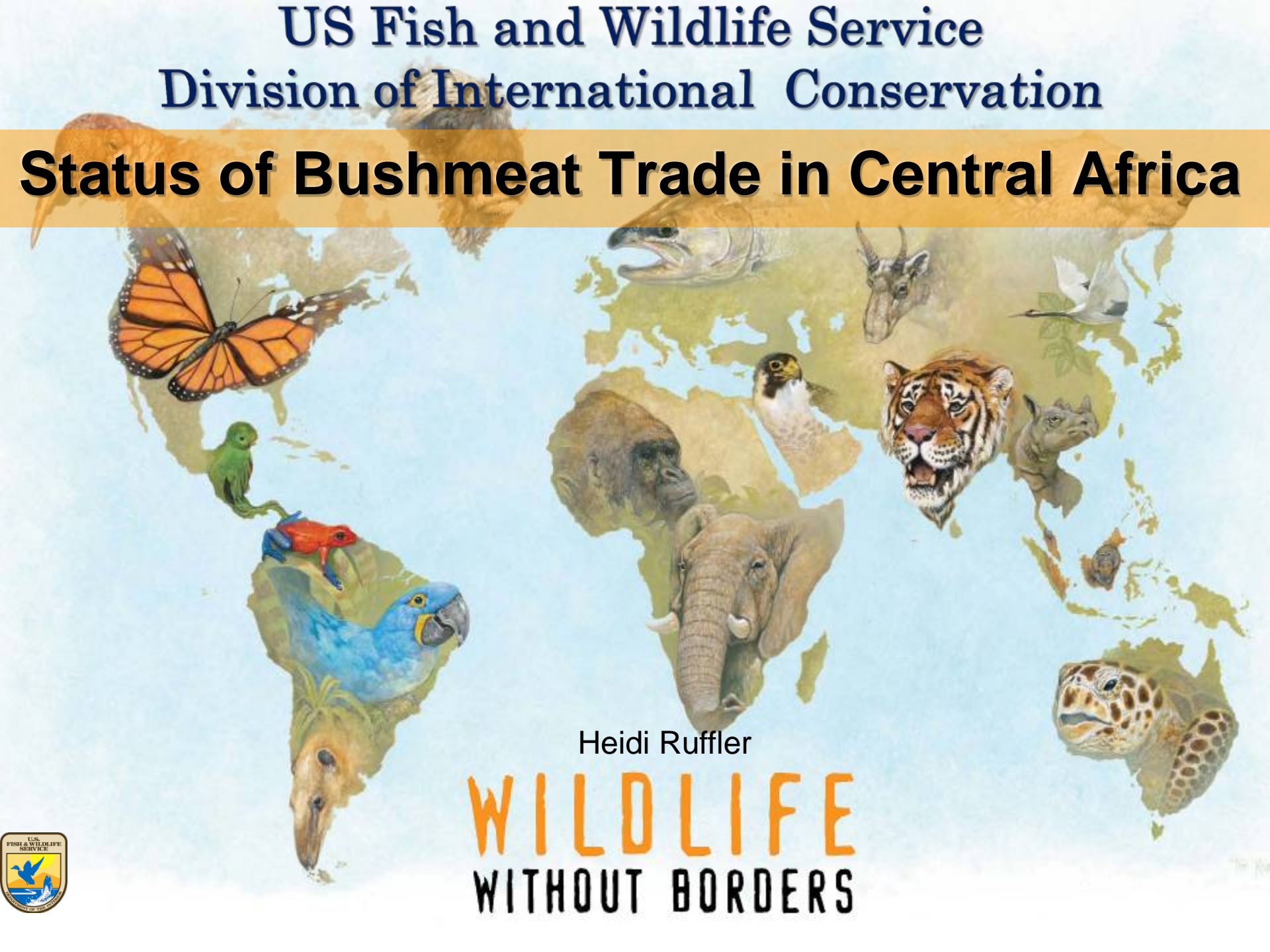


US Fish and Wildlife Service
Division of International Conservation

Status of Bushmeat Trade in Central Africa



Heidi Ruffler

WILDLIFE
WITHOUT BORDERS



Presentation Overview

- What is known about the bushmeat trade in Central Africa
- What is not known
- Discussion



What is known about the Bushmeat Trade in Central Africa

Bushmeat = meat of wild animals hunted for human consumption

Subsistence hunting (protein) vs. commercial trade (income)

Problem of overhunting:
“Bushmeat crisis” in forests of West and Central Africa threatens species and ecosystem services as well as the food security and livelihoods of people who depend on forest resources.



Photo: Heidi Ruffler/BBPP



What is known about the Bushmeat Trade in Central Africa

Up to 3.4 million tons of bushmeat harvested annually to meet growing demand (Fa et al., 2002).

From 1997 to late-2010, more than 197,000 animals passed through the main bushmeat market in Malabo, Equatorial Guinea, including over 35,000 monkeys – despite being protected by national legislation (BBPP, unpublished).



Photo: Heidi Ruffler/BBPP

What is known about the Bushmeat Trade in Central Africa



What is known about the Bushmeat Trade in Central Africa



Photo: Heidi Ruffler/CI



What is known about the Bushmeat Trade in Central Africa

If “business as usual” persists in Central Africa, then this, in conjunction with a human population growth rate of 2-3% per year, will result in a doubling of demand for bushmeat in less than 20 years, and could imply local extinction of many large-bodied mammals by 2020 (Wilkie et al., 2005).



Photo: Heidi Ruffler/CI



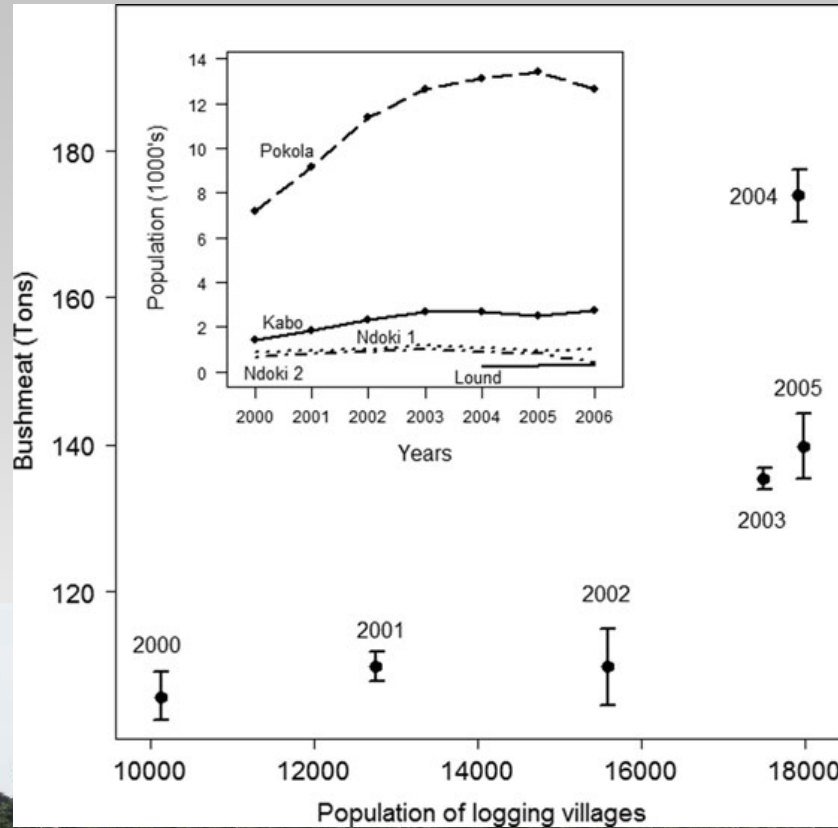
What is known about the Bushmeat Trade in Central Africa

Increased demand = direct driver; in particular from urban inhabitants with more disposable income in a market system characterized by lack of national security and stability (Barnes, 2002; East et al., 2005).

Growth of jobs in rural areas can also be a driver, including in the logging (Wilkie et al., 2000) and oil industry (Thibault and Blaney, 2003; Laurance et al., 2006). Households near logging concessions that were not employed by the logging company but that did have market access (road network), engaged in more hunting and selling of bushmeat (Wilkie et al., 2000).



What is known about the Bushmeat Trade in Central Africa



Left: Annual biomass of bushmeat entering logging towns versus the combined populations of the towns.

Inset graph: human population by logging town from 2000 to 2006.

Source: Poulsen et al., 2009



Photo: Heidi Ruffler/CI



What is known about the Bushmeat Trade in Central Africa

The unsustainability of the bushmeat trade can be exacerbated by higher road density, as roads open access to remote forested areas and to rural and urban markets, thereby lowering the opportunity cost of the bushmeat trade (Wilkie et al., 2000).



Photo: Heidi Ruffler/CI



What is known about the Bushmeat Trade in Central Africa



Photo: Heidi Ruffler/BBPP

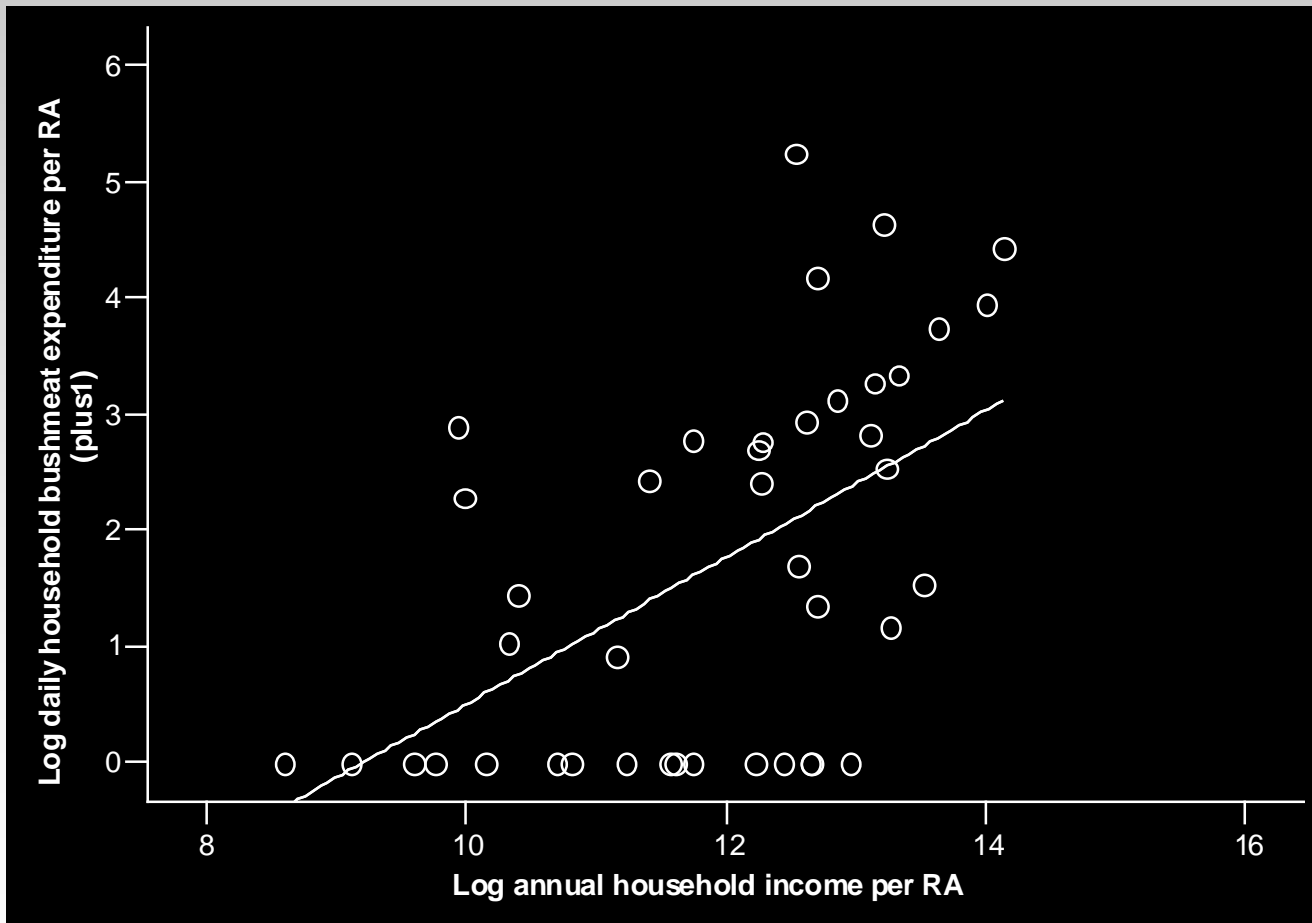
Today's demand for bushmeat is met through a greater availability of efficient hunting technologies, including guns, which are replacing traditional methods such as snaring.



Photo: Heidi Ruffler/CI

What is known about the Bushmeat Trade in Central Africa

Bushmeat expenditure with household income (income coefficient <1). Source: Kämpel (2006)



What is known about the Bushmeat Trade in Central Africa

Lack of domestic animals and fish stock is widespread in West and Central Africa.

An investigation on impact of wealth and prices on bushmeat and alternative protein consumption in Gabon revealed that rising prices of bushmeat led to less bushmeat consumption and increased consumption of fish, implying that both were dietary substitutes (Wilkie et al., 2005).

Greater wealth was a significant predictor of meat consumption, though this was most pronounced when poor households experienced small increases in wealth.



What is known about the Bushmeat Trade in Central Africa

Households can be seen to decide whether to sell or consume a particular species, where a balance is reached between the marginal utility from consumption and the foregone net payoffs that would have resulted from a sale (Damania et al., 2005).

Many of the poorest inhabitants routinely keep only the heads and intestines of meat for family consumption, but sell the more desirable meats to maximize profits.

Bushmeat is often a critical component of livelihood, especially during the lean season (de Merode et al., 2004).



What is known about the Bushmeat Trade in Central Africa



Photo: Heidi Ruffler/CI



Photo: Heidi Ruffler/BBPP



Photo: Heidi Ruffler/ci



What is known about the Bushmeat Trade in Central Africa

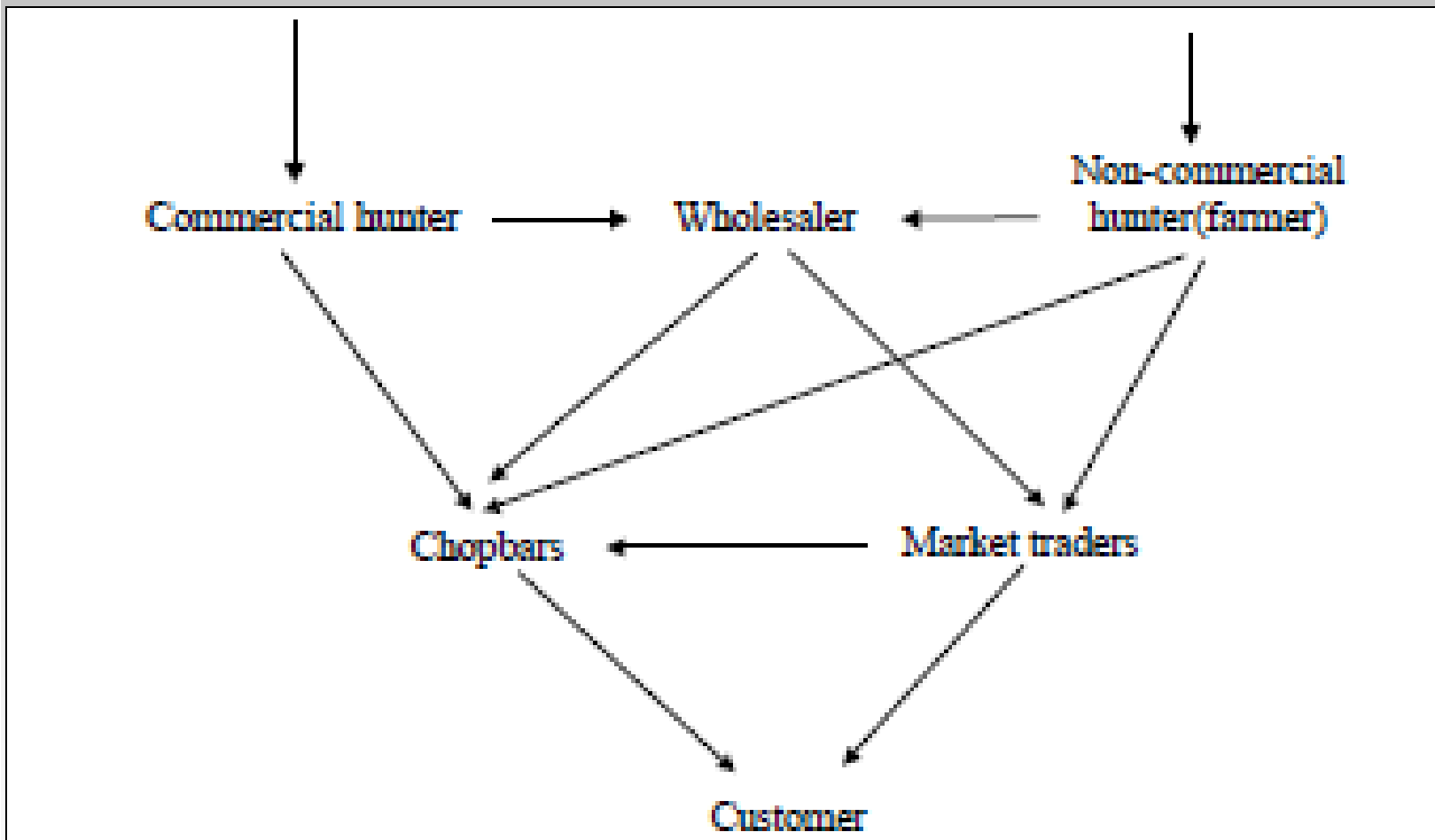
The bushmeat commodity chain may involve professional, semiprofessional hunters (bushmeat as an additional source of income), and subsistence hunters (who hunt for personal use (e.g. Cowlshaw et al., 2005)).

If not consumed by the hunter's household or given as a gift, the urban commodity chain of the bushmeat trade may involve people who transport the meat, wholesalers, people who sell the meat at market, and chopbar (café) and restaurant owners along with their employees who serve bushmeat to customers.

Women are heavily involved in the transportation and sale of bushmeat.



What is known about the Bushmeat Trade in Central Africa



Urban bushmeat commodity chain.

Source: Cowlshaw et al., 2005



What is known about the Bushmeat Trade in Central Africa



Photos: Heidi Ruffler/ZSL



What is known about the Bushmeat Trade in Central Africa

Potential solutions depend on the drivers of the demand.

Where demand represents basic dietary needs, alternative protein sources might meet conservation and development goals.

Where it represents a luxury item, a change in hearts and minds is needed.



Photo: Heidi Ruffler/CI



What is known about the Bushmeat Trade in Central Africa

Lack of environmental laws is not the issue, but rather APPLICATION of these laws.

e.g. LAGA work



Photo: Stephane Louembet/WWF



Photo: Heidi Ruffler/CI



What is known about the Bushmeat Trade in Central Africa



Photo: Heidi Ruffler/CI



Photo: Heidi Ruffler/CI



Photo: Heidi Ruffler/CI



Photo: Gabriel Ngua, ANDEGE



What is known about the Bushmeat Trade in Central Africa

Farming of domestic animals, wildlife and fish needs to be economically feasible to represent an attractive option; even then it needs to be part of a multifaceted approach if the goal is to significantly reduce pressure on wildlife populations (Mockrin et al., 2005).

The introduction of protein alternatives to diminish demand for bushmeat needs to factor in local taste preferences, cultural traditions, and political circumstances. Before advocating for protein alternatives as bushmeat alternatives in a region, household surveys can determine whether (and which) alternative sources of protein may be substitutable for bushmeat.



Discussion

How can livelihood programs ensure they are replacements, not additives?

What incentives are needed and at what level?

What activities can best address these incentives?

Who are the appropriate partners and are all the right players involved?

What is the cost of not doing it?



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Thank you!



Questions?
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