



CITES & LIVELIHOODS CASE STUDY 2019

Harvest and trade of Nile Crocodiles in Kenya

SPECIES, USE AND TRADE

Kenya has a large Nile Crocodile population, but there are concerns about habitat destruction, poisoning, and human wildlife conflict. In the Tana River County, in the Kenyan coastal region, a crocodile ‘ranching’ programme has been established.

The human population in the County is increasing, with over half under 15 years of age. Only a third of inhabitants have a secondary education or above, and unemployment is very high. The main means of community livelihoods are pastoralism and farming. Crocodiles bring fear, havoc and death to communities while they access water for livestock or personal use along Tana

River, and crocodile ranching was established to help reduce conflict and generate benefits for both people and crocodiles.

Wild-harvested eggs are collected by community members, and sold to several crocodile ranches who hatch and rear them. Other community members are employed in crocodile ranches. Crocodile skins are then sold for processing overseas into leather goods (see Table 1).

Egg collection is carried out in consultation with traditional community leaders, and egg collectors are selected based on their local knowledge of crocodiles and Tana River ecology. It is a highly skilled task.



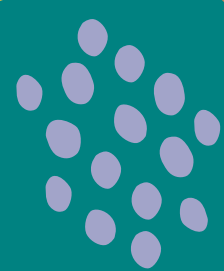
NILE CROCODILE
Crocodylus niloticus



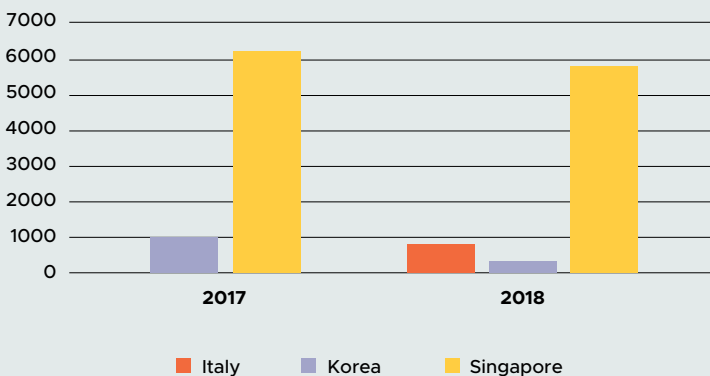
I/II (KENYA POPULATION IN II)



LEAST CONCERN



CROCODILE SKIN ITEMS (NO. OF PIECES) EXPORTED FROM KENYA 2017-2018



LIVELIHOOD BENEFITS

Trade in crocodile products contributes to the income, skills, community services and infrastructure of Tana River County inhabitants. There are few other employment options in the region. 100 egg collectors are employed (part-time), and in 2018 around USD 9,162 in total was generated by harvesters (approx. Int\$ 450,000). Additional income is gained through selling meat to crocodile ranches for food.

Ranching companies have provided important community benefits (without payment), including a maternity clinic, solar lights, basic sanitation (toilets), water pumps and provision of safe water (away from the river's edge to avoid crocodile attacks), connection of electricity, iron sheets for roofing, donated crocodile meat for school lunches, cattle husbandry infrastructure and supplies (e.g. cattle dip, cattle crush, abattoir), and the provision of boats during flooding. The maternity clinic now safely delivers 10-15 babies per month and has greatly decreased maternal mortality.

Communities have gained skills in egg collection, animal husbandry, business management, and customer service. There are few viable alternatives to replace these important livelihood benefits. There is little tourism in this politically insecure area.

CONSERVATION IMPACTS

Before the ranching programme, communities gained no benefits from crocodiles – only danger and harm. Poisoning and retaliatory killing of crocodiles were therefore well known. The limited and regulated egg harvest has incentivized people to tolerate and support crocodile populations rather than killing them in retaliation for human-wildlife conflict. There is now little or no poisoning of crocodiles in this area. Egg collection data has improved understanding of crocodile populations: there is typically no monitoring of unharvested populations due to lack of funds.

To ensure sustainable harvest, 4% of hatched crocodiles are released back to the Tana River ecosystem (the survival rate of wild hatchlings is < 2%). Eggs are collected seasonally based on quotas set according to previous population estimates. The rest of the year is a closed season.

Case study prepared by F Dermillah Obare. Edited R Cooney.

LESSONS LEARNT AND DIRECTIONS

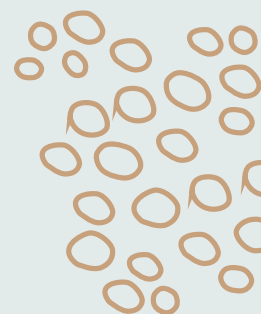
Local livelihood benefits from trade can be key to conserving CITES-listed species, particularly when these species impose heavy costs on local communities, such as Nile crocodiles. The CITES listing of Nile crocodile has been beneficial through inter alia supporting stronger controls and transparency, and enabling a dialogue with import states.

Key success factors include trust-building between Kenya Wildlife Service and the rural communities, close consultation with community and local government leadership, and sound best-practice training in egg collection.

The greatest weakness of the ranching programme is that the local

government has not fully recognized the importance of crocodiles to the local economy, and crocodile harvesting and management have not been integrated into local planning processes.

Key priorities to improve livelihood benefits are capacity building, education, awareness raising of the broader local community and local government, so that they understand the benefits that community members are gaining from crocodiles and the potential of this trade for the local economy, and incentives and funding support for additional community groups seeking to become involved.



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