Integrating Snow Leopard and Co-predators (common leopard, wolf and lynx) Conservation with Livelihood Initiatives in Nepal

Progress Report

from October 2019 to February 2020

Submitted to
The Rufford Foundation
National Trust for Nature Conservation (NTNC)
Annapurna Conservation Area Project (ACAP)
Department of National Parks and Wildlife Conservation (DNPWC)

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1. Introduction

Snow leopards are included in Appendix I of CITES, and categorized as *Vulnerable* in the IUCN Red List with a global population of 4,000 to7,800 individuals (McCarthy et al. 2017). In Nepal, it has been listed as *endangered* under criterion *D* in the National Red List (Jnawali et al. 2011) regarding the small population estimated to consist between 300 to500 individuals, with less

than 200 mature individuals. This implies that the snow leopards still continue to be in the danger category. Poaching and retaliatory killings are major threats to snow leopard conservation. It is estimated over 400 snow leopards are poached annually in the snow leopard range since 2008 (Nowell et al. 2016). Similarly, the conflict between snow leopards and people in the Mustang and Manang of Annapurna Conservation pose alarming threat to the long-term survival of snow leopards (Shrestha 2016). The prominent species of Terai¹ i.e. Rhino and Tiger showed a sharp decline about a decade ago, is gradually showing promising results. This has been possible. Hence, the learnings and best practices is crucial to replicate in Mustang for safeguarding the future of the snow leopard. This on the long run will also contribute to the conservation of other co-predators such as wolf, common leopard lynx and Pallas's cat (detected in camera trap). In this regard, grant from the Rufford Foundation for this project has been instrumental in complementing the snow leopard conservation endeavour of the government. The project *Integrating Snow Leopard and Co-predators* (common leopard, wolf and lynx) Conservation with Livelihood Initiatives in Nepal aims to determine the population dynamics and promote the ecological and intrinsic value of the snow leopard and co-predators, educate people on snow leopard and on mountain biodiversity and secure sustainable livelihoods for local people.

2. Objectives

The specific objective are as follows:

- Livelihood enhancement interventions initiated through homestays and SL-based ecotourism strengthened
- ♣ Awareness of local communities and student's enhanced on snow leopard and copredators conservation and
- ♣ Determine demographic parameters of snow leopard such as abundance, survival, recruitment, modelling its population dynamics, and analysis of movement pattern of snow leopard between habitat patches of ACA to check the degree of functionality of assessed corridors

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¹ Lowlands of Nepal

3. Project area

The project area lies inside the Annapurna Conservation Area (ACA, N 28°47′ to N 28.78° and E 83°58′ to E 83°58′, ca 7,629 km2), located in west-central Nepal (Fig. 1) of Mustang district.

The homestay and snow leopard-based eco-tourism program is implemented in Putak, Jhong and Changur settlement of ca. 85 households of Lower Mustang. The student program was conducted at Jomsom of Lower Mustang. The third objective of the project is camera trap monitoring of snow leopard. This has been postponed until due to the approval process is in line with the priority of National Trust for Nature Conservation and in the process of the approval to conduct in joint venture. The placement of camera trap will be done in Jomsom, Muktinath and Jhong of Lower Mustang, Chuksang, Ghemi and Surkhang of Upper Mustang and Proper Manang, Khansar, Yak Kharka of Upper Manang, covering 800 km² (red circle, Fig. 1). The study area is mostly covered by alpine grassland and subalpine scrubland. Snow Leopard (Panthera uncia), Leopard (Panthera pardus), Himalayan Wolf (Canis lupus), Golden Jackal (Canis aureus), Red Fox (Vulpes vulpes), Eurasian Lynx (Lynx lynx) and Pallas's Cat (Otocolobus manul) were detected by camera trap surveys and scat DNA tests (Shrestha et al. 2018). Blue Sheep (Pseudois nayaur) and Musk Deer (Moschus) are the only wild ungulates in the study area (Shrestha et al. 2014; Shrestha et al. 2018), and small mammals include Royle's Pika (Ochotona roylei), Woolly Hare (Lepus oiostolus), Siberian Weasel (Mustela sibirica), Stone Marten (Martes foina), Rat (Rattus species) and Sikkim Vole (Alticola sikkimensis) (Shrestha et al. 2018).

In 2011, local inhabitants (approx. 2,200 households) of Lower Mustang owned 14,333 goats and sheep and 5,544 cattle, yak/nak, horse and zhopa. In Upper Mustang, local inhabitants (approx. 1,104 households) owned 19,173 goats and sheep and 4,327 cattle, yak/nak, horse and zhopa in 2011. In Upper Manang, local inhabitants (approx. 800 household) owned 3,133 goat and sheep and 2,304 cattle, yak/nak, horse and zhopa in 2011.

Both Lower Mustang and Upper Manang are primary tourist and trekking destinations, receiving 30,000 visitors per year while about 4,000 tourists visit Upper Mustang per year.

The quality of education in the schools of Pokhara is relatively better than that of Mustang and the access from Jomsom to Pokhara is also easy. So, parents would opt their children to enrol in the schools of Pokhara. It was found that more than 50 % of parents from Mustang have their children enrolled in the schools of Pokhara. Targeting these students, snow leopard based eco-club and awareness program will be organized in 40 schools of Pokhara valley which has been planned for March 2020.

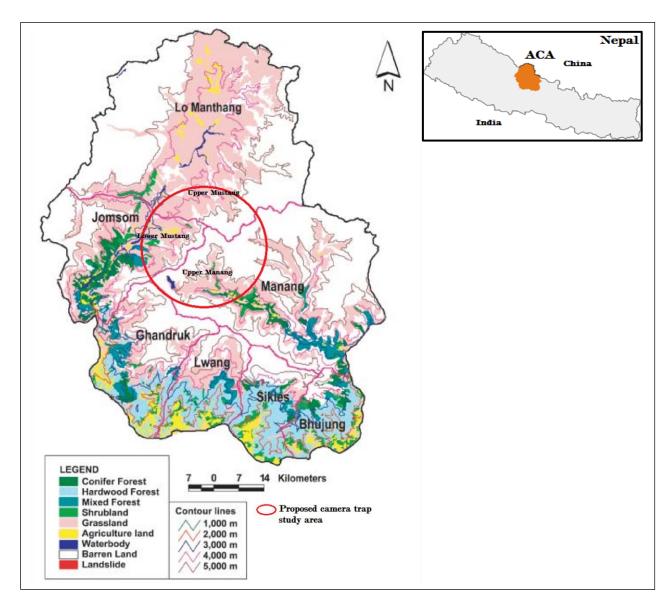


Figure 1. Study areas showing Lower Mustang, Upper Mustang and Upper Manang of Annapurna Conservation Area

4. Rationale

Annapurna Conservation Area (ACA) is the prime habitat of snow leopard. A total of 32 snow leopard individuals have been found residing in the ACA according to genotyped fecal analysis (Chetri et al 2019). A PhD study on *Implication of snow leopard distribution, population dynamics and habitat and prey preference for its conservation in Nepal* from 2014 to 2016 was commissioned by Bikram Shrestha, Principle Investigator of this project. The 1st Rufford project *Interaction between sympatric species* (snow leopard, Himalayan wolf, common leopard, lynx and Pallas' cat) and their conservation in Annapurna Conservation Area, Nepal was a part of his Phd study. The study generated information on diet and prey preference (Shrestha et al. 2018), abundance and density of snow leopard with habitat suitability and connectivity (Shrestha et al. submitted) in Lower Mustang and Upper Manang covering ca. 250 km² of ACA.

Complementing to this study, a long-term monitoring of demographic parameters i.e. abundance, survival, dispersal, breeding hotspots and modelling the population dynamics are pre requisite to devise appropriate conservation measures in ACA. Hence, this study envisages to generate information on the movement pattern of snow leopard between habitat patches within ACA, check the degree of functionality of the predicted corridors by capture probability of camera trapping capture recapture analysis and prey count. This result from this project is deemed to be vital for conservationists and the Department of National Park and Wildlife Conservation (DNPWC) for gaining insight into the areas that are highly functional in terms of snow leopard movement and strategize conservation plans. The project is being implemented by the Forum of Natural Resource Managers (FONAREM) which is the leading partner with National Trust for Nature Conservation (NTNC)/Annapurna Conservation Area Project (ACAP) the local partner.

Mustang is bestowed with mesmerizing beauty. Moreover, with the expansion of road networks taking place at a faster pace, even the remotest parts of Mustang are becoming accessible. This has given immense opportunity to ecotourism entrepreneurs who are interested in investing in homestays. The latter is emerging as a lucrative business in Mustang. Homestay have been established in a few settlements and the numbers show a growing trend. These homestays have embraced the cultural and social aspects of the respective village only

and have not considered incorporating the ecotourism aspect. This could be attributed to people's limited awareness on ecotourism linked with snow leopard conservation. Ecotourism provides an opportunity to secure livelihoods and reduce poverty of the communities living in ecotourism sites across Ladakh, India (Chandola 2012; Jackson 2015; Aishwarya et al. 2019). Thus, homestay aligned with snow leopard conservation has been envisioned in this project to ensure meaningful participation of villagers in snow leopard conservation.

Awareness raising programs are crucial for changing people's attitude and perception towards conservation. This will ultimately ensure their meaningful engagement in conservation. Awareness raising program is an integral part of this project. Students, teachers and key community representatives were the primary groups targeted for awareness programs for reaching out the wider mass to disseminate conservation message. So, awareness raising programs appropriate to different target groups were devised. This included drawing and essay competition for students and the workshop and interaction program were organized for students, teachers and local people.

5. Results

Following are the activities accomplished from October 2019 to 12th Feb 2020 under this project.

5.1 Project approval

The Principal Investigator Mr. Bikram Shrestha, Project Manager Ms Bunu Vaidya and the president of FONAREM, Dr. Sajani Shrestha had a meeting with Dr. Haribhadra Acharya, Ecologist, on 14 October, 2019 at the Department of National Park and Wildlife Conservation (DNWPC) to brief him about the project goal, objectives, activities and the expected outcomes. A letter of request for approval and a copy of the project document was submitted. The PI also held a separate meeting with Dr. Ram Chandra Kandel, Deputy Director General (Joint Secretary) ad Mr. Gopal Prakash Bhattarai, Director General of DNPWC to brief the success and best practice of the previous project. The PI also held a meeting with the National Trust of Nature Conservation which looks after Mustang and Manang district working as a

separate wing of Annapurna Conservation Area Project (ACAP). The letter of approval for the project was obtained from ACAP to execute the conservation activities on 29 November 2019.

5.2 Coordination with the NTNC staff in Mustang

Soon after the approval, PI coordinated with the staff of NTNC/ACAP based in Mustang to inform him about the project and sought his cooperation in the field. The PI shared the list of activities that were planned to be implemented and explained his role in each. The NTNC/ACAP staff expressed his willingness to extend his cooperation and informed the villagers, key community members and schools about the project execution.

5.3 Snow leopard and co-predators conservation awareness and education workshop – Lower Mustang

Meeting with staff of ACAP

A meeting was organized with the staff of ACAP-Jomsom office to develop the plan for the workshop. The date, venue and schedule were developed. Potential participants for the workshop was identified in consultation with the staff of ACAP-Jomsom office. The PI assigned the individual staff and community members with various roles and responsibilities.

Workshop

As per the decision of the meeting, the workshop **Snow leopard and co-predators conservation awareness and education workshop** was scheduled on the International Mountain Day, December 11, 2019. The student eco club (Green Force Club), an environmental wing under ACAP-Jomsom, teachers, member of Conservation Area Management Committee (CAMC), government representatives, staff from ACAP, journalist and local people (herders) participated in the workshop. A total of 37 people attended the workshop of which 12 were students, 3 teachers, 9 government staff, 5 ACAP-Jomsom/ staff, 1 FONAREM staff, 6 local people and 1 journalist (Table 1).

The workshop started with welcome remarks by Mr. Tulsi Prasad Dahal, Conservation Officer of ACAP-Jomsom's office. He gave a brief information of this project and highlighted on the objectives of the workshop, which were

- to motivate and mobilize students to conserve the endangered snow leopard and other wildlife,
- ii. to raise awareness amongst community leaders/teachers, local herders, and decisionmakers on the snow leopard and people ecological relationship

This was followed by a presentation from Mr. Bikram Shrestha, who gave insights on the intrinsic relationship between snow leopard, people and mountain. Mr. Shrestha highlighted that the charismatic snow leopard is an iconic species of Nepalese Himalaya and the protection of snow leopard would have a multiplier effect on conservation. He further elaborated that due to shortage of prey in the natural habitat, the snow leopards come out and invade into the human settlements and create havoc. He added that we can let them remain in their habitat by preserving their habitat and prey species. He emphasized on snow leopard conservation and urged people to collaborate in this effort and that the effort will be crucial in creating employment opportunity to villagers who are willing to invest on homestays.

This was followed by experience sharing from participants. Ms. Juna Thakali, a member of Thini Thakali Homestay, shared the experience of homestay which is currently under operation in Thini settlements. She further added that homestays are a very lucrative business for people in Mustang looking at income opportunity and requires very little investment. The homestay in Thini started with only 3 households in 2019 but now has increased to 13 households with the capacity to accommodate over 150 guests. She also welcomed the participants to visit the homestay to gain insight on the learnings and experiences before their initiate in their villages.

The students were also given the opportunity to give their remarks on snow leopard and wildlife conservation. They said snow leopards are iconic species of Mustang and they are committed to put their effort to save it. Mr. Ramesh B. K., previous member of Green Force Club, shared that members of the Green Club will be very happy to mobilize its members for

snow leopard conservation. He also shared his experience working with PI and admired his technical knowledge and contribution since 2011 for snow leopard conservation in Mustang. Mr. Bhes Raj Bastola, School teacher, also shared his knowledge and experience working with Green Force Club for a long time.

The workshop concluded with a vote of thanks from Mr. Ghanshyam Gautam, Assistant Chief District officer. He emphasized that snow leopard cannot be conserved in isolation and appreciated the contribution of Rufford Foundation in conserving snow leopard by collaborating with the local people. He expressed that he is very positive that the synergy developed by this project may prove very promising in achieving the desired result. He expressed his best wishes to all the participants and urges them to cooperate in the conservation.

After the presentation, we did a quick survey using questionnaires to assess the perception of people towards snow leopard conservation. The analysis and findings of the questionnaire will be presented in the magazine which is targeted to be published in August, 2020.

Table 1. List of Participants in the conservation awareness and education workshop

SN	Name	Designation	Office/School
1	Aastha Gurung	Student	Jana Hit Secondary School
2	Dickey Gurung	Student	Jana Hit Secondary School
3	Alisha Tamang	Student	Jana Hit Secondary School
4	Abhishek Khadkathoki	Student	Jana Hit Secondary School
5	Sabin Sharma	Student	Jana Hit Secondary School
6	Priyanka Khadkakoti	Student	Jana Hit Secondary School
7	Pramis Gurung	Student	Jana Hit Secondary School
8	Laxmi Majkoki	Student	Jana Kalyan Basic School
9	Susmita Pariyar	Student	Jana Kalyan Basic School
10	Suhana Thakali	Student	Jana Kalyan Basic School
11	Basanti Pariyar	Student	Jana Kalyan Basic School
12	Ramesh B. K.	Student	Previous member, Green Force Club

13	Bhes Raj Bastola	Teacher	Jana Hit Secondary School	
14	Dipendra Poudel	Teacher	Jana Kalyan Basic School	
15	Ram Prasad Sharma	Teacher	Jana Kalyan Basic School	
16	Bed Prasad Aryal	Chief District Officer	Mustang	
17	Ashish Adhikari	District Police Officer	Mustang	
18	Ghana Shyam Gautam	Assis. Chief District	Mustang	
		Officer		
19	Yam Prasad Thakali	Local/Chairman,	Gharapjhong Rural Municipality	
		ward-4		
20	Sonam Khando	Local/Chairman	CAMC-Jhong 2	
21	Juma Thakali	Local/Member of	Thini Thakali Homestay	
		Homestay		
21	Yek Raj Chaudhary	Police	District Police Office-Mustang	
23	Lok Jung Malla	Police	District Police Office-Mustang	
24	Shiv Pariyar	Police	District Police Office-Mustang	
25	Manoj Kumar Jhosi	Police	District Police Office-Mustang	
26	Dipak Magar	Police	District Police Office-Mustang	
27	Sundar Kumar Thakali	Journalist/Chairman	Federation of Nepali Journalist-	
			Mustang	
28	Kamal B. Gurung	Local/ Chairman	School Management Committee-	
			Jhong 2	
29	Dawa Gurung	Local	Jhong 2	
30	Om B Khadka	Police officer	Crime Investigation Department-	
			Mustang	
31	Tanka Raj Baral	Section Officer	Mustang	
32	Tulasi Prasad Dahal	Conservation Officer	ACAP-Jomsom	
33	Lal Devi Gurung	Tourism Assistant	ACAP-Jomsom	
34	Kamal Raj Joshi	Admin Assistant	ACAP-Jomsom	
35	Bhim B. Pariyar	Agri. Helper	ACAP-Jomsom	
36	Seeta Gauchan	Office Helper	ACAP-Jomsom	
37	Bikram Shrestha	PI (This project)	FONAREM-Kathmandu	

Some Photo images of the workshop





Left: Mr. Tulsi Prasad Dahal, Conservation Officer of ACAP-Jomsom's office welcomed to all participants. Right: PI, Bikram Shrestha, presenting his slides.



Participants in the workshop



Mr. Ghanshyam Gautam, Assistant Chief District officer, Mustang District concluded the workshop



Students are writing a brief note about the workshop



Group photo with students in front of the premises of ACAP-Jomsom office

5.4 Training for homestay and snow leopard-based ecotourism business plan

Preparations for the training

A meeting was held in ACAP-Jomsom office with Mr. Tulsi Prasad Dahal, Conservation Officer to develop a plan for conducting training on homestay promotion in Jhong ward 2. During that meeting, a team of 7 members were formed with members Mr. Bikram Shrestha (PI), Mrs. Lal devi Gurung, assistant tourism officer of ACAP-Jomsom and 2 members of Jhong Youth Club, locals, 2 members of CAMC and 1 local to execute the plan on homestay-based ecotourism. The team visited Putak, Jhong and Chhangur settlements which are the potential areas for homestay located in Jhong-2 of Lower Mustang. They identified potential and interested household and had interaction with them. A total of 40 households were visited on the 12th and 13th December 2019. A questionnaire survey was conducted for these households to learn their attitude and interest in snow leopard conservation. The participants from these settlements were selected for the training.

Some Photo images of household visit and interaction with people in Putak









Some Photo images of household visit and interaction with people in Jhong











Some Photo images of household visit and interaction with people in Chhangur

















Training:

The training **Training for homestay and snow leopard-based ecotourism business plan** was organized on 13th December 2019. A total of nineteen participants (12 Men and 7 Women (Table 2) attended the training. The objective of the training was to encourage people on snow leopard conservation by extending technical support to establish homestay in Jhong-2

Mr. Bikram Shrestha, PI facilitated the training. He made a presentation which highlighted on the presence of snow leopard in Mustang as detected by camera trapping, population trend, challenges and threats and efforts puts by the local people and government for snow leopard conservation. He also explained the potential of ecotourism in Jhong of Mustang from socio cultural and conservation point of view and gave examples of conservation aligned homestay that are running successfully in many parts of Nepal. He further elaborated that this project intended to conserve snow leopard and initiate homestay simultaneously.

This was followed by a briefing by Mrs. Lal Devi Gurung who explained on the minimum requirement to operate the homestay that included registration, investment, basic operation training etc.

During the training, ecotourism management sub-committee with 13 executive members were formed. All the members took an oath by Mrs. Sonam Khandu Gurung, Chairman of CAMC Jhong-2, made a commitment to conserve snow leopard through ecotourism-based homestay business. She awarded KHATA (Buddhist scarf) for good luck and wishes for their future endeavors. Snow leopard postcards were gifted to all participants. This committee will work under the authority of the Conservation Area Management Committee (CAMC)-Jhong 2/ACAP-Jomsom. It has registered formally in ACAP-Jomsom office.

After the training, the sub-committee found out that nine households willing to invest in homestay were identified. These households are in the process of registration at ACAP office.

The progress of the homestay is regularly being monitored by the project team. Mr. Noru Gurung, Chairman of Homestay sub-committee and Mrs Lal Devi Gurung, Assistant Tourism Officer of ACAP-Jomsom office are a focal person who provides regular updates on the homestay progress. Mr. Noru informed that villagers will initiate the homestay the

registration process in March 2020 as most of the villagers have temporarily moved out of the district to escape harsh winter.

Table 2. List of Participants in the training for homestay and snow leopard-based ecotourism business plan

SN	Name	Designation	Office/Resident
1	Chhuki Gurung	Farmer	Chhangur
2	Palchang Mando Gurung	Farmer	Chhangur
3	Sonam Gurung	Chairman-Women Group	Chhangur
4	Lheteen Gurung	Chairman-Women Group	Jhong
5	Kanchi B. K.	Member of local body	Jhong
		(Jhong-2)	
6	Gam B Gurung	Farmer	Chhangur
7	Karsang Amu Gurung	Hotel business	Putak
		owner/farmer	
8	Sher B Gurung	Village leader/Farmer	Putak
9	Lhakpa Gurung	Village leader/Farmer	Jhong
10	Rapten Gurung	Farmer	Jhong
11	Dorje Gurung	Chairman/Farmer	Jhong Youth Club
12	Karma Gyatso Gurung	Local	Jhong
13	Sonam Khandu Gurung	Chairman and Hotel owner	CAMC-Jhong 2
14	Dolma Gurung	Member-Women	Jhong
		Group/Farmer	
15	Cheng Gurung	Farmer	Jhong
16	Kamal B Gurung	Chairman/Farmer	School Management
			Committee, Jhong 2
17	Noru Gurung	Member-CAMC/Farmer	Jhong-2
18	Dawa Tsering Gurung	Farmer	Jhong
19	Chyakpe Gurung	Farmer/Hotel owner	Chhangur
20	Lal Devi Gurung	Assistant Tourism Officer	ACAP-Jomsom

21	Bikram Shrestha	PI (This Project)	FONAREM-Kathmandu

Some Photo images of training of homestay and snow leopard-based ecotourism business plan







5.5 Training on ecotourism (snow leopard tracking)

The training also had a field visit component in and around Jhong valley. The purpose of this visit was to convince the participants on the presence of snow leopard using scientific

method. The participants were involved in snow leopard tracking and prey counts. This was effective in helping them observe the presence of snow leopard in that area, assess the degree of functionality and making them realize the need for appropriate conservation measures.

Some Photo images of training on ecotourism



5.6 Project progress update with Department of National Park and Wildlife Conservation

After the accomplishment of the field work in Mustang, Mr. Bikram Shrestha, PI and Ms. Bunu Vaidya, Program Manager of this project held a meeting with Dr. Ram Chandra Kandel, Deputy Director General of Department of National Parks and Wildlife Conservation in Kathmandu to update him on the progress of the project and share of the upcoming plan. As per the advice

of Dr. Kandel project monitoring is being conducted in the field. He also expressed his commitment to extending his cooperation to the project. He appreciated the contribution made by Rufford Foundation for conserving the snow leopard, the landmark species of the Himalayas.

Some Photo images of the meeting





5.7 The ongoing Activity

School student education program in Pokhara Valley will be conducted in coordination with PABSON-Kaski, NPABSON-Kaski and government schools.

Camera trap monitoring: The proposed camera trap activity is in line with the priority of National Trust for Nature Conservation and in the process of the approval to conduct in joint venture.

6. Latest news published in online and daily newspapers on the project's conservation activities

1. Below section from Facebook of nepaldut.com highlights news on awareness program on snow leopard conservation in Jomsom of Mustang district.

http://nepaldut.com/2019/12/12/44775/?fbclid=IwAR0eZUMKI3IRYbJVHoyewn03MQftad9VDrjX7R Ay1xbN4FNBtHCPf3Byyt8#.Xfn X9Hgclp.facebook



201

Facebook

Twitter

Viber

Messenger

संरक्षित क्षेत्र मुस्ताङको जोमसोममा हिउ चितुवा संरक्षण सम्वन्धि सचेतनामुलक कार्यक्रम भएको छ । हिमालकी रानी भनेर चिनिने ठुलो बिरालो प्रजातीको हिउ चितुवा जोगाउन सके ईको पर्यटनलाई टेवा पुग्ने सरोकारवालाले बताएका छन् ।

अन्तराष्ट्रिय पर्वतीय दिवसको अवसरमा एक्याप जोमसोम र प्राकृतिक श्रोत व्यवस्थापन फोनारेमको संयुक्त आयोजनामा बिहिबार आयोजित कार्यक्रममा सरोकारवालाहरूले हिउँ चितुवा संरक्षण गर्नुपर्नेमा धारणा राखेका हुन् । मुस्ताङका सहायक प्रजिअ घनश्याम गौतमले हिउँ चितुवाको उपस्थिती तथा त्यसको क्रियाकलापले ईको पर्यटनमा सहयोग पुग्ने बताए । एक्यापका कार्यालय प्रमुख तुलसी दाहालले हिउँ चितुवाको अवशेष र क्रियाकलापबाट पर्यटकको बसाई लम्बिन सक्ने उल्लेख गरे ।

यस्तै हिम चितुवा बिज्ञ बिक्रम श्रेष्ठले मानव र हिमाल संग सम्वन्ध हिउँ चितुवाले पुरा गर्ने बताए । उनले हिउँ स्वच्छ वातावरणको सूचक भएको उल्लेख गरे । कार्यक्रममा स्कुले बिद्याथीले समेत हिउँ चितुवाबारे बोलेका थिए ।

समुन्द्री सतहको ३ हजार देखि ६ हजार मिटरको चट्टानी पहाडको उचाई हिउँ चितुवाको मुख्य बाँसस्थान केन्द्र मानिएको छ । फेलिडे परिवारको हिउँ चितुवा मांसाहारी प्राणी हो ।

201 SHARES

Facebook

Twitter

Viber

Messenger

2. Below scanned news from daily newspaper "Pokhara Aawaj" distributed in the Gandaki Province, Nepal highlights news on awareness program on snow leopard conservation in Jomsom of Mustang district.



3. Below scanned news from daily newspaper "Samadhan" distributed in the Gandaki Province, Nepal highlights news on training program on homestay and snow leopard-based ecotourism business in Jhong of Mustang district.

हिउँ चितुवा चिन्न ह

एसके बकाली श्रोमसोम, ने प्रस

वारागुङ मुक्तिक्षेत्र गाउँपालिका २ मा पर्ने भोड, पुटाक र संदगुर गाउँमा हिर्मीयतुवालाई पर्यटनसँग जोडने सामुदायिक होमस्टे चलाइने भएको छ । अन्नपूर्ण संरक्षण क्षेत्र आयोजना (एक्बाप) जोमसोम र प्राकृतिक स्रोत व्यवस्थापन फोनारेमले सोमवार आवोजना गरेको कार्यक्रममा होमस्टे तवारी उपसमिति गठनसँगै स्नो लियोपाईबारे अन्तर्त्रिया पनि भएका छ ।

संरक्षण क्षेत्र व्यवस्थापन समिति अध्यक्ष सोनाम खाएडो गुरुङ्को अध्यक्षतामा भएको व्यवसाविक होमस्टे तालिम तवा स्नो लियोपाई देसमा आधारित इको पर्यटन प्रयंदन कार्यक्रममा बन्यजन्त विज्ञ विक्रम श्रेष्ट र एक्यापकी पर्यटन सहायक लालदेवी गुरुडको उपस्थितिमा होमस्टे उपसमिति गठन भएको हो । नोरु गुरुडको संयोजकत्वमा १३ सदस्य होमस्टे उपसमिति गटन भएको छ । समितिका सचिव गमबहादर गुरुङ, कोषाध्यक्ष शेरवहादुर गुरुङ, सदस्यमा खक्को गुरुह, होल्मा गुरुङ पाल्साङ, म्होन्दो गुरुङ,



ल्हाक्या आङ्मो गुरुङ, चान्के गुरुङ, स्थाची गुरुङ, करसाङ्गी गुरुङ, कमल गुरुङ, धोर्ज गुरुङ र पेमाद्रोमा गुरुङ छन् ।

च्याचसायिक -होमस्ट तालिय तथा स्नो लियोपाई वेसमा आधारित इको पर्वटन प्रवेद्धनका लागि होमस्टे सञ्चालन गर्ने तयारी भएको होमस्टे उपसीमित संयोजक प्रतिमा भएको बताए । सोनाम खाण्डो गुरुङ्गे होमस्टे तालिम तथा स्तो सेताम्मे हिउँमा हिउँ चित्वाले

लियोपार्ड बेसमा आधारित इको पर्यटन प्रवंदन कार्यक्रमण पर्यटन सहायक लालदेवी पुनले होमस्टे सञ्चालनवारे जानकारी दिइन् । व्यावसायिक होनस्टेले स्थानीयको जीवनस्तर उकास्ने अपेक्षा गरिएको छ । यन्यजन्त विज्ञ विज्ञम श्रेष्टले विश्वमे दुर्लभ हिउँ चितुवा नेपालके

यसअधि श्रेष्ठको नेतृत्वमा जानकारी दिए । केही एक्याप, संरक्षण व्यवस्थापन महिनाभित्रे होमस्टे, एक्याप र समिति र होमस्टे उपसमिति स्वानीय तहमा दर्ता प्रक्रिया सदस्यले स्नो लियोपाईबारे अधि वढाइनेछ । व्यावसायिक फिल्ड अध्ययन गरेको थियो ।

आउजाउ गरेको डोब, दिसा, पिसाच लगायत भेटिएको श्रेष्ठले उल्लेख गरे । नैविक विविधतामा महत्वपूर्ण हिउँ चित्रवा लगायतका बन्यजन्त संरक्षण गर्नसके इको पर्यटनमा सहयोग पुग्ने एक्याप जोमसीम कार्यालय प्रमुख वाहालले बताए।

वारागृङ २ को फोड़, पुटाक र छोड्गुर गाउँ कच्ची सडकले जोडिए पनि स्थानीयले पर्यटन व्यवसायबाट कुनै लाध लिन सकेका छैनन् । स्थानीय ग्याची गुरुङ मृतिलाध दर्शन गर्ने आएका आन्तरिक तथा बाह्य पर्यटक कालोपने सडक हेंदै मुस्तिनाव जाने भएकाले गाउँ ओभेल परेको चताउँछन् ।

समन्त्री सतहदेखि ३ हजार मिटरदेखि ६ हजार मिटरसम्म हिउँ चित्तवा वस्त्व । हिउँ चितुवाका गतिविधि हेर्न आएका पर्यटकलाई सविधा विलाउने उदेश्यले होमस्टे चलाउन लागिएको हो । हिउँ चित्रवामा विद्यावारियो गरेका यन्यजन्त विज्ञ विज्ञम क्रेन्डले ३ वर्षअधि पुरलाइको विनी र वसाड, मनाडको खाडसार, याकखर्क, तिलिची लगायतका लेकमा वयामेरा ट्याप गरी हिड चित्रवाको अध्ययन गरेका 940 1

4. Below section from online news highlights news on awareness program on snow leopard conservation in Jomsom of Mustang district.

https://www.eadarsha.com/nep/89145?fbclid=IwAR3zk1LRUgYGHSLavwBvqQqG1CNg7CWX6M7lyLLI9QJ8CzLD0M3xEJQTk8U

(https://www.eadarsha.com/eng)

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(https://www.eadarsha.com/)

मुस्ताङ्गमा हिउँ चितुवा संरक्षण सचेतना



आदर्श समाज सम्वाददाता पौष १, २०७६



पोखरा, १ पुस । अन्तर्राष्ट्रिय पर्वतीय दिवस —२०१९ का अवसरमा राष्ट्रिय प्रकृति संरक्षण कोष, अन्नपूर्ण संरक्षण क्षेत्र आयोजना, इलाका संरक्षण कार्यलय जोमसोम र प्राकृतिक श्रोत व्यवस्थापन बिज्ञहरु (फोनारेम) को संयुत आयोजनामा जोमसोममा हिउँ चितुवा संरक्षण सचेतना तथा शिक्षा गोष्ठी सम्पन्न भएको छ ।

इलाका संरक्षण कार्यालय जोमसोमका कार्यालय प्रमुख तुलसी प्रसाद दाहालबाट सबैलाई स्वागत गर्दै कार्यक्रमको मूल आसय प्रकाश पारे । संरक्षणका विभिन्न पक्षका बारेमा धारणा राख्यै हिउँ चितुवामा बिद्यावारिधि बिद्यार्थी तथा फोनारेममा आबद्धता बिक्रम श्रेष्ठले आफ्नो विद्युतीय प्रस्तुतीकरण गर्दै हिउँ चितुवा, मानव र हिमालको अन्तरसम्बन्ध र यसका संरक्षणका विभिन्न पक्षहरूमा स्पष्ट पारेका थिए।

बिश्वमै दुर्लभ मानिएको सुन्दर हिउँ चितुवा नेपालकै प्रतिमा र उच्च पहाडी भेकको स्वस्थ वातावरण सूचक र हिउँ चितुवाको संरक्षण गरियो भने स्वतह अन्य वन्यजन्तु र सम्पूर्ण जैविक बिबिधाताको संरक्षण हुनुको साथै पर्यटक प्रवद्धनलाई पनि टेवा पुर्याउने हुँदा यसको संरक्षणको धेरै ठुलो महत्व हुने श्रेष्ठले बिश्वास ब्यक्त गरे ।

मुस्ताङ्ग जिल्लाका विभन्न कार्यालयका प्रमुखहरू, ठिनी र लुप्रा गाउँका घरवास व्यवसायमा आबद्ध ब्यक्तिहरू तथा, जोमसोम र स्याङ्ग स्थित विभिन्न बिद्यालयका शिक्षक बिद्यार्थी निक्कै उत्साह पुर्बक आफ्नो उपस्थिति जनाइरहेका थिए । हिउँ चितुवा संरक्षण कार्यमा भोलिका अभिवावक आजका बिद्यार्थी र स्थानीय समुदाय बीच जनचेतना बिस्तार गरियो भने संरक्षण कार्य दिगो रहने विश्वास श्रेष्ठले गरे । कार्यक्रममा सहायक प्रमुख जिल्ला अधिकारी मुस्ताङ्गका घनश्याम गौतमले सबैका पर्ति आफ्नो शुभकामना व्यक्त गरेका थिए ।

"हिउँ चितुवाले केही मात्रामा नोक्सान गरेपनि यसले भाबी सन्ततीको लागि मानवीय जीवनमा र जैविक वातवरणमा दीर्घकालीन फाइदा नै गर्छ आजको यस जनचेतनामूलक कार्यक्रमले हामी बिद्यार्थी लगायत अन्य ब्यक्तिहरू सहभागी गराएर गरिएको कार्यक्रममा प्रस्तुत ज्ञानबर्दक कुराहरू हामीले राम्ररी थाहा पाउन सक्यौ" कक्षा १० का बिद्याथी अभिषेक खडकाथोकीले भने ।

"आजको कार्यक्रमले हामीलाई हिउँ चितुवाको संरक्षणका लागि हामीले गर्न सिकने प्रयासहरुको बारेमा थाहा पायौ यस कार्यक्रमको लक्ष युवा जनशक्तिले अहिले हिउँ चितुवा संरक्षणमा महत्वपूर्ण भूमिका निर्वाह गर्नुपर्छ भन्ने कुरा थाहा पाए" कक्षा १० का बिद्यार्थी प्रियंका खडकाथोकीले आफ्नो भनाइ राखेका थिए ।

"हिउ चितुवाको समस्या निराकरण गर्नको लागि वन बिनास र चरी चरनको दुरुपयोग नगरी दिएमा हिउँ चितुवाको आहार बन्यजन्तु प्रशस्त उत्पादन हुन्छन र हिउँ चितुवाले मानवीय जीवनमा कुनै हानीनोक्सानी गर्देन । हामी सबै मिलेर बन्यजन्तुको संरक्षणमा लाग्नुपर्छ" कक्षा १० का बिद्यार्थी प्रमिश गुरुङले आफ्नो भनाइ राखे । समुन्द्री सतहको ३ हजार देखि ६ हजार मिटरको चट्टानी पहाडको उचाई हिउँ चितुवाको मुख्य बाँसस्थान केन्द्र मानिएको छ । परिवारको हिउँ चितुवा मांशहारी प्राणी हो । 5. Below section from online news highlights news on training program on homestay and snow leopard-based ecotourism business in Jhong of Mustang district.

https://samadhannews.com/news/2019/12/18/12193/?fbclid=IwAR2LSgrbhA4xL75ryn22g3 cu6FEvvYcASrFhY0upg-YXwC3TUB8un-T4C9g#.XfruUD3vyT9.facebook



मुस्ताङको झोङ, पटाक र छेङ्गुर लेकमा हिउँ चितुवा बेसको अध्ययन गर्दे वन्यजन्तु बिज्ञ बिक्रम श्रेष्ठ सहित स्थानीयबासी ।

एसके थकाली, जोमसोम

मुस्ताङको वारागुङ मुक्तिक्षेत्र गाउँपालिका वडा–२ अत्र्तगत पर्ने झोङ ,पुटाक र छेङ्गुर गाउँमा स्नो लियोपार्ड पर्यटनसंग जोड्नेगरी सामुदायिक होमस्टे संञ्चालन गरिने भएको छ । अत्रपूर्ण संरक्षणक्षेत्र आयोजना एक्याप जोमसोम र प्राकृतिक श्रोत व्यवस्थापन फोनारेमद्धारा सोमबार आयोजित संयुक्त कार्यक्रममा स्नो लियोपार्ड पर्यटन लिक्षत होमस्टे तैयारी उपसमिति गठन तथा स्नो लियोपार्ड सचेतीकरण अन्तरक्रियामा भएको हो ।

संरक्षणक्षेत्र व्यवस्थापन समितिका अध्यक्ष सोनाम खाण्डो गुरुङको अध्यक्षतामा भएको व्यवसायिक होमस्टे तालिम तथा स्रो लियोपार्ड बेसमा आधारित ईको पर्यटन प्रर्वद्धन कार्यक्रममा वन्यजन्तु बिज्ञ बिक्रम श्रेष्ठ र एक्यापकी पर्यटन सहायक लालदेबी गुरुङको उपस्थितीमा होमस्टे उपसमिति गठन भएको हो । नोरु गुरुङको संयोजकत्वमा १३ सदस्य होमस्टे उपसमिति गठन भएको पर्यटन सहायक लालदेबी गुरुङले जानकारी दिईन् । उनका अनुसार समितिको सचिव गमबहादुर गुरुङ र कोषाध्यक्ष शेरबहादुर गुरुङ छन् । सदस्यहरुमा छुक्की गुरुङ ,ढोल्मा गुरुङ ,वाल्मा गुरुङ ,ल्हाक्या आङ्गो गुरुङ, चान्के गुरुङ ,ग्याचो गुरुङ ,करसाङ्गो गुरुङ ,कमल गुरुङ ,धोर्जे गुरुङ र पेमा ढोमा गुरुङ रहेका छन् ।

यसअधि वन्यजन्तु बिज्ञ श्रेष्ठको नेतृत्वमा एक्याप ,संरक्षण व्यवस्थापन समिति र होमस्टे उपसिमितिका सदस्यहरूले स्नोलियोपार्ड क्रियाकलाप संम्वन्धि फिल्ड अध्ययन गरेको थियो । वारागुङ –२ झोङ खर्कमा गरिएको फिल्ड अवलोकनमा हिमालकी रानी हिउँचितुवा संम्वन्धि क्रियाकलापहरू भेटिएको थियो । सेताम्मे हिउँले भरिएको खर्कमा हिउँ चितुवाले आउजाउ गरेको डोब हिउँ चितुवाको दिशा र पिसाब लगायतका बस्तु भेटिएको श्रेष्ठले उल्लेख गरे । जैविक विविधतामा योगदान दिने हिउँ चितुवा लगायतका वन्यजन्तु संरक्षण गर्नसके ईको पर्यटनमा सहयोग पुग्ने एक्याप जोमसोमका कार्यालय प्रमुख तुलसी दाहालले जानकारी दिए ।

वारागुङ--२ को झोङ ,पुटाक र छेङ्गुर गाउँमा कच्ची सडकले जोडिएपनि स्थानीयले पर्यटन व्यवसायमा कुनै आर्थिक लाभ लिन सकेका छैनन । यी गाउँको मुक्तिनाथ खोलाको दक्षिण पारीपट्टी मुक्तिनाथ जाने कालोपत्रे सडक भएकाले पर्यटकीय हिसाबले ओझेल परेको स्थानीय ग्याचो गुरुङले दुखेसो सुनाए । उनका अनुसार मुक्तिनाथ दर्शन गर्न आएका आन्तरिक तथा बाह्य पर्यटक कालोपत्रे सडक हुँदै मुक्तिनाथ जाने भएकाले गाउ ओझेल परेको उनको भनाई थियो ।

समुन्द्री सतहको ३ हजार मिटर देखि ६ हजार मिटर अग्लो उचाईमा हिउ चितुवाको बासस्थान रहने गर्छ । हिउ चितुवा क्रियाकलापको गतिविधि हेर्न आएका पर्यटकलाई सुविधा दिलाउने उद्देश्यले होमस्टे तैयारी गरिएको उपसमितिले जनाएको छ । हिउँ चितुवामा बिद्यावारिधि गरेका वन्यजन्तु बिज्ञ बिक्रम श्रेष्ठले ३ वर्षअधि मुस्ताङको ठिनी र छुसाङ अनि मनाङको खाङसार ,याकखर्क र तिलिचो लगायतका लेकमा क्यामेरा ट्याप गरी हिउँ चितुवाको अध्ययन गरेका थिए ।

References

Jnawali, SR., et al. (compilers) (2011) The Status of Nepal Mammals: The National Red List Series, Department of National Parks and Wildlife Conservation Kathmandu, Nepal

McCarthy T., Mallon D., Jackson R., Zahler P., McCarthy K. (2017) *Panthera uncia*. The IUCN red list of threatened species. e.T22732A50664030. Downloaded on 19 September 2017

Nowell K, Li J, Paltsyn M, Sharma RK (2016) An ounce of prevention: snow leopard crime revisited. TRAFFIC, UK

Shrestha B (2016) Interaction between sympatric species (snow leopard and co-predators) and their conservation in Annapurna Conservation Area, Nepal. A progress reported submitted to The Rufford Foundation (UK), NTNC, ACAP and DNPWC (Nepal)

Shrestha B, Aihartza J, Kindlmann P (2018) Diet and prey selection by snow leopards in the Nepalese Himalayas. PLoS ONE 13(12):e0206310. DOI: 10.1371/journal.pone.0206310

Shrestha B., Som Ale, Jackson R, Thapa N, Gurung LP, Adhikari S, Dangol L, Basnet B, Naresh Subedi N, Dhakal M (2014) Nepal's first Pallas's cat. CatNews 60: Spring 2014