

Doc 06: Aquatic Wild Meat: intersection between fisheries and environment

(Prepared by the Aquatic Wild Meat Working Group)

Aquatic Wild Meat, deliberate target or by-catch of fisheries in West African region?

1. In West Africa, small cetaceans are consumed as food (Sohou et al., 2013; Uwagbae and Van Waerebeek, 2010; Van Waerebeek et al., 2017; Maigret, 1994; Murphy et al., 1997; Van Waerebeek et al., 2000, 2003; Leeney et al., 2015; Keith-Diagne et al., 2017) and Togo (Segniagbeto et al., 2014). The study by Segniagbeto et al. (2019) indicates aside cases of consumption of these cetaceans, the use of their teeth in local jewelry. For example, specifically in Ghana, at least 16 species of cetaceans are used as aquatic wild meat and during some years more than a thousand individuals are landed (Ofori-Danson et al., 2003; Van Waerebeek et al., 2009, 2014; Debrah et al., 2010). In The Gambia and Senegal, dolphin meat and oil are also used in traditional cures (Madge, 1998; Leeney et al., 2015)).
2. When it comes to Sirenians, the African manatee (*Trichechus senegalensis*) especially, its domestic trade (manatee meat is sold in markets and restaurants in urban centers) (Thibault and Blaney, 2003; Fa et al., 2006; Mvele and Arrowood, 2013), its usefulness for traditional medicine and other purposes has been historically recorded and continues to some extent in all West African countries (Reeves et al., 1988; Powell, 1996; Akoi, 2004; Dodman et al., 2008; Keith Diagne, 2015; Bachand et al., 2015; Mayaka et al., 2015, 2019; Kamla, 2019).
3. Among Chelonians, sea turtles are also harvested to varying degrees for food and traditional medicine along the West and Central African coast, including The Gambia, Gabon, Guinea-Bissau, Sierra Leone, Ghana, Togo, Mauritania, Benin, Cabo Verde, Senegal, Côte d'Ivoire, Guinea and the Republic of Congo (CMS, 2000; Thibault and Blaney, 2003; Bal et al., 2007; Fretey et al., 2007; Catry et al., 2009; Hancock et al., 2017).
4. In West Africa, the three species of crocodiles, which are: The Nile crocodile (*Crocodylus niloticus*), the African slender-snouted crocodile (*Crocodylus cataphractus*) and the dwarf crocodile (*Osteolaemus tetraspis*), have long been the target of hunters not only for their skin and meat but also for other products and by-products such as their lungs, heart, gastroliths (stones contained in the stomach of crocodiles), teeth, etc. (Kpera, 2002). Crocodile meat is consumed and appreciated in West Africa, for example, in Benin by all socio-cultural groups except the Fulani.
5. In recent decades, according to studies, it is clear that chondrichthyans and particularly sharks are the species experiencing the most visible decline in numbers (CSR, 2006). In the sub-region, sharks have been subject to targeted exploitation

through artisanal fishing for about thirty years. Their smoked, dried salted meat and their fin are the valued by-products. The increase of catches through artisanal fishing was followed by an increase in industrial fishing capacity, where bycatch of sharks emanated. Following the scarcity of sharks, fishing targeting rays seems to be booming nowadays in the West African region (CSRP, 2006). Like all selachians, sawfish, due to its fins, represents an important financial manna for the fisherman, causing a significant reduction in their numbers in West African marine waters. Sawfish is the subject of important commercial negotiations for its rostrum as well as its fins (with high commercial value) and its meat. Trade has therefore undoubtedly highly contributed to the drastic decline in its population and the near extinction situation this species is currently experiencing in West Africa.

What knowledge and actions from officials in charge of fisheries in the region?

Although scientists began to refer to wild aquatic game in the 1990s and 2000s as "marine bushmeat", the issue of marine megafauna has relatively gained little attention from fisheries officials, even as dwindling resources have led small-scale fishers in regions such as West Africa to turn to 'wild aquatic game'. Local officials remained silent and helpless towards this phenomenon and it was not until 2020 that delegates from over 80 countries took action to address the problem of wild aquatic meat at the conference of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) held in Gandhinagar, India. An agreement was reached to develop an action plan for West Africa and to coordinate global protection efforts for the species concerned, including, for the first time, certain sharks and rays. A priori, CMS strictly prohibits the harvest of threatened migratory species listed in its Appendix I, its highest level of protection.

To which extent do fisheries observers or fisheries law enforcement officials understand the catch of these species?

Total catches of aquatic wild meat species in databases are generally considered to be incomplete. As the use of these species is clandestine, their monitoring and studies by fisheries law enforcement officials remain limited. There are still large knowledge gaps for fisheries observers or fisheries law enforcement officials about the extent of their harvest, the cultural, traditional and/or economic drivers to the exploitation of species, trade dynamics...

General conclusion

Reducing aquatic wild meat fishing in West Africa will require simultaneous and coordinated work by all countries in the region at multiple levels. Therefore, interventions to mitigate or eliminate the illegal use and/or trade of aquatic wildlife should focus on social, economic and environmental aspects.

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