TOPIC: SNOW LEOPARD CONSERVATION PROJECT LECTURE NO:11 B.SC PART 1 ZOOLOGY(HONS.)-PAPER I-GROUP B CHAPTER 3 DATE:29TH MARCH 2020 AUTHOR-DR.NIRMAL KUMARI

Introduction

Snow leopards (Panthera uncial) belong to the family of cats called Felidae. Unlike other big cats such as lion and tiger and leopard, the snow leopard does not roar due to its different structure of vocal cords.

Project Snow Leopard

Snow leopard was once globally endangered species, but now its IUCN red list status has been changed from endangered to vulnerable. The snow leopard population is around 7500 surviving individuals in the world in the areas of Central Asian mountains, Himalayas and in Russia s remote Altai mountains. India has around 10% of the Global snow leopard population in less than the 5% of Global snow leopard habitat.

In India, snow leopards are found in the high altitude areas above the forested areas above 3000m. The states of Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh constitute snow leopard Habitat range in India. Most of the snow leopards are found in China, followed by Mongolia and India. India has an estimated snow leopard population of 400 to 700 snow in these five Himalayan States.

Threats to snow leopards

- Loss of Habitat and species: there have been concerns over loss of Habitat and prey species in the mountainous areas due to anthropogenic actions. Habitat degradation Habitat fragmentation and Habitat loss are caused due to human intrusion. Overgrazing has damaged the high altitude grasslands which have left less food for the Prey species of snow leopard such as wild goats and sheep. Further, hunting of Snow leopards natural prey for meat is also a major threat to the survival of snow leopards.
- Retribution killings: as the snow leopard Habitat lacks a sufficient number of prey species, snow leopard has increasingly being adapted to prey on domestic livestock. This has led to man-animal conflict. Loss of even a single sheep or goat causes great economic hardship for the herder communities. All these have led to retaliatory killings of the Snow Leopards.
- **Poaching of snow leopards**: snow leopards are hunted for their fur and skin. The bones and other body parts of snow

leopards are used in traditional Asian medicines, which has frequently led to poaching of snow leopards.

• Other anthropogenic activities: other activities such as tourism, construction of roads, human settlement in the snow leopard habitat also poses a great threat to the snow leopards.

Project snow leopard launched in January 2009

 Project snow leopard, launched in 2009 with the ultimate goal of safeguarding and conserving India's unique natural heritage of high altitude wildlife and their habitats by ensuring their conservation and welfare through the participation of local population and through supportive actions of government.

Aim and objectives of project snow leopard

- Promoting a knowledge-based adaptive conservation strategy which fully involves the participation of local communities who share the snow leopard habitat in the conservation and protection efforts under project snow leopard.
- Conserving India's unique natural heritage of high altitude wildlife by promoting conservation, protection and management through the participatory policies and actions.

Location

• It includes all the biologically important landscapes in the high altitude Himalayas in Jammu and Kashmir, Uttarakhand,

Himachal Pradesh, Sikkim and Arunachal Pradesh. The project snow leopard includes all biologically important snow leopard habitats irrespective of its ownership, either protected areas or common land etc.

 The project snow leopard includes an estimated 1,29,000 km2area in India, which comprises of non-forested or sparsely forested high altitude areas of the Himalayas and trans Himalayas above the altitude of 3000m in the Western Himalayas and 4000m in the Eastern Himalayas.



Project save our snow leopards (SOS)

 Project save our snow leopard SOS was launched in January 2014 by WWF India in partnership with Tata Housing Development company. The project Save Our snow Leopards (SOS) has been launched by unveiling the SOS online crowdfunding platform.

- Through this campaign, the WWF India and the Tata Housing Development company would build awareness about the conservation issues which the snow leopard are facing with the aim of raising at least 15,00,000 rupees through this platform. The funds would be used for WWF snow leopard conservation projects which includes setting up camera traps, construction of predator-proof livestock pens for local communities in the snow leopard habitat areas.
- Through this project, the WWF India and the Tata Housing Development would work with Central and state governments to assess the status and distribution of snow leopards and promote their conservation strategies. It would also encourage awareness generation among the local communities about wildlife conservation and build a positive attitude towards snow leopard and manage snow leopard- man conflicts.

Ladakh as a model for the protection of snow leopards

• The Ladakh region of India is setting an example for the protection of snow leopards. The estimated snow leopard population is around 400 in Ladakh. The wildlife department by taking the help of local communities and Non-governmental organisations (NGOs) have been successful in preventing the

man-animal conflict and have discouraged the Killing of snow leopard in this region.

Protected areas for the Snow leopard

- Sacred Himalayan Landscape
- Kibber Wildlife Sanctuary at Lahaul Spiti, Himachal Pradesh
- Pin Valley National Park at Lahaul Spiti, Himachal Pradesh
- Great Himalayan National Park at Kullu, Himachal Pradesh
- Dibang Wildlife Sanctuary, near Anini, Arunachal Pradesh
- Hemis National Park, in Ladakh- Jammu and Kashmir

Other conservation efforts

- **Livestock insurance**: insurance cover is provided for the livestock in the snow leopard habitat to avoid retaliatory killings if the snow leopard attacks the domestic livestock.
- **Grazing set aside areas:** separate grazing areas have been created to keep away the livestock from the attack of Snow leopards.
- Nature club and youth action Council has been created to encourage community participation in the conservation of snow leopards.
- **Conservation education programs** have been carried out in the snow leopard habitat to create awareness and education

about the conservation of biodiversity, especially the snow leopards.

• **Research camera programs** have been carried out, to keep track of snow leopards in their habitat.

Need for the conservation of high altitude ecosystem

- The high altitude zone which includes the Himalayas and trans-Himalayan biogeographic zone supports unique biodiversity and wildlife which is of global conservation importance.
- It includes various species of endangered and threatened populations such as snow leopard, 2 species of bears, wolf, Red Panda, and other mountain ungulates which includes Chiru, Tibetan gazelle, Ladakh urial, two species of Musk deer, wild yak, Hangul, 3 species of goral, serow, takin etc.
- For the conservation and protection of these high altitude wildlife species, India has ratified several International Agreements. Snow leopard was included in the convention on migratory species in 2003 as the concerted action species under appendix 1.
- The representatives of the Ministry of Environment and Forest played an important role in elevating the conservation and protection of snow leopard at international level.

The snow leopard is no longer an endangered species

- International Union for the conservation of nature IUCN on September 14, 2017, has changed the IUCN red list status of Snow leopards from endangered category to vulnerable category. This means that status of snow leopard has changed from very high risk too high risk of extinction in the wild.
- IUCN in 1972 for the first time had listed snow leopard in the endangered category. To be categorised as endangered species, the snow leopard population must be less than 2500 mature snow leopards in the wild and experiencing a high rate of decline. Vulnerable category means a species has less than 10,000 mature individuals left with a decline in the population of at least 10% over the three generations.