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POLICY BRIEF

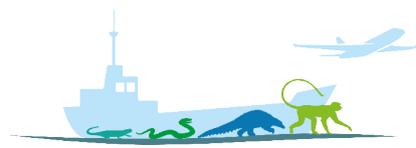
TOWARDS SUSTAINABLE WILDLIFE TRADE: *THE CASE OF BUSHMEAT IMPORT*

THIS BRIEF

This policy brief is part of a series of three, being the result of a collaborative work carried out under the initiative of the Federal Public Service Health, Food Chain Safety and Environment (Belgium) within the framework of the 'One Health' initiative on the trade in exotic animal species. Its content is based on the background documents, the panel discussions, and the keynote presentations from the 'Towards a sustainable wildlife trade' conference organised in Brussels on 3 and 4 December 2019. The keynote speakers whose presentations made it possible to draw up this document are: Sofie Ruyschaert (WWF-Belgium), John Fa (Manchester Metropolitan University - CIFOR), Anne-Lise Chaber (University of Liège & University of Adelaide), Herwig Leirs (University of Antwerp), Mutien-Marie Garigliany (University of Liège), Sandrella Morrison-Lanjouw (University Medical Center Utrecht), Carole Billiet (Ghent University & Brussels Bar) and Erik Verheyen (Royal Belgian Institute of Natural Sciences).

KEY POLICY RECOMMENDATIONS

- Ensure a coherent 'One Health' policy framework for the illegal importation of meat, including bushmeat
- Effective and efficient border controls
- Collect data and enhance knowledge
- Information and awareness raising



CONTEXT

- Wildlife trade of animals and plants is one of the fastest growing markets internationally. With a **legal market worth €300 billion annually¹** and an **illegal market** whose profits are estimated **between €6.5-22.3 billion per year²**, wildlife trade has a dynamic global scope³. Main drivers of trade are luxury goods and food (36%), traditional medicine (25%), and pets and entertainment (22%)⁴.
- The trade of wild species, legal or illegal, has become a major concern for a variety of reasons. Given that a large part of animals are hunted in an unsustainable manner, wildlife trade is often seen as one prominent driver of animal extinction^{5,6,7}. Beside conservation issues, the **uncontrolled trade of exotic species poses a hazard to public health through the potential spread of animal pathogens**, as demonstrated for the recent epidemics of **Severe Acute Respiratory Syndrome (SARS)** and highly suspected for the **Covid-19 outbreak^{9,10,21}**. It can also bring high risks to wildlife health, livestock or crops¹¹. In the past decade, the issue of wildlife trade has been identified as a major concern in the international policy arena. However, there are numerous constraints and limitations to monitor and successfully tackle this problem with current policy instruments⁸.
- There is growing evidence of the key role that the European Union plays within the sphere of wildlife trade^{5,13}. Estimates of the net value of the wildlife trade in the EU alone vary widely¹⁸. In 2013, Walley¹ estimated **the EU's legal share at approximately €100 billion, whereas van Uhm¹³ estimated this in 2016 at €38 billion with 25% of it being illegal**. For decades, the EU has ranked as a top importer of wildlife^{14,15}, being a source, processing point and destination of wildlife trade. This includes both legal and illegal trade with a wide heterogeneity of compliance levels for the specific regulations among its Member States^{16,17}, for example with regard to The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).
- Bushmeat or wild meat trade is a specific concern for the illegal import of exotic species in Europe. The meat of wild animals is an important traditional component of diet and culture worldwide^{18,19}. However, unsustainable hunting for bushmeat now threatens many of the hunted species. **International trade of bushmeat contributes to unsustainable demand, increasing the overexploitation of already vulnerable source populations**. Moreover, it is likely to pose a threat to human and animal health through the introduction of pathogens.

KEYNOTE MESSAGES

The use of wild meat and its implications on food security and biodiversity

Wildlife is hunted for food, trophies, medicines and other traditional uses, worldwide particularly across Latin America, Asia and Africa^{22,19}. Individuals hunt tropical forest wildlife primarily to eat or sell it. In tropical rainforests worldwide, hundreds of species are unsustainably consumed, but in terms of weight and numbers, mammals make up the bulk of the trade²³. Wild meat is the primary source of protein for the majority of forest or rural families but is also consumed regularly in urban centers, primarily as a luxury^{24,19,25}. In isolated communities, wild meat is often the most tradable item, in terms both of value-to-weight ratio and transportability²⁶. Increasing evidence shows that commercial hunting has been growing in importance for some time with a large number of hunters currently either earning or supplementing their incomes with the sale of meat²⁷. Such commerce increases the amount of hunting and reduces the sustainability of numerous wildlife species²⁸. It has been estimated that a **significant number of forest mammals** could become extinct in the near future, and that **protein malnutrition** is likely to increase dramatically if food security in some regions is not promptly resolved²⁶.

Health risks related to the trade of exotic animals

Imported exotic animals or animal products may carry pathogens that could be a threat to human or animal health. About **60% of infectious diseases in humans are zoonotic (being of animal origin) and this percentage amounts up to 75% for emerging diseases**²⁹. Models suggest that emerging zoonotic diseases appear to occur more often in tropical regions and are best predicted by the distribution of tropical forested regions, high mammalian species richness, and variables relating to shifts in agricultural land use³⁰. Additionally, such zoonotic diseases pose a substantial threat to the conservation of global biodiversity³¹. The notion of risk indicates the chance that a particular hazardous event may actually cause damage³², being a combination of probability and impact. Regarding exotic animals, these risk components depend on the species, the origin of the animals, the type of animal products (bushmeat in this case), the way they are preserved and their destination once they have arrived in the country. The health risk related to the trade of exotic species is a reality, though some scientists consider it limited for Western countries. Decision-making process on health risks related to the trade of exotic animals is all about what is the acceptable level of risk for society²⁹.

KEYNOTE MESSAGES

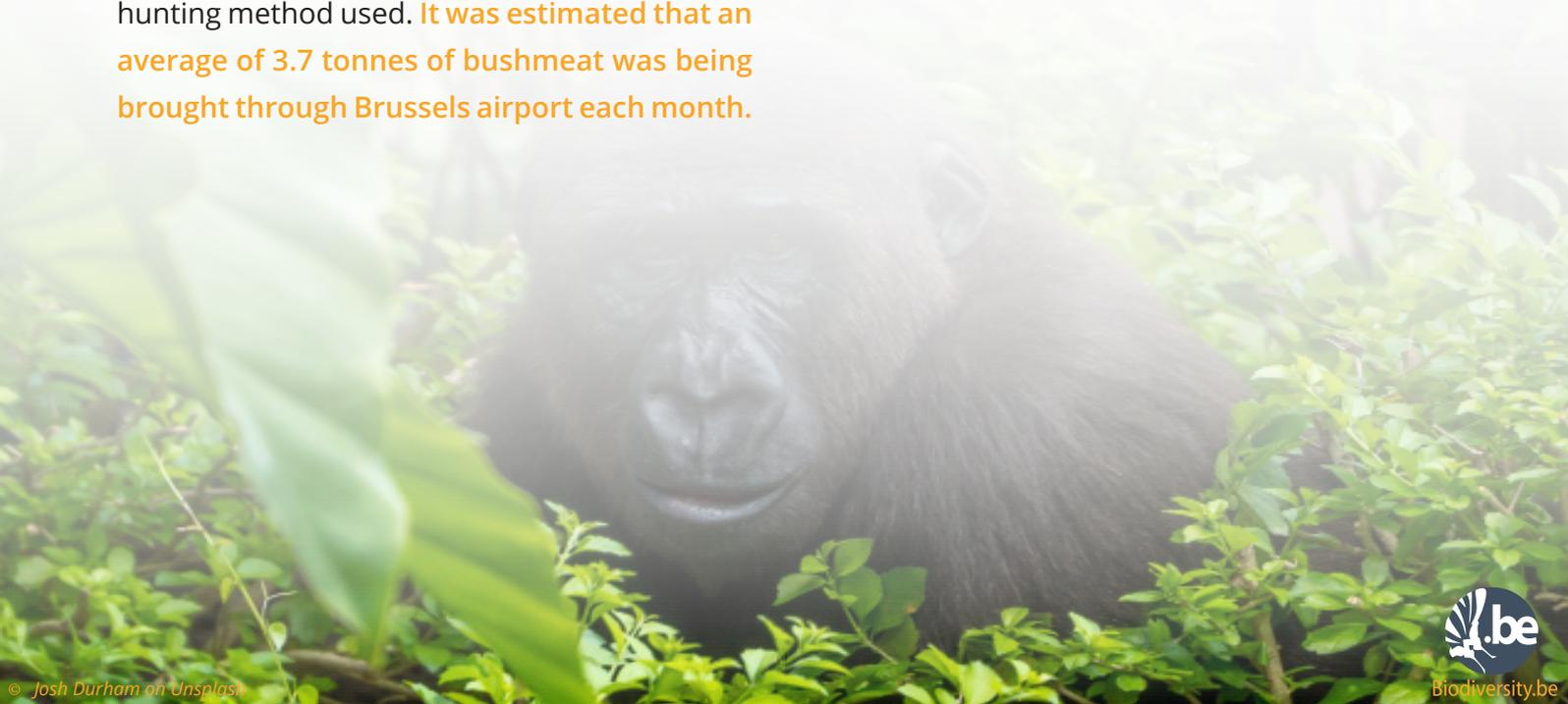
The import of wildlife products for food in Europe

A set of country-level studies have evaluated the magnitude of illegal bushmeat import within European international airports in France, Switzerland and Belgium. Chaber et al.³⁴ estimated that about 5 tons of illegal African bushmeat were smuggled each week through Paris Roissy-Charles de Gaulle airport in personal baggage. Bushmeat is not only imported there for personal consumption but is also considered as part of a lucrative organized trade, with high prices indicating luxury status. A wide range of species is carried, many of which are CITES-listed, such as crocodiles, pangolins, and primates.

In a 2018 study of Chaber et al. working with Belgian authorities at Brussels airport, flights from Sub-Saharan Africa were targeted over a two-year period and all passengers' luggage was searched for both bushmeat and domestic meat (livestock)³⁵. Visual identification, radiographs and genetic analysis were conducted to determine the species involved and any further information such as the age of the animal and hunting method used. **It was estimated that an average of 3.7 tonnes of bushmeat was being brought through Brussels airport each month.**

A range of species were identified, some being CITES listed. It is unknown whether the bushmeat seized was intended for personal consumption or commercial purposes.

Regarding the specific role of Belgium within the European trade, Musing et al.³⁶ identified Brussels Airport as a major transit point for bushmeat coming from West and Central Africa into Switzerland and other EU countries. Within Switzerland, a study conducted at two of its major airports (Zürich and Genève) over a one-year period showed that one third of the species found arriving as bushmeat were CITES-listed species including pangolins, primates, duikers and tortoises³⁷ whereas another study conducted in the same airports from 2008 to 2011 estimated an annual inflow of approximately 1.000 tonnes of illegal meat imports of which 8.6 tonnes were bushmeat³⁸.



KEYNOTE MESSAGES

Identifying the drivers of local demand for African bushmeat in Western countries

While there is an abundance of literature on African wild meat consumption in Africa²⁸, a gap in knowledge exists regarding the demand for this meat in western countries. This can potentially create a blind spot in biosurveillance for Europe. In 2017, a study was done in the Netherlands to understand the underlying incentives for African wild meat consumption in the Netherlands³³. It focused on the willingness to pay for African wild meat, generational changes in consumption, attitudes towards health and infectious diseases, the type of meat consumed and cultural drivers of a local demand. Although probably underestimated, this study confirms there is ongoing local demand for African bushmeat in the Netherlands. Bushmeat has a status symbol and there is high willingness to pay, with a large majority of respondents acquiring bushmeat from friends or local butcher. In Western countries, the risk of disease is perceived as very low or absent by consumers from the diaspora, which therefore constitutes a major incentive to bushmeat consumption. **The lack of data** from public authorities on the health risks associated with bushmeat consumption in the European Union contributes to the continuation of this trend.

Legal perspectives on the bushmeat trade

The legal considerations relating to the import of meat (domestic and wild animals) are difficult to grasp. The importation of meat (domestic and wild animals) by passengers is strictly prohibited at EU level in accordance with the EU Animal health legislation. Furthermore, the import of small consignments of other products of animal origin into the EU is permitted without veterinary checks, insofar they do not exceed a limited certain quantity³⁹. Fish products, snails, frog legs or insects are not considered as meat in the sense of the regulation and are authorised in limited quantities. Live CITES-listed species but also dead specimens benefit from legal protection for their international trade. Importation of CITES-species bushmeat may therefore also be an infringement of EU wildlife legislation (Council Regulation (EC) No 338/97) in addition to prosecution under animal health legislation.

The very small amounts seized from passenger luggage in Brussels contribute to what could be called the **“confetti criminality”** that refers to forms of pollution/environmental damage which, although small and repeated on many occasions, are not diffuse pollution but have a significant cumulative effect when considered outside the context of individual cases⁴⁰. Wildlife crime is currently a core concern of “green criminology”, an approach which asserts that justice systems need to do more than just traditionally consider anthropocentric notions of criminal justice, but should consider how justice systems can provide protection and redress for the environment and other species^{41,42}.

KEY RECOMMENDATIONS

ENSURE A COHERENT 'ONE HEALTH' POLICY FRAMEWORK FOR THE ILLEGAL IMPORTATION OF MEAT, INCLUDING BUSHMEAT

A coherent 'One Health' policy framework can be ensured by establishing transversal and coordinated National and European strategies and action plans to oversee the illegal importation of meat, including bushmeat, encompassing following features :

- Making the issue of illegal bushmeat import a priority in health and environmental policies
- Establishing effective and efficient biosecurity measures and ensuring current and legal policy frameworks are fit for purpose; timely supplementing these with new developments if needed
- Engaging with all concerned actors (civil society, governments, airlines companies, airports, policy-makers at national, European and international levels, and NGO's) and facilitating collaboration.

EFFECTIVE AND EFFICIENT BORDER CONTROLS

An effective and efficient border control system is required to prevent the illegal importation of meat, including bushmeat, into the European Union. Concerned public authorities should work together and implement a coherent set of actions. Strengthened enforcement capacities at borders can be achieved by:

- Providing appropriate resources for border authorities to perform controls at passengers airports, cargo airports, ports and state borders
- Increasing frequency, regularity and efficiency of controls, targeting in particular flights from countries at risk
- Imposing proportionate and dissuasive administrative or criminal penalties to offenders and informing passengers on the criminal dimension of bushmeat importation
- Ensuring collaboration between Member States

COLLECT DATA AND ENHANCE KNOWLEDGE

Decision making regarding the illegal importation of meat, including bushmeat relies on evidence which can be improved by:

- Better characterising the volumes, sources, pathways of introduction, taxonomic identity, and potential risks of imported bushmeat at national, EU and international level
- Better characterising the drivers of consumption of bushmeat and the perception and behaviours of consumers in Europe
- Considering transdisciplinary research by integrating sociological, economic, biological, epidemiological, anthropological and legal approaches
- Establishing reliable, transparent and traceable databases and dataflows flows on imported wild meat species following FAIR principles (Findable, Accessible, Interoperable and Reusable²⁰) to allow reproducible data analysis and interpretation
- Strengthening research on pathogens for consideration in risk analysis processes

INFORMATION AND AWARENESS RAISING

Awareness can be improved by:

- Establishing a collaborative communication strategy with all relevant stakeholders (public authorities, private sectors, airline companies, airports, press and media) targeting all potential audiences from passengers to technical officers. This collaborative approach will ensure endorsement by the different stakeholders.
- Acceding to [risk communication](#) approaches.

For each recommendation, examples of concrete actions proposed by participants in the conference discussion groups can be found at the following [link](#)

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