supported local livelihoods and to formulate mitigation measures to CITES regulations.

Main results

a) International or transboundary bushmeat trade

The international trade of bushmeat in Colombia does not include long trade chains. It is actually limited to a local and small-scale trade between neighboring countries. In many cases, the trade occurs across a river that marks the official border, but does not represent a social or cultural boundary. These trade routes are geographically and temporally dynamic, as they depend on circumstantial factors (e.g. the official closure of the border between Venezuela and Colombia, the devaluation of a currency in respect to the one from the neighboring country). This study showed that four main trade routes exist in Colombia – three in the Amazon and one in the Caribbean:

- from the Javará river in Peru and Brazil to Leticia in Colombia
- from Puerto Ospina (Colombia) to Puerto del Carmen (Ecuador)
- from Tarapacá (Colombia) to Brazil, for the trade of *Podocnemis expansa* during the low water season
- from Venezuela to Maicao (Colombia), for marine turtles (*Chelonioidea sp.*).

b) Stakeholders in the trade chain

The transboundary trade chains are composed of hunters, intermediaries, traders and consumers. The majority of the stakeholders hunt, trade or consume bushmeat from various species, including some listed in the CITES Appendices. Although most trade occurs within countries, some is traded across borders. This study did not establish quantities. However, the number of stakeholders involved and the structure of the trade chains indicates that the trade for most species (except for marine turtles) is sporadic and opportunistic.

- **Hunters:** The hunting of species listed in the CITES Appendices and then traded across the border is mainly carried out by rural men from indigenous origins or settlers, but also by urban or peri-urban hunters living close to the main entry and exit points. Hunting often complements other subsistence activities and is mainly carried out for consumption. Only the surplus is sold to other community members or known clients (intermediaries or final consumers).

- **Intermediaries:** In some municipalities like Leticia or Maicao, intermediaries play a key role in the transboundary trade chain, generating a significant income from their work. The intermediaries purchase bushmeat from hunters on one side of the border and then trade it to other retailers in the market, to food stalls and restaurants or to final consumers from the neighboring country.
- **Retailers:** In different regions of Colombia, bushmeat is sold in markets, restaurants and food stalls. In some cases, the retailers are specialized in bushmeat trade (e.g. food stalls selling cooked marine turtle in Maicao). However, most retailers also diversify with the sale of fish and other locally produced meats (e.g. traders in the market from Leticia who complement the sale of luxury fish such as pirarucu with the sale of bushmeat).
- **Consumers:** The final consumers purchase meat in the market to prepare it at home, or consume it in restaurants and food stalls. The demand for bushmeat varies according to the cultural value of bushmeat in the region, the availability of other preferred sources of protein and their price.

c) Bushmeat species most commonly traded across the border

Bushmeat species traded across borders varies depending the different regions of Colombia (Table 1.1).

Table 1.1. Most commonly traded species across the border.

Common name	Scientific name	Regions in which the species is traded across the border	CITES Appendices
Capybara	<i>Hydrochoerus hydrochaeris</i>	Orinoquía, Caribe, Amazonas	/
Paca	<i>Cuniculus paca</i>	Orinoquía, Caribe, Amazonas	III
Peccary	<i>Pecari tajacu</i> <i>Tayassu pecari</i>	Orinoquía, Caribe, Amazonas	II II
Agouti	<i>Dasyprocta punctata</i>	Orinoquía, Caribe	III
Red footed tortoise	<i>Chelonoidis carbonaria</i>	Orinoquía, Caribe, Amazonas	II
Yellow footed tortoise	<i>Chenoloidis denticulata</i>	Amazonas	II
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Caribe	I
Leatherback sea turtle	<i>Dermodochelys coriacea</i>	Caribe	I
Loggerhead sea turtle	<i>Caretta caretta</i>	Caribe	I
Green turtle	<i>Chelonia mydas</i>	Caribe	I

d) Impacts of CITES regulations on local livelihoods

The importance for local livelihoods of bushmeat transboundary trade (of species listed in the CITES Appendices) varies according to communities in the country. For most stakeholders, this trade cannot be dissociated from the national trade in bushmeat as it implicates the same stakeholders and the same species as on the other side of the border. In Colombia, the sale of bushmeat is illegal at the national level and CITES regulates the international trade. However, stakeholders continue to operate despite illegality and significantly complement their income by selling bushmeat. In general, bushmeat trade is not the main income-generating activity, but it contributes to diversified economies. Given the importance of bushmeat use, not only as a source of income and food, but also as an integral component of local cultures, the dependency on this resource cannot only be measured in economic terms.

e) Mitigation measures

Stakeholders in the Leticia and Maicao workshops identified several measures to mitigate the potential impacts of CITES regulations on local livelihoods.

Alternatives for hunters:

- Replace part of the hunting by fishing, where fish trade is already established.
- Promote the production and trade of traditional agricultural products.
- Develop the manufacturing and sale of handicrafts.
- Develop eco-tourism based on local and indigenous livelihoods.
- Promote any other productive activity based on traditional practices.
- Promote the sustainable management of natural resources use through programs that may include local stakeholders in monitoring and control.

Alternatives for traders:

- Establish the legal possibility to commercialize a list of non-protected species within national borders under a sustainable use management plan.
- Establish seasons for the legal sale of specific species.
- Develop mini-livestock and ranching systems to produce bushmeat species legally.

Several stakeholders noted that some of these activities might reduce but not replace the trade, given that bushmeat use is culturally rooted in those regions.

Conclusions

The international bushmeat trade in Colombia is transboundary and is concentrated in specific geographical points:

The trade occurs across natural borders (e.g. rivers) between neighboring communities from different countries and where control for bushmeat trade is almost absent. In this context, the international trade is, in fact, a local trade crossing the borders of two countries. The transboundary trade occurs in specific entry or exit points, mainly in three Amazonian locations and one location in the Caribbean region. This form of international trade significantly differs from the long-distance luxury trade in bushmeat from Africa to Europe and the United States (Chaber et al. 2010; Bair-Brake et al. 2014).

The lack of an official definition of bushmeat in the context of CITES could leave some species outside the scope of the study:

Some definitions of bushmeat (e.g. Nasi et al. 2008) limit the term to terrestrial fauna, excluding species like sea turtles. However, the trade in these species follows similar patterns to those observed for terrestrial species considered as bushmeat.

The institutional capacities to control and punish international trade of bushmeat and apply national regulations concerning wildlife are weak. In some remote areas, the presence of governmental authorities is scarce, hampering the administrative and judicial control of bushmeat trade.

On the other hand, it is often a challenge for environmental authorities to distinguish between subsistence use, national commercial use and international commercial use, given that the limit between those concepts are blurred in the context of rural realities living in boundary areas.

Alternatives to the international bushmeat trade might reduce the trade, but not necessarily replace it.

Participants of the workshops suggested that whatever the alternatives developed, the trade in bushmeat species will continue given the low costs of hunting compared to any other domestic meat production systems in those regions and the cultural attachment to bushmeat hunting and consumption.

Recommendations

- Differentiate transboundary trade at local scales by rural communities from the international luxury and long-distance trade in CITES regulations, in order to measure and mitigate the potential impacts on local livelihoods.
- Examine the possibility of establishing an official CITES definition for bushmeat in order to clarify the scope of the concept.

- Establish mechanisms for inter-institutional cooperation between neighboring countries to control bushmeat trade, taking into account local social and cultural realities. Signatory countries should implement the *CITES, Bushmeat and Livelihoods* handbook to provide preliminary information that will help develop such collaborations.
- Develop and implement a system to monitor the use and trade of bushmeat, and follow up the impacts of mitigation measures put in place to ensure that CITES regulations do not create significant negative impacts on rural communities.
- Develop programs to include local communities in monitoring systems on the use and trade of bushmeat (monitoring of wildlife, hunting, trade, consumption), through economic incentives. These projects may be of particular interest in the post-conflict context of Colombia, where strategies for the sustainable use of biodiversity have been proposed as important to building peace in the country (ONU, 2014).

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