



SCIENTIFIC MEETING

**BUSHMEAT AND FISHERIES WITHIN THE LIVELIHOOD
CONTEXT:
WHAT ARE THE IMPLICATIONS FOR CONSERVATION?**

Tuesday, 9 June 2009

The Meeting Rooms, The Zoological Society of London, Regent's Park, London NW1 4RY

Chair: Dr Glyn Davies, Director of Programmes, WWF-UK

Background issues: bushmeat and livelihoods

Dr Glyn Davies (Director of Programmes, WWF-UK)

Bushmeat and fish consumption in Gabon

Dr Lauren Coad (Environmental Change Institute, University of Oxford) & Kathryn Knights (Imperial College London)

The Gabonese national strategy for bushmeat management aims to balance wildlife conservation with sustainable rural offtakes. Gabon, with only 1.5 million people, abundant wildlife and one of the lowest deforestation rates in Africa, is well placed to achieve this, yet current bushmeat offtake is unregulated and proving locally unsustainable. Revision of management policies is underway, but must be efficiently targeted if these twin aims are to be realized.

To underpin the national strategy, research on hunter offtakes, rural economies, wildlife trading and transport, national diet, cultural choices and consumer socio-economics were carried out under the 'Projet Gibier' umbrella (2000–2007).

The datasets give powerful insight into bushmeat use across a range of locations and socio-economic situations, allowing managers to clarify the drivers of hunting and trade and to estimate the possibilities for, and consequences of, national regulation.

First analyses suggested that bushmeat use is primarily controlled by economic drivers and that fish is a dietary substitute for bushmeat in rural Gabon.

At this meeting we will present further analyses of the predictors of bushmeat consumption in households across Gabon, focussing on the influence of locally-produced (vs imported/conserved) fish.

A thorough understanding of the interaction between bushmeat and fish in consumer choice is critical to creating management policies that will not simply push the bushmeat crisis from the forests to the rivers and sea.

The role of wildlife products in livelihoods in Equatorial Guinea: a comparative study

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Hunting, fishing and gathering of other non-timber forest products are important components of livelihoods throughout west/central Africa. In order to formulate effective policy to ensure the sustainability of wildlife harvesting for both development and conservation reasons, an understanding of its position within the wider rural economy is needed. We evaluated wildlife use and dependence within the context of other available livelihoods in continental Equatorial Guinea, a small forested central African country which is undergoing a dramatic economic boom following the discovery of offshore oil. We carried out household surveys and hunter interviews over 12 months in three villages with differing combinations of market and forest resource access, making comparisons between communities, households and individuals. At the community level, better access to markets and traders (and consequently lower transport costs) resulted in higher average incomes from hunting, even when wildlife densities and offtakes were lower, but also higher prices and incomes from trade and agricultural goods, with sales opportunities possibly driving higher agricultural production. Within a village, the poorest and most vulnerable households gained a significantly greater proportion of income and production from forest products, largely because of a lack of income from other livelihoods (particularly trade and paid work). Between individuals, there was a strict gender-divide in livelihood activities in all villages, with women practicing agriculture and collecting low-value forest products and men pursuing livelihoods with more earning potential, including hunting. While they prefer the security of a regular wage, hunting is an important source of fall-back income for men in the absence of preferable alternative livelihood opportunities. Forest products contribute significant value and income to all communities studied, even those not 'specialising' in hunting or in wildlife-dense areas, suggesting that bushmeat hunting in particular is an important component of rural livelihoods across the country.

Fishing and snaking on Tonle Sap Lake, Cambodia

Dr Sharon Brooks (University of Cambridge)

The hunting of snakes by fishers on the Tonle Sap Lake in Cambodia has become a significant livelihood activity in the last 20 years that is of most importance to the less well-off as a result of reduced livelihood options. This activity is driven by the high demand for animal food from the numerous crocodile farms in the region, providing new market

opportunities for previously unexploited resources. An estimated 6.9 million snakes of seven species are captured and traded per year representing the world's largest snake hunt, raising strong concerns over the long-term sustainability of this new form of exploitation. Within our study communities, people engage in a high diversity of natural resource use activities, responding to both seasonal availability and market opportunities. Snake hunting provides a crucial income source as a result of the seasonal difference in the availability of snakes compared to other wildlife resources, principally fish. Following a lean period when fish catches are low and few alternatives exist, snakes are one of the first wildlife resources to become available, thereby providing an income at a time of year when it is needed most. While snake hunting may be unsustainable in isolation, any conservation action needs to recognise the importance of this activity for local livelihood strategies. Switching between resources according to availability provides a way of coping with prevailing uncertainty and resource fluctuations, and is potentially compatible with wider ecosystem conservation and development goals.

Recommended Reading

Brooks, S.E., Allison, E.H., & Reynolds, J.D. (2007): Vulnerability of Cambodian water snakes: Initial assessment of the impact of hunting at Tonle Sap Lake. *Biological Conservation* **139**: 401–414.

Brooks, S.E., Reynolds, J.D., & Allison, E.H. (2008): Sustained by snakes? Seasonal livelihood strategies and resource conservation by Tonle Sap fishers in Cambodia. *Human Ecology* **36**: 835–851

Summary and discussion

Professor Katherine Homewood (Department of Anthropology, UCL)