Hunting for Consensus: Reconciling Bushmeat Harvest, Conservation, and Development Policy in West and Central Africa

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Introduction

From both conservation and development perspectives, there is a bushmeat crisis. Yet there have been divergent opinions among conservation and development agencies in developed nations on the best practices and policies to resolve this crisis in the bushmeat range states. To address this issue a group of us met to share our knowledge of the bushmeat issue and to reflect on growing international concerns about the livelihoods and conservation dimensions of the bushmeat trade. We examined the problem from our varying disciplinary perspectives—conservation science, social science, and environmental policy—and arrived at the following consensus.

The development of bushmeat policy is ultimately a matter for governments within nations where wildlife is harvested for food. Nevertheless, contributions from conservationists and development agencies are often sought and proffered. Yet these policy suggestions have only occasionally been congruent, which has limited their utility.

We believe there is a need for international development and conservation agencies to adopt a more consistent and supportive approach to bushmeat policy development. Such an approach should seek to secure important global biodiversity values while recognizing the livelihood dimensions of the trade and the practicalities of policy change. Our consensus statement is only a first step; further discussions must involve an array of stakeholders in the range states.

Definition of the Bushmeat Crisis

Bushmeat is an African term that includes all wildlife species used for food, from cane rats to elephants. The ecological, nutritional, economic, and intrinsic values of wildlife hunted for food are all at risk of being lost because present policies and practices cannot reconcile these different values of bushmeat or manage the resource sustainably. The dual threats of wildlife extinctions and declining

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food and livelihood security of some of the poorest people on Earth make the trade in bushmeat a national and global conservation and development concern, warranting the phrase *bushmeat crisis*.

Whether the hunting of bushmeat is primarily an issue of biodiversity conservation or human livelihood, or both, varies with perspective, place, and over time. It is crucial to understand when and where the bushmeat trade is primarily a livelihoods issue, a biodiversity conservation crisis, or both. Without this knowledge decision makers cannot reform policies and practices so that these different, but equally important, values of wildlife are not lost through inaction. Worse still, benefits may be lost as a result of conflicting actions of the development and conservation communities.

In much of West Africa populations of many largebodied wildlife species have already declined or been extirpated because of habitat loss and hunting, leaving a fauna consisting predominantly of resilient, rapidly reproducing species. In these places the "crisis" has more of a livelihood dimension: the need to ensure that the poor have access to affordable protein sources, and the few remaining populations of threatened and endangered wildlife species are protected. The wildlife species that remain in these primarily agricultural ecosystems are often crop pests, and they are hunted for food and to reduce crop losses.

In more remote regions of Central Africa the bushmeat crisis is currently more of a conservation issue. In many places wildlife in aggregate is still abundant. Yet wildlife species that are scarce and breed slowly—such as gorillas, chimpanzees, elephants, and bongo-are at risk of local extinction. Although hunting for household consumption may be locally sustainable, the level of extralocal demand associated with the commercial trade in bushmeat is typically far greater than the forests can supply. Because hunters typically kill large animals when they encounter them in the forest, these species will be driven to extinction as long as there are enough small wildlife species to continue to attract commercial hunters to the forest. The concern is that as the scale of wildlife trade in Central Africa increases to meet rising demand, wildlife populations will be quickly depleted, and not only will some globally important wildlife populations be lost, but many rural people will lose an important source of food and income. Marginalized groups and indigenous peoples who cannot easily compensate for the loss of income from wildlife harvesting by entering conventional labor markets are especially vulnerable.

Depletion of wildlife and loss of livelihoods of local people are issues that sit on either end of the bushmeatwildlife continuum, and they reflect a complex mixture of concerns. Finding and implementing development and conservation policies and practices that are complementary and that reconcile the different values of wildlife to people is the challenge that faces national and international decision makers if the multifaceted bushmeat crisis is to be solved.

Reasons for the Bushmeat Crisis

Conservationists (but not animal rights people) and development planners agree that harvesting bushmeat at levels that are sustainable would be ideal. Reconciling what is sustainable in theory with what is likely to be manageable in practice remains a key challenge.

Large-bodied, slow-reproducing species are usually scarce, and hunting makes them especially prone to extinction. Defining sustainable harvest levels in places with high numbers of endemic species with very restricted ranges is challenging because loss of local populations could have global significance. Other species such as the blue duiker (*Cephalophus monticola*) and cane rats (*Thyronomys swinderianus*) reproduce more rapidly and are capable of sustaining much higher levels of offtake. As a result, prospects for sustainable use of these relatively common, small, and resilient species are brighter.

Just as there are differences among species, there are differences in the productivity of different ecological systems. Wildlife productivity in tropical forests is generally low, and typically the quantity of bushmeat that could be harvested each year is an order of magnitude less than from much more productive tropical grasslands. On the other hand wildlife productivity in forest regenerating after shifting cultivation tends to be higher than in primary forests. Finally, in some places habitat loss, fragmentation, pollution, and disease contribute further to declines in wildlife numbers and reduction in sustainable harvest levels

In Africa, although laws typically exist that regulate hunting and sale of wild animals, in practice wildlife hunted for food is usually an unregulated open access resource that anyone with the time and equipment can harvest. Land management and tenure systems that would give rural communities a say in access to and disposition of natural resources are lacking in much of Central and West Africa. Rural families often have few assets on which to rely, and existing natural assets are increasingly depleted or claimed by more people amid rapid human population growth. Wildlife harvested for food is a valued good that is subject to growing demand when supply is either static or declining. Consequently, in many rural locations in Central and West Africa where there are few barriers to entering the bushmeat trade and few alternatives to offset demand, hunting pressure is increasing and wildlife populations are declining or being extirpated.

The Bushmeat Crisis and Development

Bushmeat is a development issue because many types of development decisions or actions lead to crisis. The 886 Bushmeat Harvest in Africa Bennett et al.

poor and most marginal are vulnerable to three kinds of changes: depletion, degradation, and shocks. Depletion occurs when there is less of any resource (for bushmeat, fewer species or reduced populations), whereas degradation pertains to a decline in quality (e.g., loss of more favored species). Shocks are the result of unexpected and often external factors (war, economic crisis, drought) that rapidly change the conditions people face. One of the most important roles bushmeat play in the economies of poor people is as a safety net against these short-term livelihood crises. These negative environmental changes may not be the result of the actions of the people most affected. Usually, the drivers of these changes are actions, policies, and decisions taken or made by actors far away from where the impacts occur (i.e., infrastructure and concession policies).

In many areas unsustainable exploitation of bushmeat is the result of the failure of development policies that have led to an absence of rural-sector investment or sustained income opportunities in rural areas. Development actions, such as road construction into frontier forests, can bring about a rapid stripping of resources, and the people who reside in these areas see their assets and livelihood security diminish rather than increase. Rural people may be pushed off their lands because they typically lack secure land rights and the ability to enforce them. Lack of long-term integrated planning compounds the risks to poor people from ill-considered development.

Finally, bushmeat overexploitation and loss is a development problem because it encompasses issues of sectoral and intergenerational equity. Where bushmeat markets are booming, poor rural communities are often mining their wildlife resources to subsidize the protein consumption costs of urban families. The failure of development to provide growing urban populations with secure livelihoods and sustainable sources of animal protein are resulting in overharvesting of wildlife in rural areas and decreased livelihood security of poor rural families who are dependent on a dwindling wildlife resource. Bushmeat harvest is more a survival strategy than a development strategy. The places where species are threatened pinpoint places where development policies have failed, and the future of the rural poor is likely to be threatened as well.

Managing for All Values of Wildlife

Wildlife species are valuable for the roles they play in regulating the composition, abundance, and productivity of plants and animals within the planet's diverse ecosystems. To many people they are also intrinsically valuable and convey a profound sense of the wonder of nature. Wild animals are valuable for the food on people's plates and the money in people's pockets. Unfortunately, many

in the conservation and development communities have seen these values of wildlife as conflicting with each other and thus as mutually unattainable. This has been especially true in discussions of the tropical forests of Central and West Africa, where wildlife conservation, bushmeat harvest, and human livelihood concerns overlap in complex ways.

A large part of the conflict has stemmed from inherently flawed attempts to obtain all values of wildlife from a single place at a single time. The challenge for policy is to accommodate these different values in ways that support diverse needs and interests. If we want to capture all the values of wildlife we must think about wildlife management at a large enough spatial scale. Through this magnifying lens one can imagine a large heterogeneous landscape with three very different types of land uses: high biodiversity protected areas, production forests, and farm bush areas. Although no single area captures all values, if managed in concert a well-planned landscape can generate the ecological, livelihood, and existence values of wildlife simultaneously.

Protected areas include national parks, biological reserves, and other areas in The World Conservation Union (IUCN) management categories I and II. These are essential elements of a wildlife conservation strategy, and a nation's full array of species should be represented in its protected areas network. These protected areas should have biodiversity conservation as their primary objective, taking precedence over all other values of wildlife, and no hunting should be allowed within them. The species within these strictly protected areas are of both national and international concern and include protected and endangered species. Other categories of protected areas (IUCN III-VI) have management objectives that address both livelihood and conservation concerns.

Production forests are designated for natural resource production and harvesting. In production forests hunting of wildlife species that are not protected (e.g., not on national protected species lists and/or not on the IUCN Red List) should be allowed and managed sustainably. The natural resources within these areas represent national-level interests and values, and management standards and support for their effective management should stem primarily from private-sector investment and national mechanisms.

Farm bush areas are mosaics of agricultural fields, tree crop plantations, fallow lands, and locally protected forests. They are the primary source of cultivated and wild harvested goods that are the foundation of rural livelihoods. In farm bush areas bushmeat provides diverse local benefits and is important to rural livelihoods. Sustainability and support of local livelihoods should be the primary purpose of these areas. Wildlife species not specifically protected or threatened with extinction (e.g., not on national protected species lists or on the IUCN Red List) should be managed locally, and the rights of local users to harvest wildlife should be ensured. When

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protected species are present, their management should involve both local and national managers. The natural resources within these areas primarily have local value.

Moving Forward

To ensure that management of wildlife in protected areas, production forests, and farm bush is sufficiently effective to capture its ecological, livelihood, and existence values, a set of other actions are required. At present, political will to address the bushmeat trade is inadequate. Current capacity for wildlife law enforcement is limited, although some projects have shown that it is possible to regulate transportation and sale of bushmeat. Moreover, finding solutions to the challenges of bushmeat management is unlikely to be possible solely within the wildlife and natural resources sector. We must engage the development, public health, and private sectors to play their roles and en-

sure that their actions complement direct conservation interventions. These include supporting appropriate landuse management and land and resource tenure, putting in place appropriate legal frameworks, and strengthening of community participation in resource management. These actions all provide a useful opportunity and entry point for another key link between bushmeat and development policy: the strengthening of governance and institutions, which is a cross-sectoral concern throughout sub-Saharan Africa. If a well-governed bushmeat sector were achievable, then this would have far wider repercussions than in the wildlife management field alone.

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