



Research Article

Legal and Illegal Trade of Wildlife and Domesticated Birds in District Tank, Khyber Pakhtunkhwa: A Case Study of Two Local Markets (Mandies)

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Abstract | The commercial use of wild plants and animals is commonly referred to by means of wildlife-trade. The data was collected from two (02) unlike localities of the district Tank. The data was proofed on a questionnaire beside during animal classification, local and common names, and price for each animal in Pakistani-Rupees (PKR). A total of 13 different species of birds were being sold in Dabbara Mela and Tank Mela among which 08 were marketed legally, while 05 of them were being sold totally in a prohibited way without consent from the wildlife division. The Partridges trading of is more common in district Tank. The partridges marketing are typically illegal without any permission from the wildlife department. They are kept in cages all over their life. They are as well tamed for breeding use as well as their chicks are after that sold for an attractive amount of cash. As introduced animals and birds are totally banned thus these bazaars are not concerned with imported birds and animals. The most commonly traded family Phasianidae in the birds of district Tank.

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Introduction

The trade of wild animal is typically referred as wildlife-trade. Those animals might be regained from their usual habitat or could be reared in non-natural environment. Internationally wildlife

trade is a long-standing activity for their economic and cultural activities (Tittensor *et al.*, 2020). Unfortunately, unsustainable and illegal trades adversely affect the population of wildlife. More than 35,000 species of wildlife listed by CITES fall in the threatened category with differing trade

implications (Tittensor *et al.*, 2020). Wildlife trade is the leading conservation issue to the biodiversity especially in South America, Asia and Africa (Alves *et al.*, 2013; Challender *et al.*, 2015a; Burivalova *et al.*, 2017). While some markets supplied to the legal pet-trade in bird-species, an investigation of 239 stores with birds, other animals and pet-shops, indigenous Hakeem, street salespersons, and Pansari from five (05) main cities Karachi, Lahore, Rawalpindi, Peshawar and Muzaffarabad initiate that they were elaborate in the illegal wildlife-trade Waseem *et al.* (2020).

Markets working on wildlife trade have been noted and aspects of illegal trade examined (Beastall *et al.*, 2016). Wildlife-trade is the risk to animals and their habitats (Vié *et al.*, 2016). Among animals the illegal trade of birds on its peak worldwide, and 408 red-listed species are also facing the trading issue (Bush *et al.*, 2014; Regueira and Bernard, 2012; Alves *et al.*, 2013).

The main threats recognized in our current study were the marketable use of spotted-doves via residents and hunters of the community that kept squabs of spotted-doves for local usage and predators i.e., crows, civets, cats and snakes (Ahmad *et al.*, 2024) Knowledge about illegal trading of wildlife remains much more limited due to its covert nature. In several countries, unlawful trade is passed by mainly ethnic peoples as they hunt for money and food, hence contributing to the decline of biodiversity (Tittensor *et al.*, 2020). One of the major conservation problems have been the co-existence of mammals and people (Ahmad *et al.*, 2022). To overcome the threats of trade, required to understand the economics (sale volume and price) and population status of particular animals, also need to find out the social aspect of wildlife (motivation to nurture animals) (Phelps *et al.*, 2014; Challender *et al.*, 2015b; Harris *et al.*, 2015; Regueira and Bernard, 2012). In Pakistan Instagram, Facebook, OLX and WhatsApp these social-media accounts play a major role in conservation (Ahmad and Li, 2024). This study aims to inspect the increasing trade links and socio-economic changes that are progressively including new ranges into the wildlife-trade. To understanding the multi-dimensional and synergistic issues driving wildlife-trade will help address probable antagonistic effects that the bird-trade may have on biodiversity of District Tank.

Materials and Methods

Study area

Two localities of district Tank are specified by local governments for domesticated Cattle called Markets (Mandies) including “Tank Cattle’s Mela” and “Dabbara Cattle’s Mela” unfortunately substituted for illegal trading in these legal markets. Tank Mela is located 3 km towards district Dera Ismail Khan from main Tank city. Tank Cattle’s Mela is organized once a week every Wednesday. Dabbara Mela is located in the village of Dabbara about 15.9 km towards South Waziristan from the main Tank City. This is also planned once a week every Tuesday.

Method and study design

This study was conducted in the summers (March, April, May, and June) of 2020 and 2021 respectively. The data was collected from these two different localities of the district Tank systematically, every Wednesday and Thursday of the week. The summer season is selected for study by taking information from local traders of the mela, according to traders and poachers most illegal trades occur in summer. We collected the information regarding bird’s volume (direct bird counts), and economic values and also documented the questionnaire regarding bird’s information and their poaching seasons following the protocol of Burivalova *et al.* (2017). Interviewed 200 different professional people including bird owners, farmers, traders, and poachers from both localities and focused mainly on illegal trading birds. The main questions that were asked from interviewers include; which species of birds most people own, whether these birds were breeding in captivity or wild-caught, and approximately how many of each bird were sold. The study also intense on the demographic status of bird-aring people including Age, economic status, profession, education level, and ethnicity.

Results and Discussion

Bird species

The legal and illegal trade of Birds is at its peak, About 14 diverse species of the birds were being traded in Dabbara Mela and Tank Mela amongst which 8 were traded legally including *A. anser* (Domestic Goose), *P. cristatus* (Indian peafowl), *N. meleagris* (Helmeted guinea fowl), *M. gallopavo* (Wild turkey), *C. livia* (Pigeon), *A. platyrhynchos* (Mallard) *P. krameri* (Parrot) and *G. gallus* (Chicken). While five species were being

Table 1: List of birds.

S.No	Species	Common name	Local name	Status	Captive breeding/ wild caught
1	<i>Anser anser</i>	Domestic Goose	Baty	LC	Captive Breeding
2	<i>Pavo cristatus</i>	Indian Peafowl	Moor	LC	Captive Breeding
3	<i>Numida meleagris</i>	Helmeted Guinea fowl	Tectara	LC	Captive Breeding
4	<i>Meleagris gallopavo</i>	Wild Turkey	Piru	LC	Captive Breeding
5	<i>Columba livia</i>	Pigeon	Kamtara	LC	Captive Breeding
6	<i>Anas platyrhynchos</i>	Mallard	Batakh	LC	Captive Breeding
7	<i>Psittacula krameri</i>	Parrot	Tooti	LC	Captive Breeding
8	<i>Gallus gallus</i>	Chicken	Chraga	LC	Captive Breeding
9	<i>Perdix perdix</i>	Grey Partridge	Seenzara	LC	Wild Caught
10	<i>Alectoris chukar</i>	Chukar Partridge	Zark	LC	Wild Caught
11	<i>Ammoperdix griseogularis</i>	See See Partridge	Susai	LC	Wild Caught
12	<i>Coturnix coturnix</i>	Common Quail	Batair	LC	Wild Caught
13	<i>Melanoperdix niger</i>	Black Partridge	Taru	VU	Wild Caught
14	<i>Pycnonotus cafer</i>	Red-vented bulbul	Bulbul	LC	Wild Caught

Table 2: Economic values of illegal trades.

S.No	Species	A. Volume/ Mela	Price/Bird	Total Income	Bird owners	Trader profession	Ethnic group	Birds age
1	<i>Perdix perdix</i>	Both	1000-4000	90000	Farmer	Farming	Pakhtun	Both
2	<i>Alectoris chukar</i>	Both	12000-30000	150000	Hunter	Farming	Pakhtun	Both
3	<i>Ammoperdix griseogularis</i>	Dabbara	500-1200	70000	Hunter	Pouching	Pakhtun	Adult
4	<i>Coturnix coturnix</i>	Both	100-1500	60000	Hunter	Pouching	Pakhtun	Adult
5	<i>Melanoperdix niger</i>	Both	15000-40000	120000	Farmer	Farming	Pakhtun	Both
6	<i>Pycnonotus cafer</i>	Both	250-2000	45000	Farmer	Pouching	Pakhtun	Both

sold entirely in an illegal manner no consent from the wildlife Division. Those comprise *A. chukar* (Chukar Partridge), *P. perdix* (Grey Partridge), *A. griseogularis* (See See Partridge), *M. Niger* (Black partridge), *P. cafer* (Red-vented bulbul) and *C. coturnix* (Common Quail) Table 1. In this study, we focused on the illegal trade of wild birds their volumes and economics.

Conclusion and Recommendations

The Partridges trading is very communal in district Tank. The marketing of the partridges are mostly illegal i.e. without the any authorization from the department of wildlife. They were reserved in birdcage all through their life. They are moreover raised for reproduction purposed; their chicks are traded for an attractive quantity of cash. Ullah *et al.* (2024) stated that the maximum hunted group is Anseriformes (43%) tracked by Gruiformes (27%), Accipitriformes (10%), Pelecaniformes (8%), Charadriiformes (4%), Ciconiiformes (3%) and Suliformes (2%). Observations and interviews were extensively hired

during this study. The introduced animals and birds are totally forbidden thus these markets are not concerned with imported birds and animals. The Phasianidae family is very commonly traded family of birds in district Tank (Table 2). The Chukar (*A. chukar*) was originate mainly pricey bird amongst the entire traded birds with a price is about 25,000 to 30,000 PkR.

Shehzad *et al.* (2023) stated that *Saara hardwickii* was assembled from lightly vegetated, arid, open, hard-soil places spread across Tank District. Black inhabitants in the region trap and kill massive numbers of these species for food or oil extraction. It has been detected in these districts of Dera Ghazi Khan, Bahawalnagar, Mianwali, and Cholistan Desert in Punjab.

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Novelty Statement

The novelty of this study lies in its exploration of the dynamics of both legal and illegal wildlife and domesticated bird trade within the local markets (Mandies) of District Tank, Khyber Pakhtunkhwa. While much existing research focuses on broader wildlife trafficking patterns, this case study offers a unique, in-depth analysis of specific markets within a rural context, highlighting the cultural, economic, and regulatory factors influencing the trade of birds. The study also examines the intersection of legal and illegal practices, shedding light on how local customs, insufficient law enforcement, and growing demand contribute to both legal and illicit trading of bird species, many of which are vulnerable or endangered. By focusing on a specific geographic area and its markets, this research fills a gap in understanding how wildlife and domesticated bird trade operate on a microeconomic scale in Pakistan's Khyber Pakhtunkhwa province.

Author's Contribution

Shahid Amin: Methodology, resources, supervision.

Muhammad Fawad Fareed and Umer Farooq: Investigation.

Inayat Ullah and Aziz Ur Rehman: Resources.

Danial Bakhsh Saigra, Ashfaq, Alwina Sajid and

Hazrat Ali: Visualization.

Conflict of interest

The authors have declared no conflict of interest.

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