

Some Observations on the Population Status of Punjab Urial (*Ovis vignei punjabiensis*) in District Chakwal, Punjab

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Abstract

Study on population status of Punjab urial (*Ovis vignei punjabiensis*) in Chumbi Surla Wildlife Sanctuary and Ara-Basharat area, Salt Range, district Chakwal was carried out in September, 2001. Population of Punjab urial in Chumbi Surla Wildlife Sanctuary was estimated to be 220 individuals. The actual observed animals were 45, which constituted 16 males, 20 females and 9 young ones. In Ara Basharat area, population of urial was estimated 152 animals whereas the observed population was 37 urials which consisted of 11 males, 20 females and 6 young.

Keywords: Punjab Urial, *Ovis vignei punjabiensis*, Population, Status.

Introduction:

The remarkable number of the world's ecological regions including variety of habitats in Pakistan supports a large number of unique species of fauna and flora (Roberts, 1997). Ungulates are among the most important game animals that are widely distributed and have the benefit of inhabiting in the broad ranges from the sea level to the world's highest mountain habitats of Hindukush, Karakorum and Himalayas. Due to high hunting pressure and habitat degradation some of the species of ungulates have become extinct in the past from their original distributional ranges of the country while some of them exterminated from their previous habitats whereas few of those are facing serious threat of extinction.

Punjab urial (*Ovis vignei punjabiensis*) is one of the important ungulates which is facing serious threats in some of the areas of Punjab. Various studies have documented the status and distribution (Ahmad and Ghalib 1975; Aleem, 1977; Chaudhari *et al.* 1997; and Mirza *et al.*, 1976), whereas others have examined some aspects of behaviour, ecology and biology (Roberts, 1997; Schaller, 1974, 1977 and Stockley 1922). Azam *et al.* (2006) have studied population status of Punjab urial in Jalalpur, Salt Range of district Jhelum in Punjab.

Better management and conservation needs wise maintenance and utilization of biological resources. Here the author's concern is a biological species – the Punjab urial presently included in the list of those species which have conservation status in the world's list of IUCN –

'Red Data Book'. In some of other parts of the country, the species conservation has been connected to the programme of trophy-hunting through local communities involvement. The occurrence of the species as a sub race in the Chumbi Surla Wildlife Sanctuary and Ara Basharat Area district Chakwal is a big concern towards its conservation. Preliminary initiatives towards conservation and management of a biological species demands its study to be conducted on distribution and status as a first step thus the present study for this purpose was conducted in preceding mentioned two areas of Salt Range.

Materials and Methods:

Chumbi Surla Wildlife Sanctuary is located 20 km southwest of Chakwal Town almost in the centre of Salt Range. Forests and 'shamilats' of this site covering an area of 55,987 ha which was declared a wildlife sanctuary in 1978 with the prime aim to conserve the largest known population of Punjab urial (*Ovis vignei punjabiensis*). The core zone, Surla and Bakshwala Reserve Forests cover an area of 5,342 ha and surroundings consisted of 49,912 ha of community forests which dominate on hill-slopes ranging from 460 to 1,050 m above the sea level. The area also includes agriculture lands in Kahoon which is a broad valley in the southern part of the sanctuary and the flat areas around Dhok Bann Ameer Khatoon, Tharpal, Bhadi, Karaila, Khokhazer and Shamsabad.

The forest comprises of four blocks Surla I, Surla II and Bakshwala in the centre of the sanctuary area (4,932 ha), and Choa Saidan

Shah in the southeast (410 ha). The core area of the forest is surrounded by community lands of different villages. There are some areas under cultivation in the periphery of the Wildlife Sanctuary. There is no such village which is situated in or near the core zone of the forest. Vegetation of the area is dry-subtropical semi-evergreen scrub forest type dominated by *Acacia modesta* and *Olea ferruginea*. Other scrub species present in the area are *Justica adhatoda* and *Dodonaea viscosa* etc. and grass species are *Chrysopogon serrulatus*, *Heteropogon contortus*, *Digitaria sanguinalis*, *Dichanthium foveolatum* and *Dactyloctenium scindicum*.

Ara-Busharat is situated at southeast corner of district Chakwal which is known to be sustaining a sizeable population of urials. The area consists of hill-slopes and ravines besetting with typical vegetation of the Salt Range. *Olea ferruginea* was observed to be the dominant plant species followed by *Acacia modesta* and *Zizyphus spp.*

Population census of wild ungulates is difficult in the rugged mountains because they are well known to be adaptive from such steppic arid sub-tropical forests in the southern latitudes to the high mountain cliffs and alpine zone of Hindukush, Karakorum and Himalaya in the North-west. They are shy in nature and have ability to detect human smell from a great distance (Roberts, 1997). Although there are different methods that can be used in studying population of ungulates but transact and quadrat methods used by Azam *et al.* (2006) were followed during the present study.



Fig 1: Typical habitat of the study area.

Results and Discussion:

The study revealed that Punjab urial (*Ovis vignei punjabiensis*) inhabits rugged terrain of the Salt Range including the two study areas; the Chumbi Surla and Ara Basharat. A sizeable population of urial was found in Chumbi Surla Wildlife Sanctuary. The actual counts were 45 animals consisting of 16 (35.56%) males, 20 (44.44%) females and 9 (20%) young (Table-1). Herd size varied from 4 to 16 (average 6.8). Almost whole of the population was found in the core zone particularly in the adjacent areas of Dhoke Sela. Small numbers of animals were seen between Dhoke Sela and Bann Ameer Khatoon. Extrapolating the observed data, the population of urial in the Chumbi Surla Wildlife Sanctuary was estimated to be 220 animals. Chaudhri *et al.* (1997) estimated population of urial in the sanctuary above 150 individuals. Present study revealed that the population of urial in the sanctuary is increasing after 1997.

In Ara-Busharat area population of urial was estimated to be 152 animals. However, only 37 urials were actually sighted; of these 11 (29.72%) were males, 20 (54.05%) were females and 6 (16.21%) young ones. Herd size was observed varying from 2 to 10 animals (average 5.2). Frequency of occurrence of urial in two areas was calculated 1.9 per urials/sq km which is almost same as observed in the area of Jalalpur, district Jhelum (Azam *et al.*, 2006). This may be because of similar habitat and juxtaposition of the two areas.

Table-1: Population of Punjab urial (*Ovis vignei punjabiensis*) in Chumbi Surla Wildlife Sanctuary and Ara-Busharat area.

Location	Male	Female	Young	Total
Chumbi Surla Wildlife Sanctuary	16	20	9	45
Ara-Busharat area	11	20	6	37
Total	27	40	15	82

Considerable variation in population size was noticed in the previous studies. According to Roberts (1997) urials had been totally exterminated from the Khair-i-murat Hills and a few were surviving around tracks north of

Jhelum as well as around Bhone and west of Chakri in the Salt Range area. Mountfort (1969) observed main concentration of the urials in northwest of Kala Chitta Hills and Mason Valley at Kalabagh. Schaller (1971) estimated population in the Salt Range to be 500 animals. Mirza *et al.* (1976) studied the population of urials in various parts of Salt Range and estimated 1,288 urials in Kalabagh Reserve district Mianwali, 213 in Kala Chitta hills (chak Jabbi area) and 588 animals in district Jhelum.



Fig 2: Punjab urial (*Ovis vignei punjabiensis*) observed in Chumbi-Surla Wildlife Sanctuary.

Present study figures proved that a sizeable population of urial exists in the Chumbi Surla Wildlife Sanctuary and Ara-Busharat areas both parts of Salt Range. However, considering the smaller size of the population (1.9 urials/sq km), there is a need to be taken vigil steps to improve the habitat of this majestic animal. Also, there is an urgent desire to take appropriate management measures including the total ban on its hunting, habitat conservation and control over human criminal activities.

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