

**TOPIC: HANGUL(KASHMIR RED STAG) CONSERVATION
PROJECT**

LECTURE NO:12

B.SC PART 1

ZOOLOGY(HONS.)-PAPER I-GROUP B

CHAPTER 3

DATE:30TH MARCH 2020

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Introduction

In the 1970s, the Jammu Kashmir Government with the support of IUCN and World Wildlife Fund (WWF) prepared a project for the protection of the hangul and the Kashmir stag habitat. This project for the conservation and protection of Kashmir stag came to be known as project hangul and its population increased to 340 by 1980.

Project Hangul- Conservation of Kashmir red stag

- Hangul or kashmir red stag is a subspecies of the elk native to India. Earlier, kashmir stag was categorised as a subspecies of European red deer. Later kashmir red stag was categorised as the subspecies of elk after the mitochondrial DNA genetic study revealed that it belongs to the Asian family of elk. Kashmir stag is mainly found in the dense

riverine forests of Kashmir Valley and the northern Chamba district of Himachal Pradesh.

- Hangul lives in the groups of around 2 to 18 individuals in the riverine forests, high valleys and mountains in Kashmir and the northern Chamba district of Himachal Pradesh. The Kashmir red stag is found in Dachigam National Park, Sindh Valley, Rajparian wildlife sanctuary, Overa Aru wildlife sanctuary and in forests of Kishtwar and Bhaderwah.
- The Hangul is the only surviving species of the Asiatic member of the red deer family. The male members of this Kashmir red stag have beautiful antlers which can have around 11 to 16 points on it. The society of Kashmir stag is matriarchal.
- The Kashmir red stag is the state animal of Jammu Kashmir, and the Kashmir stag IUCN status is of a critically endangered species. Once, Kashmir stag habitat was distributed in the Northern India and Pakistan but now it has been restricted only to the Dachigam National Park in Kashmir.
- Since the 1950s, it has been considered as one of the rarest species of mammals in the Indian subcontinent. The Dachigam National Park has been affected by the intrusion of terrorists and the Kashmir stag are being killed just for their meat.



Threats to Hangul

- **Habitat destruction:** The intrusion of the human population in the Kashmir stag habitat, has been responsible for the declining population of Kashmir red Stag. Raising of domestic livestock such as sheep and goat in the Kashmir stag habitat has led to its fragmentation. The fragmentation of Kashmir stag habitat has hampered the genetic flow across its different populations. It has been also responsible for hangul population becoming locally scarce and even extinct.
- **Overgrazing** by the domestic livestock has caused stress situations which have affected the reproductive cycle of

hangul. Infection to several diseases could have been responsible for its declining population.

- **Poaching** is another concern for the Kashmir red stag, and the situation gets deteriorated by the intrusion of terrorists in the Kashmir stag habitat.

Conservation of Kashmir red Stag

- At the beginning of 20th century, the Hangul numbered around 5000 individuals. However, due to massive poaching, the intrusion of domestic livestock in the Kashmir stag habitat etc. its numbers dwindled to around 150 by 1970s.
- In 1957, E. P. Gee published a report in which he considered the Kashmir stag along with the Asiatic lion and the one-horned Rhino as the most endangered species of India. However, the Kashmir stag could not get similar kind of conservation compared to the other two.
- Alarmed by the deteriorating situation, the Jammu Kashmir Government with the support of IUCN and World Wildlife Fund (WWF) prepared a project for the protection of this animal and the Kashmir stag habitat. This project came to be known as project hangul which brought good results and increased their numbers to over 340 by 1980.

Current protection status of Kashmir red Stag

- Hangul has been listed under the schedule 1 of Wildlife (Protection) Act 1972 and the Jammu and Kashmir Wildlife (Protection) Act 1978. It has been listed among the top 15 species which require high priority in conservation by the union government.
- The Kashmir stag IUCN status is critically endangered. Earlier the Kashmir stag IUCN status was the least concern as it was grouped under the European red deer family.
- A taxon is considered critically endangered if it meets any of the following criteria;
 1. If its population has declined by greater than 80% in the last 10 years or in the three generations.
 2. The species has been restricted to a geographical range.
 3. If its population is less than 250 individuals and it is declining at 25% in 3 years or one generation.
 4. If it has very small and restricted population with fewer than 50 mature individuals.
 5. If the probability of extinction in wild is very high.

Wildlife conservation fund

- Wildlife conservation fund was founded in 2010 with the objective to save the wildlife and Wilderness in Jammu and Kashmir. It proposes to undertake the conservation and

protection of wildlife in Jammu and Kashmir starting with the conservation of hangul.

- It aims to achieve this through community support, awareness and management of wildlife. It aims to change attitudes towards nature and promote harmony between the humans and wildlife.
- Wildlife conservation fund launched Hangul Conservation Project (HCP) which will try to resolve the various issues which are related to the threatened Hangul species in Kashmir, particularly in the Dachigam National Park.

Status of the population of Hangul

1. The Kashmir red stag population was reported to be 197 in 2007. It increased to 234 in 2009. However, after 2009 its population started decreasing and in 2011 it decreased to 218 and it further decreased to 186 in 2015. In the latest census of 2017, its numbers have fallen down to 182 individuals.
2. In 2013, the state wildlife department of Kashmir set up a captive breeding centre at Shikargarh on the Srinagar Anantnag highway. However, within days of shifting a fawn as the part of the breeding program, it fell prey to a leopard. Since then, the breeding centre has been dysfunctional and non-operative.

3. The falling sex ratio is another cause of worry. The male to female ratio ranged from 21 to 51 males per 100 females before the 1990s. However, the ratio has reduced to around 12 males per 100 females. This imbalance has led to a decline in birth rate which is a cause for concern. If the population of Kashmiri red stag has to be increased, the sex ratio has to be brought to the normal status within a specified period of time.
