



GSLEP program update Bhutan

VIII Steering Committee Meeting
February 10 – 11, 2024
Samarkand, Uzbekistan

*Department of Forests & Park
Services
Ministry of Energy & Natural
Resources
Royal Government of Bhutan*



**Bhutan State of Snow Leopard
2024**

Implementation status of the NSLEP (National Goals of GSLEP)

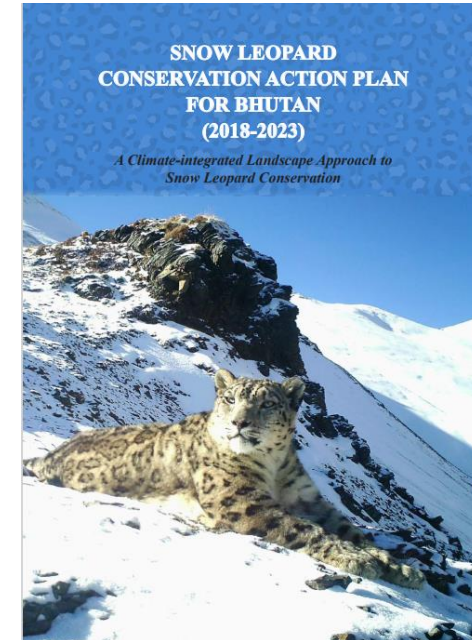
Nationwide Snow Leopard Survey-I (2015-2016) Snow leopard Conservation Action Plan for Bhutan (2018-2023)

Goal: To maintain a viable population of snow leopards in Bhutan with ecological links to snow leopards in the eastern Himalayan mountain landscape.

Target 1: By 2023, Snow leopard populations in Bhutan are stable or increasing.

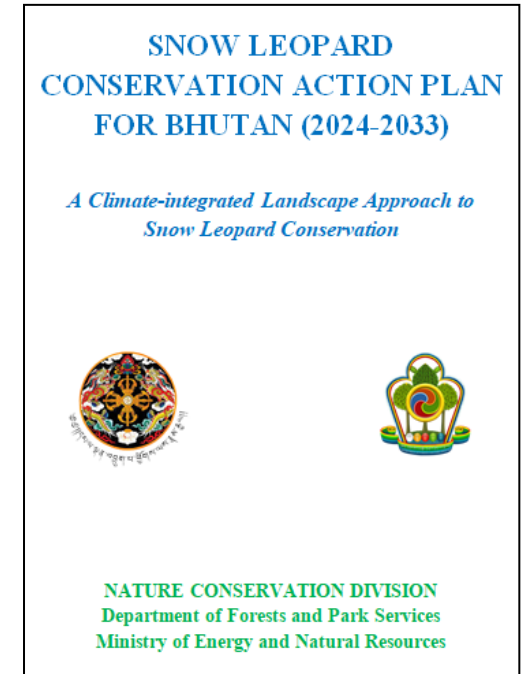
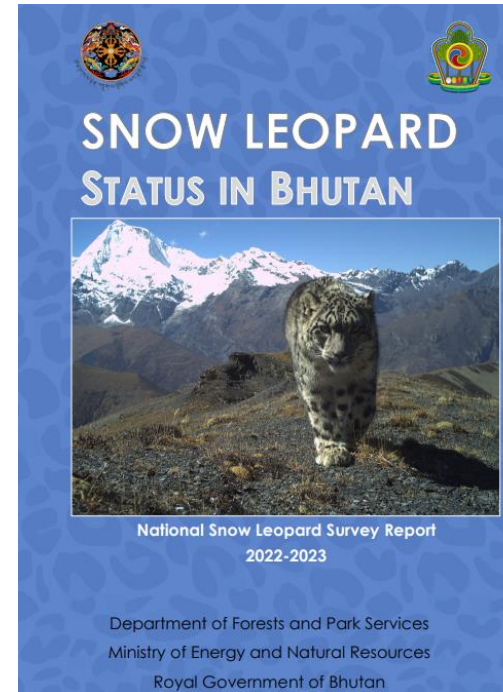
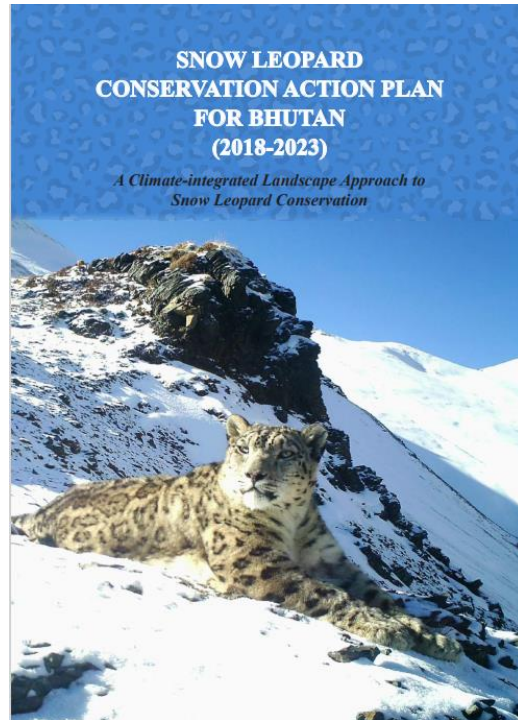
Target 2: By 2023, important snow leopard habitat mapped and secured for conservation to ensure ecological and demographic connectivity of snow leopard population.

Target 3: By 2023, over 80% of the local communities are engaged as willing conservation stewards of snow leopards, prey species and habitat.



Progress:

- *Nationwide Snow Leopard Survey-I (2015-2016) – 96 individuals*
- *Snow leopard Conservation Action Plan for Bhutan (2018-2023) prepared with 8 objectives, 19 outputs, 54 actions under 3 targets.*



Status:

- *45 action achieved (83.33%) and 9 were not achieved (16.67%).*
- *Estimated budget BTN 255 million (USD 3.2 million)*
- *Implemented almost 80% of the action plan*
- *Funding gap of over 30% of total cost*

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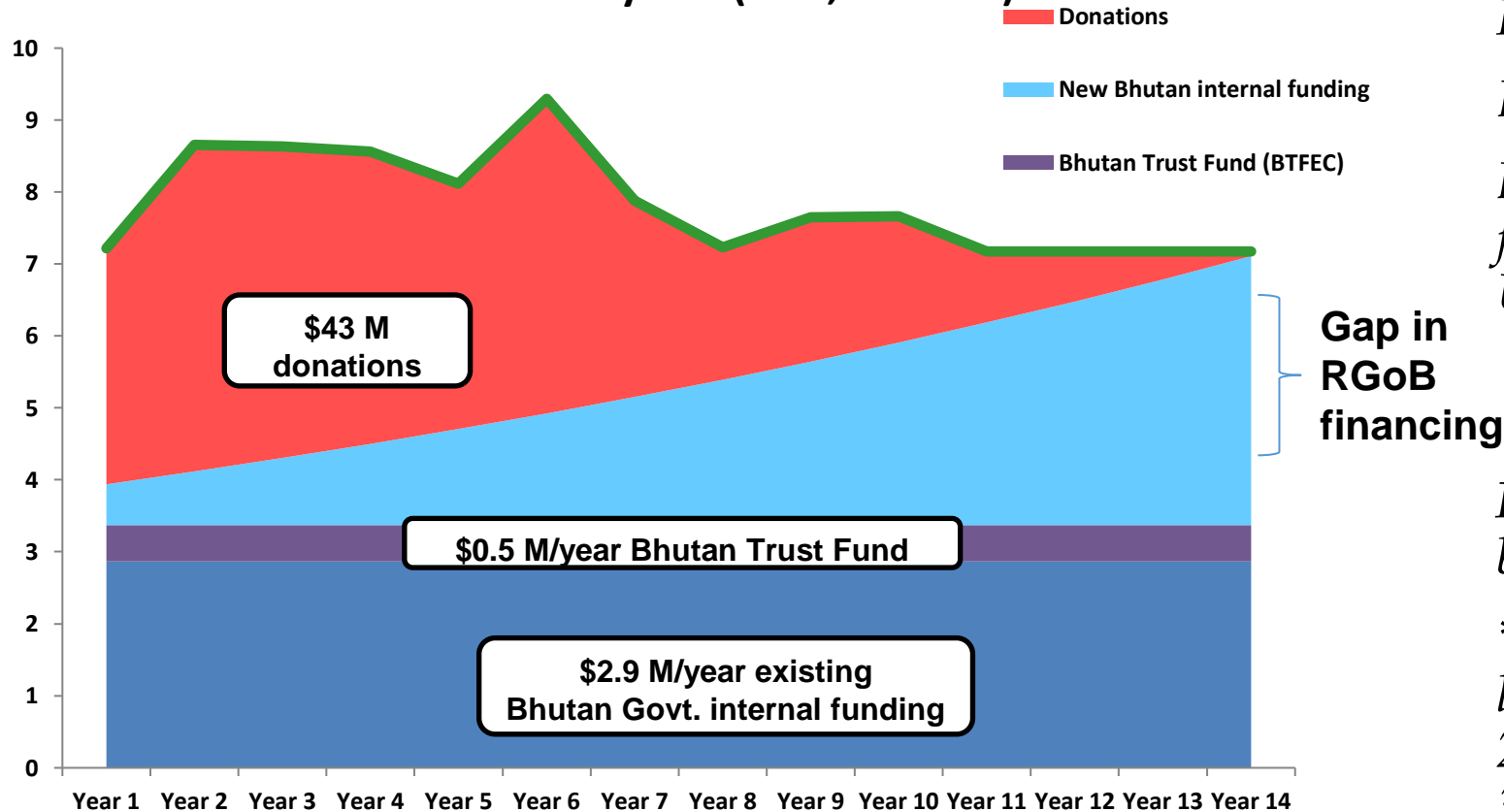


Resource mobilization



Bhutan for Life Transition Fund

Estimates of Funding to Fill Financial Gap
for 14 years (USD, millions)



Total Project
US\$ 118M

Internal (RGoB)-63%

External (conservation project)-37%

Bhutan for Life - estimates of funding to fill financial gap for 14 years (Total Project US\$118m).

*Future plans: * Enhancing community based ecotourism.*

** Secure fund to implement 2nd snow leopard conservation action plan (2024-2033) which estimate BTN 300m (US\$ 3.9m)*

Threats to Snow Leopards, their Ecosystems, and Local Livelihoods

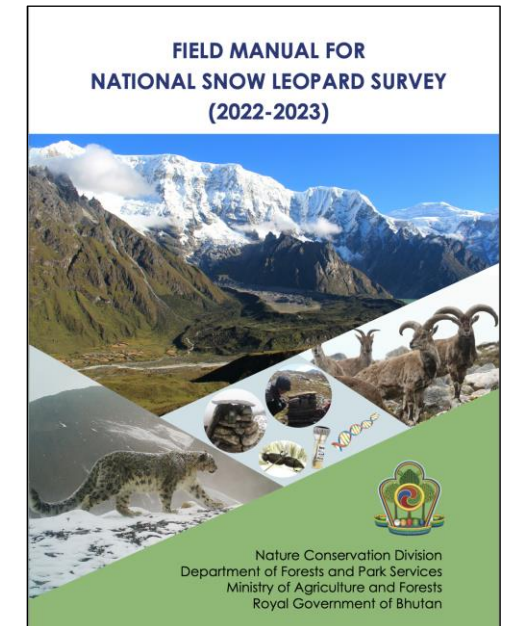
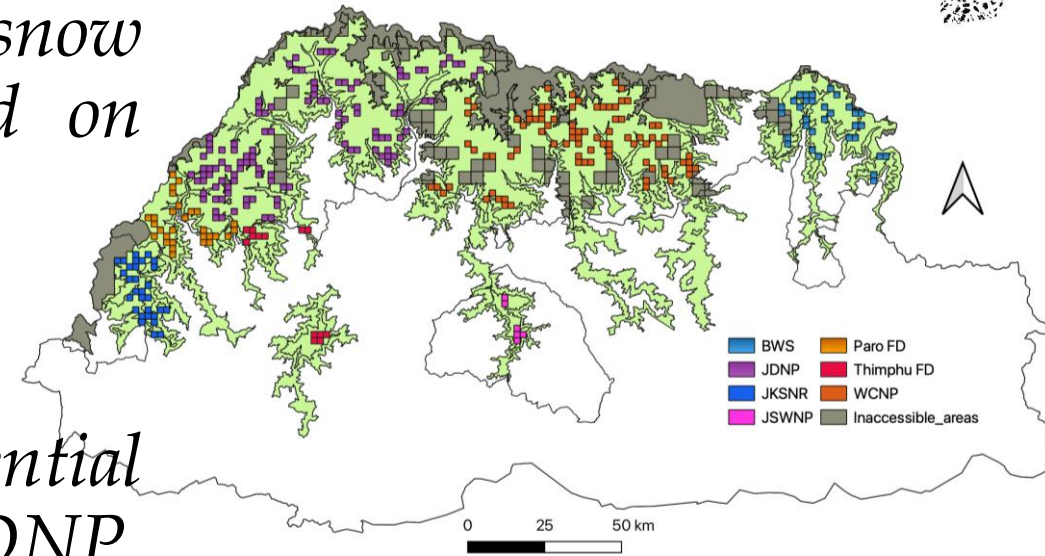


- *Climate change: global threat to ecosystems & human communities*
- *Human-wildlife Conflict: livestock depredation*
- *Habitat degradation: shifts in vegetation, shrubs overtaking, alpine habitat shrinks, grazing competition, NWFP collection.*
- *Disease & feral dogs: transmission of diseases*
- *Proposed strategy: Snow leopard Conservation Action Plan for Bhutan 2024-2033 – this will be achieved through strategic actions grouped under 4 objectives, 10 strategies and 53 actions with fund estimate of BTN 300m (3.9 US\$).*

Snow Leopard Population Survey-II



- NSLS-II (2022-2023)-Updated *status* of snow leopards through camera trapping based on PAWS protocols.
 - ✓ Current population
 - ✓ Distribution pattern
- Spatial coverage: ~10,000 km² in the potential snow leopard habitats of JKSNR, JDNP, WCNP, BWS, JSWNP, Paro and Thimphu Forest Division (3600m – 5090m).
- 310 grids of 2x2 km grid, 620 camera traps from Aug till Dec 2022, by 90 rangers with fund of US\$ 0.55m
- Snow leopard scats were also collected.



Snow Leopard population in Bhutan

Report: NSLS-II report launched on 16th September, 2023.

Estimated: 134 individuals ($SD \pm 706$).

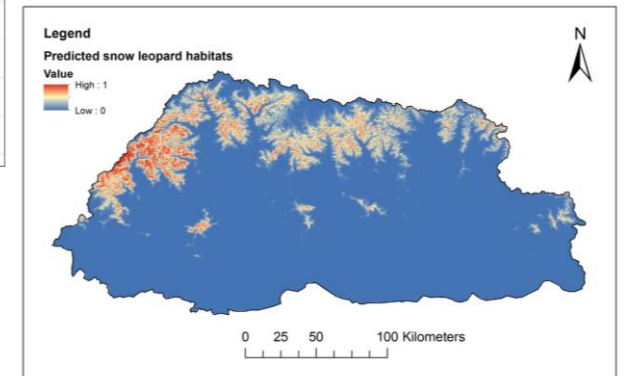
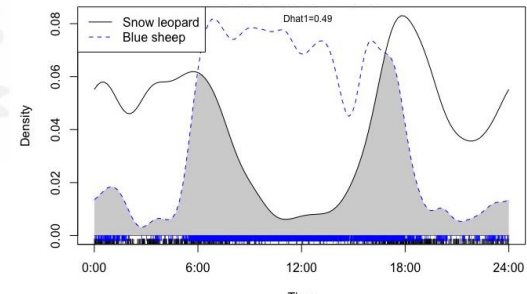
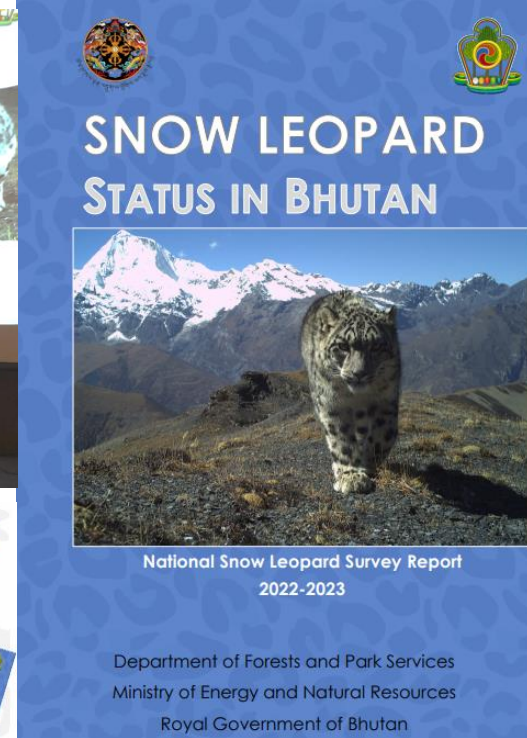
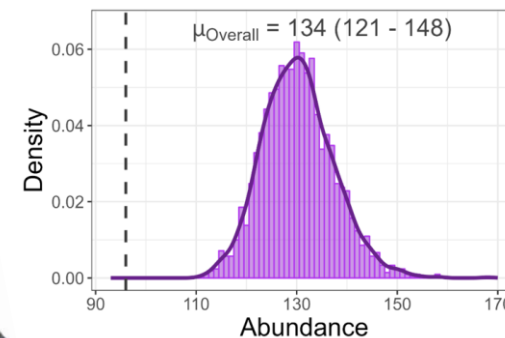
Density: 1.34 snow leopards per 100 km² ($SD \pm 0.071$).

Occupancy: 43.25% ($SE \pm 4.09$)

This is an increase of snow leopard population in Bhutan by 39.5% from the baseline population of 2016 where 96 ($SD \pm 8$) individuals were estimated.

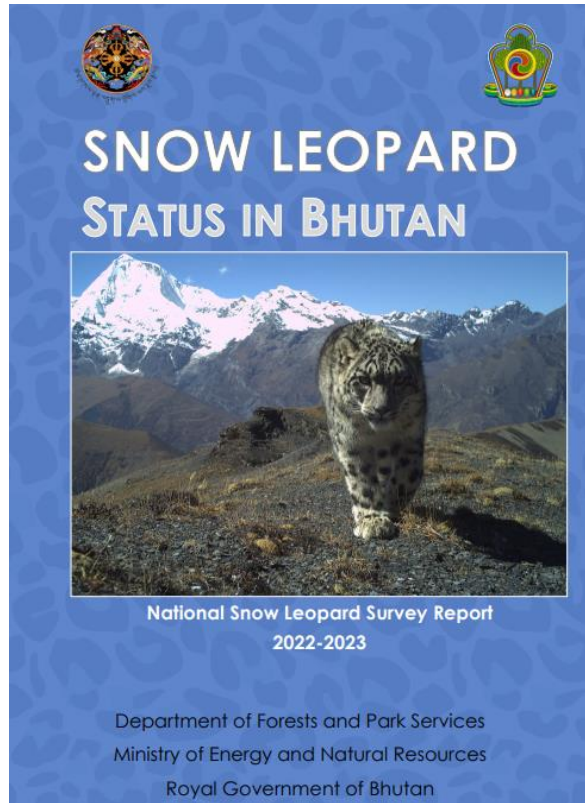
Activity patterns & capture history

Snow leopard Habitat suitability



Inputs for the Report:

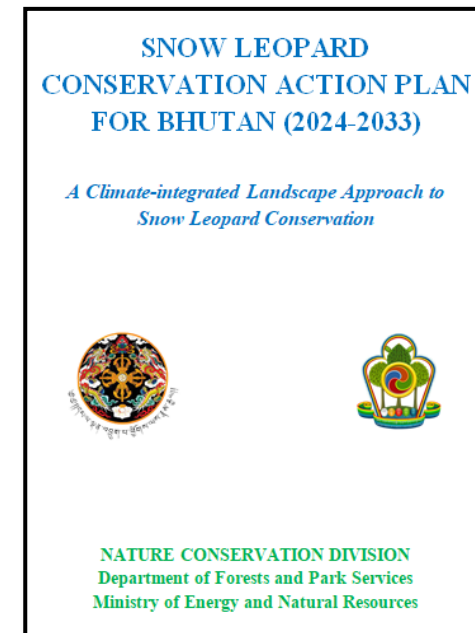
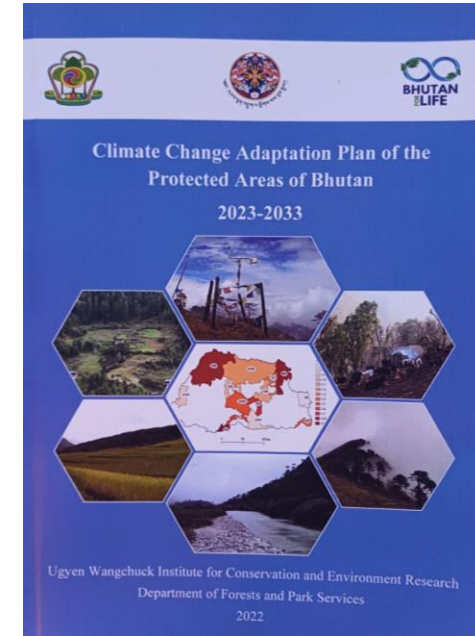
*Dr Ian Durbach,
Dr Koustubh
Sharma, and
Dr Justine Shanti
Alexander of the
PAWS initiatives
under the GSLEP
for their invaluable
contribution in
designing the
survey and
reviewing the
report.*



Climate Adaptations/Nature-based Solutions

- *Climate Vulnerability & Capacity Analysis (CVCA) Report 2022.*
- *Bhutan adopted the Climate Change Policy of the Kingdom of Bhutan 2020.*
- *Climate adaptation for biodiversity & local communities:*
 - *SMART Green Infrastructure*
 - *Socio-economic resilience*
 - *Future resilience*
 - *Ecosystem services*

Gaps and needs: Require additional resources to reduce knowledge gap and implement National Adaptation Plan



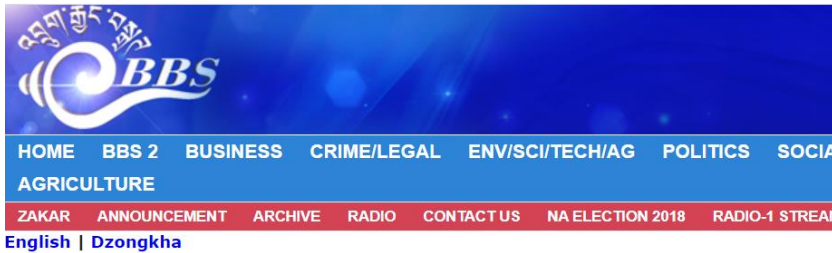
Green economy interventions

- *Promoting ecotourism (trek routes, camping sites, mountain festival, farm house, capacity building)- Snowman Trek/Race.*
- *Sustainable resource management- High altitude medicinal and aromatic plants*



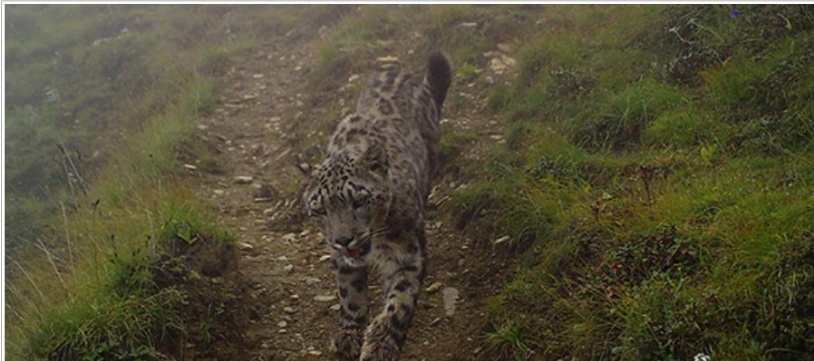
Community-based conservation initiatives

- Snow Leopard Conservation group in JDNP
- Highland festivals for community engagement & ecosystem services.



Engaging local community in conserving snow leopards

Sangay Chezom, Paro
Apr 18, 2019



Bhutan is one of the 12 countries in Asia that is home to snow leopards. However, due to human encroachment for poaching and retaliatory killings, the endangered big cats are losing their habitat.

To address the issue, Jigme Dorji National Park (JDNP) for the first time in the country has involved a community in Paro towards conserving snow leopards.

The villagers of Yagsa community under Tshento Gewog lose 17 yaks on average to snow leopards every year. The village with 26 households has around 1,500 yaks.

In the past, frustrated yak herders set traps and try to harm snow leopards. This is not the case now.



Today, with the Snow Leopard Conservation Group in place, locals are compensated for their loss and the community is engaged more towards conserving the animal.

"We get to take the meat and also Nu 3,000 as compensation. People are calm and they take the pictures of death yak and send it to the group," Kencho Dorji, the Secretary

of Snow Leopard Conservation Group, said.



"These new tents will help us use less fuelwood. They can be easily assembled and dismantled, and are quite convenient to carry when we move between mountain pastures. They have a bigger space and smoke ventilation, so now we have adequate room for our family and belongings. It is less smoky inside and healthier for us overall."

Sherab Zam, Yaksa Herder



BHUTAN

CONSERVATION

Jigme Dorji National Park lies in the northwestern part of Bhutan, sharing a border with the Tibetan Autonomous Region of China. The park protects an area of 4316 sq. km. and supports a rich biodiversity. It was in JDNP where tigers were first recorded above 4000 meters, sharing habitat with snow leopards. Here snow leopards frequently prey upon young yaks, leading local herders to view the cats as pests that need to be eliminated. Working collaboratively with our partners and local communities, the Conservancy is focused on projects aimed at the benefits of having snow leopards present, with the communities being the primary drivers of conservation. Activities underway include community-based snow leopard monitoring and improvement of livestock



- *Community Rangers as Citizen Scientists Group in JKSNR*
- *Conservation Partner initiative with Royal Bhutan Army in Haa*
- *Friends of Nature – Local Nature Guide*
- *Women Snow leopard Conservation Group in Paro*
- *Quick Response Team in all Snow leopard range areas*



Promoting the use of Renewable Energy in Yak rearing areas

Posted on May 1, 2014

20 April, Soe and Soeyaksa: With smiles on their faces, Soe and Soeyaksa yak rearing farmers' return home with a small carton box to hand over to the rest of their family members. One of the members opens the box and in surprise finds a small lantern with wire attached accessories. It is a portable solar lantern with one small panel and a wire jack with a multiple head for charging the mobile phones. A Solar Lantern!

According to a farmer, 'This is a huge support for us. We move from place to place with the yaks and this solar lantern will help us better care for the yaks and also churn milk at night in our tents and sheds, besides other obvious



Gap: Require adequate compensation and incentives for yak herders

Management & monitoring of disease systems

- *Bhutan One Health Strategy: A multi-sectoral approach to protecting the health of humans & animals.*
- *Wildlife Health Strategy – Surveillance of disease outbreak.*
- *Quick Response Team - Monitoring and management of disease outbreak in livestock & wildlife.*
- *Initiated “Nationwide Accelerated Dog Population Management and Rabies Control Programme”.*
- *Nationwide vaccination for Lumpy skin diseases.*
- *Gaps: Limited technical capacity and resources*

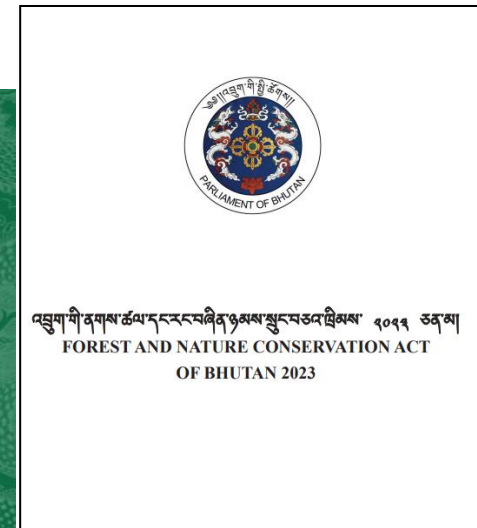


Disrupting illegal wildlife trade in the country

- *Record no cases on poaching and illegal trade of snow leopard.*
- *Records indicate merely three instances of retaliatory killing of snow leopards, likely due to the absence of a compensation scheme.*

Measures:

- *Strengthening protection & Law enforcement:*
 - *SMART Patrolling rolled out at national level.*
 - *FNCA 2023 (Chapter 5: 87, 91) – Listed under Schedule I*
 - *FNCRR 2023 (Offence & Penalty)*



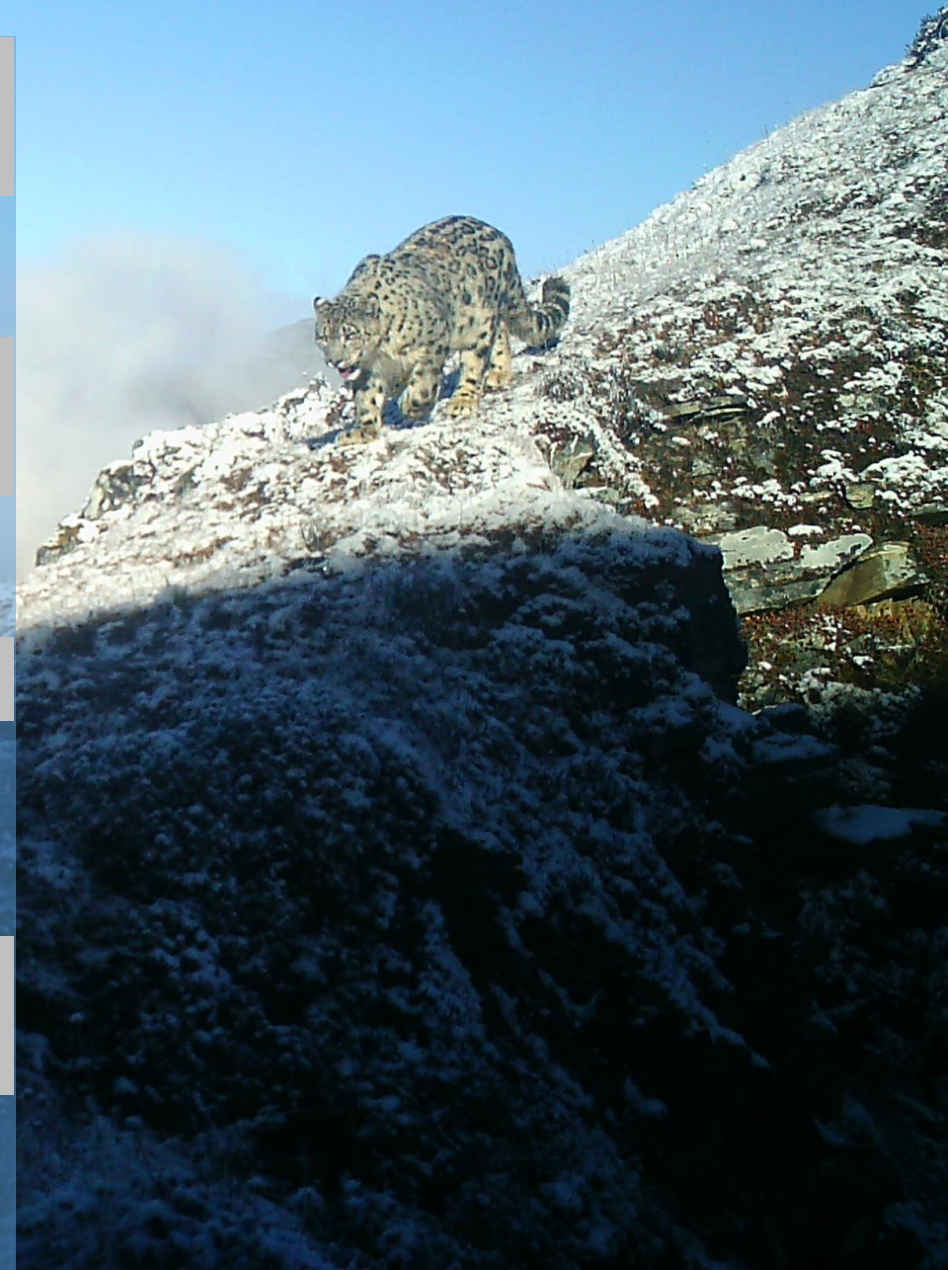


Managing Infrastructure initiatives in snow leopard landscape

- *No major infrastructure development/project implemented in Snow leopard landscape.*
- *No motorable roads inside snow leopard landscape.*
- *All major developmental activities in Bhutan are require environmental clearance, forestry clearance, EIA, ESSG and EMP.*

Trans-boundary initiatives

- *Snow leopard is a flagship species in the Kanchenjunga Landscape Conservation and Development Initiative Program of ICIMOD.*
- *GSLEP: It aims to conserve snow leopards and their ecosystems which outlines strategies for conservation, research, and community engagement -12 range.*
- *Regional cooperation are essential for the long-term conservation of snow leopards and their habitats-population dispersal.*
- *Love to see trans-boundary conservation work happening within the snow leopard range countries-potential for collaboration.*





Continued partnership in our collective efforts to safeguard the snow leopard and its fragile ecosystems.

Together, we are making a tangible difference in the protection and conservation of these iconic species and their habitats.

Aims to ensure long-term viability of snow leopards while fostering harmonious coexistence with local communities.



Few cameratrap images from NSLS-II



Kadrinchey!

We express our deep gratitude to the
Government of Uzbekistan for their warmth
and hospitality.



Thank You!

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