

Illegal reptilian trade in Chagai Desert, Pakistan: a narrative of bad governance and weakening of traditional institutions

Balochistan province, in the west of Pakistan, is home to some of the world's rarest reptile species, many of which are endemic to the province. Owing to illegal exploitation for the pet trade and loss of habitat, many of these species are now vulnerable. The Chagai and Nushki district in the province, which comprises a belt of land that lies south of the border with Afghanistan, harbours some 55 species of amphibians and reptiles, of which a large number of specimens are captured to supply illegal dealers operating out of Karachi. The majority of these animals are exported to Europe and the USA where herpetoculture has become increasingly popular over recent decades. The animals are relatively easy to keep in captivity: non-venomous snakes and lizards—mostly geckos—are the favoured species from the Chagai-Nushki area for the pet trade. The Fat-tailed Gecko *Eublepharis macularius* is most in demand among the gecko species, while Small-scaled Skink Gecko *Teratoscincus microlepis*, Keyserling's Skink Gecko *Teratoscincus scincus keyserlingii* and Persian Spider Gecko *Agamura persica* are also gaining in popularity.

Pakistan banned the export of all reptiles and mammal species in 2000. Twenty nine of the country's 229 amphibian and reptile species are listed in the CITES Appendices, including the Afghan Tortoise *Testudo horsfieldii* (CITES Appendix II and listed as Vulnerable in IUCN's Red Data List of 2009 (Tortoise & Freshwater Turtle Specialist Group, 1996) and Spiny-tailed lizards *Uromastyx* spp. (CITES Appendix II and protected under the *Balochistan Wildlife Act*).

In general, over-exploitation of these reptile species is driven by rapidly growing commercial urban markets, coupled with a breakdown in traditional tenure systems and local rules, along with a lack of awareness, weak governance and a failure of top-down regulation and enforcement. Collection in the region is said to have been initiated in the 1960s with the export of a shipment of *Uromastyx* species to the UK by a collector who encouraged local people to believe that reptile species in the area were hazardous owing to their toxic venom, and enlisted their assistance to capture specimens for export (Mulo Jogi pers. comm. to P. Attaullah, September 2010). Trappers predominantly come from Sindh province to collect specimens in the area during May and June as reptiles are easier to capture in hot months following hibernation during the winter period. The local people largely remain unaware of the real value of these animals and are reportedly agreeable to their capture and removal on account of the potential danger posed by the toxins of some of these species. This illegal trade is principally carried out by some 10–15 wildlife trading parties, mainly based in Karachi, who are registered to carry out legal trade in wildlife for scientific purposes, supplying pet shops and public zoos. The reptiles are collected by members of various nomadic tribal groups, including *Bar*, *Bheel*, *Oad* and *Jogies*, assisted by local people, as well as local tribal chiefs and other notables. Apart from occasional leisure trips to Karachi or countries in the Middle East paid for by the trading parties, for the most part locals are not paid for their services. *Jogies*, who are mainly from Sindh province, work in groups of between five and six people, and are paid a lump sum (PKR.30 000–40 000 (USD300–400) after the successful delivery of a consignment. The former administrative elected head of the district—the District Nazim (now replaced by a District Co-ordination Officer)—reported in a high level meeting in 2006 that between 15 000–20 000 reptiles were collected in Chagai-Nushki by *Jogies* every year, while trading parties had tried to offer him PKR20 million (USD200 000) for his support and facilitation of the illegal collection of reptiles (P. Attaullah pers. comm. to R. Tahir, December 2012).

Responses to reptilian over-exploitation have often emphasized urgent and heavy control measures. For a range of reasons, however, such approaches have not often been effective: capacity for effective enforcement is usually very low in the areas where most hunting takes place, livelihood strategies are not very diverse, and regulatory measures are likely to have little impact. Bearing these facts in mind, it is clear that a sustainable use model should be explored that allows for the sustainable harvesting of reptiles that cultivates a sense of ownership in the local population and which explores the marketing of these resources to generate a sustained source of income. IUCN's Sustainable Use and Specialist Group-Central Asia (SUSG-CASia) took the lead in implementing a GEF (Global Environment Facility)-funded Habitat and Species Conservation Project to conserve the critically endangered habitats and species and to replicate the trophy hunting model for the sustainable harvesting of reptiles of Nushki in Balochistan province. However despite community mobilization and awareness-raising, the sustainable capture of reptiles remains unsuccessful mainly due to bureaucratic hurdles and lack of political will. It is suggested that consideration be given to the breeding of these species in captivity for the purposes of marketing specimens internationally. Packaging would bear a green label with a message indicating that proceeds from sales would be used to conserve species and their habitats.

Quotas for the harvesting of wild specimens would need to be based on the non-detriment findings from periodic surveys, and Customs officials would need to be trained in order to sensitize them to the importance of reptiles and to build on their capacity to differentiate between captive-bred specimens and those harvested illegally from the wild. Communities can play an effective role both in curbing illegal harvest and the breeding of these species in captivity. For such purposes, sustainable-use plans should be prepared providing a detailed mechanism for the equitable distribution of resources among stakeholders.

The encouraging news is that Balochistan's regulatory bodies are beginning to understand the importance of reptiles in the country and are consequently taking measures to revise the *Balochistan Wildlife Act* to facilitate improvements in the conservation of these species, as well as allow for the sustainable harvest/trade of reptiles in the province. However, CITES Parties have to play an active role in informing countries where illegal exports are taking place so that steps can be taken to curb such activity. Finally, workshops and public meetings must continue to take place on a regular basis so as to raise awareness among the relevant stakeholders about the need for strict measures to curb the illegal harvest and trade in reptiles and other species from Balochistan, and from Pakistan as a whole.

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REFERENCE

Tortoise & Freshwater Turtle Specialist Group (1996). *Testudo horsfieldii*. In: IUCN 2012. *IUCN Red List of Threatened Species*. Version 2012.2. www.iucnredlist.org. Viewed on 18 February 2013.

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