

A project report on

Linking Citizen Science to Turn Paper Results into Red Panda Conservation Outputs in Jajarkot District, Karnali Province, Nepal.



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EXECUTIVE SUMMARY

As a part of long-term scientific monitoring, altogether six local people well familiar with the local topography, flora/fauna and literate enough to be capable of filling datasheets and handling equipment (eg. GPS, Vernier Calipers etc.) thus selected from Jiree, Barekot RM, Malutara, Kuse RM and Dhyargaun Nalagad Municipality were trained and motivated to help the team in monitoring red panda including other wildlife and their habitat in Jajarkot. In total 32 camera traps (7 in Nalagad, 15 in Kuse and 10 in Barekot) were used; however, as of now we were able to collect only camera-traps from Nalagad only., with each camera-trap unit running for between 39 and 148 days in Nalagad, for a total sampling effort of 529 camera-trap nights.

A total of 13 species of mammals belonging to 11 families of four order has been reported from Camera trap survey in Nalagad. Endangered species like red panda, Musk Deer, Vulnerable species like Himalayan Black Bear, Siberian Weasel has been reported for the first time from the district.

E-Story book “Habre ko gaun” and PSA “Habreko Gaun”, Conservation Sticker and Red Conservation Flex are Information Education and Communication IEC materials produced as outputs of the projects. Altogether eight school awareness programs were conducted to reach 379 students and 50 teachers in eight different schools of the fringe villages close to red panda habitat namely: Shree Tapobhumi Sec. School, NalagadShree JanaBikash Basic School, Shree Himalayan Sec. School, Shree Durga Sec. School, Shree Saraswati Sec. School, Shree Malutakura Sec. School, Shree Bhagawati Sec. School.

Ten event of awareness building workshops were organized in Divisional Forests Office, Jajarkot, Divisional Forests Office, Jajarkot, Baniyagaun, Nalagad Municipality-11, Dhyargaun, Nalagad Municipality-10, Dhottachaur CF, Barekot RM-04, Social Development Office, Jajarkot, Tamtu, Barekot RM-04, Chalna Chaur, Kuse RM-08, Malutara, Kuse RM-08, Lathachuli, Kuse RM-08, Bharma, Kuse RM-06 to reach a total of 206 local stakeholders.

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ACRONYMS AND ABBREVIATIONS

CBD	Convention on Biological Diversity
CFUGs	Community Forest User Groups
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DD	Data Deficient
DFSC	Department of Forests and Soil Conservation
DNPWC	Department of National Parks and Wildlife Conservation
EN	Endangered
FGD	Focus Group Discussion
GIS	Geographical Information System
GoN	Government of Nepal
IEC	Information Education and Communication
IUCN	International Union for Conservation of Nature
LC	Least Concern
MoFSC	Ministry of Forests and Soil Conservation
NPWC Act	National Parks and Wildlife Conservation Act
NGOs	Non-Governmental Organizations
NSO	National Statistics Office
NT	Near Threatened
PAs	Protected Areas
PSA	Public Service Announcement
RM	Rural Municipality
VU	Vulnerable

SECTION I

1.1 Background

Nepal's biodiversity is a reflection of its unique geographic position and altitudinal and climatic variations. Nepal's location in the central portion of the Himalayas places it in the transitional zone between the eastern and western Himalayas. It incorporates the Palearctic and the Indo-Malayan biogeographical regions and the major floristic provinces of Asia (Sino-Japanese, Indian, western and central Asiatic, Southeast Asiatic, and African Indian desert) creating a unique and rich terrestrial biodiversity (MoFSC/GoN, 2002). As many as 35 forest types and 118 ecosystems have been classified based on altitude, climatic variations and vegetation types. The Himalayan ecosystem is exceptionally rich in floral and faunal diversity, which maintain ecological balance as well as play important ecological role. Despite of this importance they have not yet received due attention, as a result many of the species are now vulnerable and threatened to risk of endangered. Among several species found in Himalayan region, the Red panda (*Ailurus fulgens* Cuvier, 1825) belonging to family Ailuridae of order Carnivora is one of the unique earth's living fossils (Pocock, 1941) threatened to the risk of endangered.

Red panda is found in the temperate forests of the Himalayas characterized by the presence of mixed deciduous and coniferous forests with a bamboo-thicket understory (Roberts & Gittleman, 1984). It is found at an altitudinal range between 2200 m and 4800 m in the temperature range from 10 °C to 25 °C (Roberts & Gittleman, 1984).

Red Panda was protected as an endangered (EN) species in International Union for Conservation of Nature (IUCN) Red List of Threatened Species (Glatston et al., 2015). It is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In Nepal *Ailurus fulgens fulgens* is listed as a schedule 1 in the National Parks and Wildlife Conservation Act 1973 (Baral & Shah, 2008) and as endangered species in the National Red List (Amin et al., 2019, Jnawali et al., 2011).

Nepal is home to approximately 1.9 % of the total global Red Panda population, which is estimated to be 16,000- 20,000 individuals in about 70,000 km² habitats available for them in its range states (Choudhury, 2001). In Nepal, *A. fulgens* has been reported from the following districts: Taplejung, Panchthar, Sankhuwasabha, Solukhumbu, Ramechhap, Dolakha, Sindhupalchowk, Rolpa, Rukum, and Mugu (Jnawali et al., 2012), Ilam (Williams, 2004), Jajarkot (Baral, 2014), Jumla

(Bhatta et al., 2014), Kalikot (Dangol, 2014), Khotang (Mali, 2014), Bhojpur, Dolpa, and Lamjung (Ghimire et al., 2019, MoFSC, 2016), and Rasuwa, Nuwakot, Myagdi, Baglung, and Dhading (Bista et al., 2017). The protected areas in Nepal in which the species is known to occur include Kangchenjunga Conservation Area (Mahato & Karki, 2005; Yonzon, 1996), Manaslu Conservation Area (Yonzon et al., 1997), Makalu Barun National Park (Joshi & Sangam, 2011; Jackson, 1990), Sagarmatha National Park (Mahato, 2004), Langtang National Park (Yonzon, 1989; Yonzon & Hunter 1991; Yonzon et al., 1991; Fox et al., 1996), Annapurna Conservation Area (Shrestha & Ale, 2001), Dhorpatan Hunting Reserve (Sharma & Kandel, 2007), and Rara National Park (Sharma, 2008).

The total range-wide red panda population is estimated to be less than 10,000 mature individuals (Glatston et al., 2015). The estimated potential red panda habitat available in its entire distribution range varies greatly between different studies. Choudhury (2001) estimated the potential habitat of about 142,400 km², while two other studies have suggested different area available across the entire range, e.g., 47,000 km² (Kandel et al., 2015) and 134,975 km² (Thapa et al., 2018). The national red panda survey 2016 documented the potential red panda habitat available across 23,977 km², out of which, almost 70% of the total habitat lies outside the PAs network (MoFSC et al., 2016), 22,400 km² (Kandel et al., 2015) and 20,150 km² (Thapa et al., 2020; Thapa et al., 2018).

Nepal has witnessed a significant paradigm shift from species level conservation to landscape level conservation. Conservation policies, implementation activities, modalities have been reviewed and revised with the time. Distributional information about the species is of paramount importance to render accurate biogeographical interpretations (Ficetola et al., 2014). Of all major fauna, small mammals' conservation comes up with Wallacean shortfall (Troudet et al. 2017), so does happen with the records of different species in Nepal.

In Nepal, a very limited number of studies on the red panda have been carried out so far, most of them focused within the protected area. The species has been sparsely studied outside the protected area (PAs), although it covers the large share of red panda habitat (about 70%) (MoFSC et al. 2016). The Red Panda (*Ailurus fulgens*) has been already reported in mountains of Jajarkot.

The Local Governments (namely; Barekot, Kuse, and Nalagad) of Jajarkot had previously prepared the first local national Red Panda Conservation Action Plan for Nepal (2021-2025)

funded by (Rufford Second Small Grant) which is in line with the Government of Nepal's Red Panda Conservation Action Plan for Nepal (2019-2023) (Baral et al. 2021). This action plan focuses on conducting extensive research using rigorous scientific tools and techniques to understand their ecological and habitat dynamics. Furthermore, it also emphasizes curbing poaching and strengthening local stewardship for red panda conservation. It will also synergize the combined efforts of the Divisional Forests Office, local governments, conservation partners, and local communities to achieve the aim to protect and manage red panda populations in Jajarkot. Involvements of local communities have been well prioritized in this action plan which I believe will be critical in achieving the targeted objectives of this five-year action plan. The proposed project "Linking Citizen Science to turn paper results into red panda conservation outputs in Jajarkot District, Karnali Province, Nepal" attempts to execute the actions proposed in the local red panda conservation action plan (2021-2025). Due to Covid 19, Nepal is suffering from the risk of economic recession, hence, the local governments failed to manage the funds for the execution of actions proposed in the local red panda conservation action plan (2021-2025), Jajarkot. The execution of this bottom-up approach to red panda conservation planning with a deeper understanding of human-nature interactions in the red panda habitat has been proposed to guarantee the success of top-down conservation planning that has been conducted without taking local socio-economic considerations into adequate account. The execution of these paper works into conservation actions linking citizen science not only supports ongoing community-based red panda conservation activities but also promises to yield a high conservation effect.

The community identifies contextual challenges and threats to red panda conservation and finds capacity enhancement as a possible solution to be addressed by the local red panda conservation action plan. The red panda conservation activities endorsed in the plan mandate to train community people as citizen scientists to monitor red panda and their threats by using in-field sign tracking and camera trapping, and therefore, transforming them as citizen scientists to continue the activity of data collection and promote community and school awareness and sensitization on red panda conservation and significance of their habitats to school children, herders and villagers in and around red panda habitats. Hence, this project attempts not only to link citizen science to implementing the red panda conservation activities endorsed in the local red panda conservation action plan for conservation output; but also, to address the Wallacean Shortfall in red panda habitats

Earlier few Community people of Barekot RM, Kuse RM and Nalagad Municipality were well trained in red panda habitat monitoring and wildlife survey based on sign survey in previous project funded by Rufford Foundation, The United Kingdom's previous projects. Through this project capacity building trainings were conducted to encourage the local youth and to take interest in red panda and other wildlife conservation and associated wildlife-based (especially red panda based) ecotourism as a source of livelihood. Local peoples could bring about collective action for the conservation of any wildlife species only when they get to know the ecological importance of that wildlife. Hence local youths were involved in habitat survey with research team for the exploration of red panda habitat and relative abundance of different mammals.

1.2 Objectives

To train and deploy Community people as citizen scientists to monitor red panda and their threats by using in-field tracking and camera trapping.

2 Methodology

2.1 Study Area

The Jajarkot district is located in the Karnali Province of Nepal. It covers an area of 2,310.95 km². It is located between 28° 37' 22"N to 29° 07' 22"N and 81° 49' 22"E to 82° 34' 46"E among Rukum in the East, Dailekh, Jumla, and Kalikot in the West, Salyan and Surkhet in the South and Dolpa and Jumla in the North. The Jajarkot district adjoins the Kalikot District to the west, where the westernmost global record of *A. fulgens* as been reported. Hence, the Jajarkot district is of global red panda conservation importance. Jajarkot is an evocative and unique region with intact carnivore guilds and wilderness that exemplifies dynamic human-wildlife relations (Basnyat et al 2019; Baral, 2014; Baral et al., 2014). Transhumance practice of livestock management in publicly-owned grazing land and non-timber forest products (NTFPs) collection (*Ophiocordyceps sinensis*, *Delphinium himalayai*, *Nardostachys jatamansi*, *Picrorhiza scrophulariiflora*, *Swertia chirayita*, *Paris polyphylla*, *Delphinium denudatum*, *Morchella esculenta*, *Ganoderma lucidum*, *Polygonatum cirrhifolium*, *Polygonatum verticillatum*, *Rheum australe*, *Valeriana jatamansii*, *Dactylorhiza hatagirea*, etc.) is ubiquitous and has an important economic contribution to the livelihoods of communities, relying mainly on subsistence agriculture with a strong linkage between farming, pasturelands, and forestry (Baral, 2014; Baral et al., 2014). The study area

beholds temperate, sub-alpine, alpine and nival types of vegetation and acts as a refuge for different mammal species such as *Ursus thibetanus*, *Ailurus fulgens*, *Semnopithecus schistaceus*, *Moschus spp.*, *Muntiacus vaginalis*, *Hemitragus jemlahicus*, *Naemorhedus goral*, *Capricornis thar*, etc. (Baral, 2014; Baral et al., 2014). The project was more precisely conducted in the Barekot Rural Municipality (RM), Kuse RM, and Nalagad Municipality of Jajarkot District, Karnali Province, Nepal (Figure 1). Barekot and Kuse RM and Nalagad Municipality are homes to a total population of 74,425 (NSO/GoN, 2021).

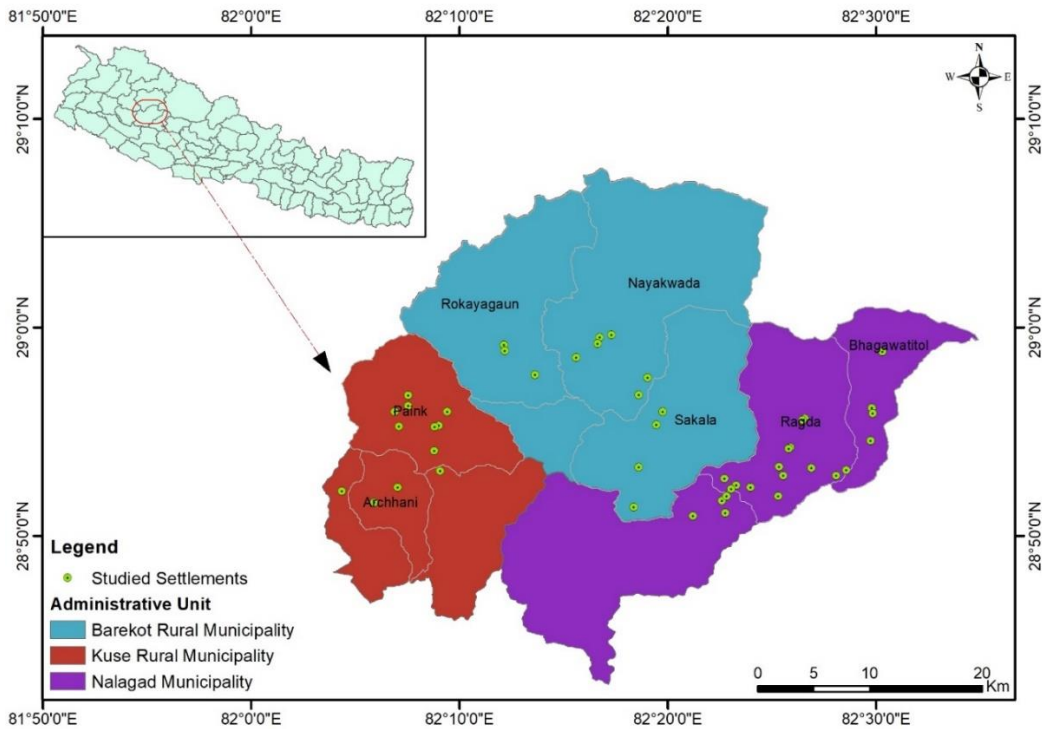


Figure 1: Map of the project area

2.2 Methods of Data Collection

Literatures such as books, research articles, scientific journals, relevant published and unpublished articles, project reports, annual reports, program reports, thesis and dissertations, local/national newspapers, relevant international conventions like CBD, CITES and national Act like National Parks and Wildlife Conservation (NPWC) Act 1973, management plans and various websites were reviewed so as to collect secondary data. Both secondary data and primary data on red panda's presence, its distribution, vegetation of its habitat and its conservation threats were collected and collated.

The Nepali government introduced the public works program, called the Prime Minister Employment Program, in early 2019, “to create job opportunities within Nepal and end Nepal youth dependency on jobs abroad.” For the implementation of this Program, there are Employment Service Centers (ESCs) at each Municipalities/ Rural Municipalities (Local administrative unit) of Nepal. ESCs have collated information on unemployed persons between 18-51 years and ranked their well-being in accordance with Prime Minister Employment Program Operation Guidelines 2022 (Second Amendment). A MoU has been signed with each RM. A collaboration was made with Employment Service Centers (ESCs) at RM for the identification of six underprivileged cohort members from Dhyargau, Daha, Chauthari, Tamtu, Jiri, Malutakura, Jajarkot which were the closest permanent human settlements to the project site. The inhabitants of these localities used to share resources from same red panda habitats. A total of nine cohorts were selected of whom six cohorts were selected being based on Prime Minister Employment Program Operation Guidelines 2022’s ranking; and three were selected based on their experiences of forests and wildlife habitats.

As a part of long-term scientific monitoring, altogether nine local people well familiar with the local topography, flora/fauna and literate enough to be capable of filling datasheets and handling equipment (e.g. GPS, Vernier Calipers etc.) thus selected from Barekot RM, Kuse RM, and Nalagad Municipality of Jajarkot were trained and motivated to help the team in monitoring red panda including other wildlife and their habitat.

One day long training event was organized for them to educate on following topics:

- Importance of biodiversity
- General introduction of probable wildlife abundance in red panda habitat, their status, ecology, conservation threats and conservation importance
- Legal provisions pertaining to red panda (including other associated wildlife in red panda habitat like Musk Deer, Himalayan Black bear, Common Leopard, Himalayan Ghoral, Himalayan Serow)
- Different wildlife habitat monitoring techniques including equipment handling and data recording.
- Camerat Trapping

2.2.1 Field survey for red panda including other wildlife

Citizen scientists including other biologists including team leader were mobilized for recce survey and camera trap placement starting from November 2023 till now.

Recce survey

Considering the difficult terrain, reconnaissance or recce method was used for sampling red panda including other mammal species. Pre-existing trails that are passable were identified and marked. These trails were selected such that the entire area was covered and were representative of all vegetation types. The trail length was recorded using the track log in the handheld global position system (Garmin e Trex60). Observers used to walk slowly in the morning (6 am to 9 am) for detecting both direct and indirect signs (scat, pellets or droppings, pug marks, hoof marks and calls) of mammal species. Geo-coordinates, time, date and number of individuals sighted of all species encountered were recorded. The perch height and tree height of red pandas were also recorded.

Camera trapping

After recce survey in the proposed area habitat, on the basis of an elevation range between 2200 m (Ghose and Dutta 2010) and 4000 m, (Yonzon and Hunter 1991) and forest cover including fir, rhododendron, birch, alpine scrub (Yonzon and Hunter 1991), oak, broad-leaf deciduous, broad-leaf conifer, and coniferous trees (Yonzon and Hunter,1991; Williams, 2006), a habitat map was extracted from ICIMOD land use map. The identified habitat was overlaid with grids of 9.6 km² (red panda's maximum home range recorded in LNP) (Fox et al 1996). After this, 50% of these grids was selected by using Geospatial Modeling Environment built in ArcGIS 10.2 version. Each selected grid will be further subdivided into 6 sub-grids each with an area of 1.6 km² to ease the data collection. Finally, 20 camera traps were randomly placed in such sub grids. In doing so after a reconnaissance survey for carnivore signs and usage, a camera trap was deployed at the most suitable locations within each grid to photo-capture mammals. Camera trapping points were selected in the whole of the study area at a minimum of 1km separation. Points too close to human settlements (within 1 km) were eliminated from the final camera trap locations. In total 32 camera traps (7 in Nalagad, 15 in Kuse and 10 in Barekot) were used; however, as of now we were able to collect only camera-traps from Nalagad only. Trail cameras (model UV557) was deployed and were tied to a pole/tree at a height of 30–45 cm from the ground and placed 3–5 m away from the middle of the trail to ensure full-body capture of the target animals. The time delay between

successive pictures was kept as ‘Fast as Possible’ mode (1–2 s delay), however, at night the delay increased to 8–10 s depending on the battery conditions (which is required to recharge the white light flash).

Table 1: Citizen Scientist Mobilization after wildlife habitat monitoring training



Citizen Scientist Jay Bahadur Singh operating Camera trap in prime red panda habitat



Citizen Scientists Jagriti Shahi installing Camera trap after red panda monitoring training



Citizen Scientist Rajendra Singh operating Camera trap in prime red panda habitat



Citizen Scientists Kiran Bahadur Singh and Rajendra Singh installing Camera trap



Citizen Scientists Janak Bahadur Singh with Jeevan Rai in red panda habitat



Citizen Scientists Dharendra Dhyar in red panda habitat

3. Results

A list of citizen Scientists selected from three different Municipalities (Barekot RM and Kuse RM and Nalagad Municipality) of Jajarkot are presented in Table 2

Table 2: List of Citizen Scientists

S.No.	Name	Address	Municipality	Bases for Recruitment
1	Raju Dhyar	Dhyargau	Nalagad-10	Unemployed as per Prime Minister Self Employment Program
2	Abinash Dhyar	Dhyargau	Nalagad-10	
3	Motiram Nepali	Lathachuli	Kuse RM-08	
4	Jagriti Shahi	Lathachuli	Kuse RM-08	
5	Rajendra Singh	Daha	Barekot-4	
6	Janak Bahadur Singh	Chauthari	Barekot-4	Experiences of forests and wildlife habitats
7	Jay Bahadur Singh	Tamtu	Barekot-5	
8	Kiran Bahadur Singh	Jiri	Barekot-4	
9	Dhirendra Dhyar	Dhyargau	Nalagad-10	



Figure 2: A pair of red panda cubs in Karainchuli region, Barekot RM Photo Courtesy: Kiran Bahadur Singh (Citizen Scientist).

Species recorded in the camera placed by citizen scientists from Nalagad Municipality RM in the red panda habitats during camera trap survey November 2023- March 2024 (529 Camera trap day)

is presented in Table 3. Those species records from Barekot and Kuse RM are yet to confirmed after camera traps collection from the field.

Table 3: Species recorded in the Camera traps from Nalagad Municipality in the red panda habitats during Camera trap Survey November 2023- March 2024.

S.No.	English Name	Scientific Name	Redlist		CITES
			IUCN	National	
Order: Carnivora					
Family: Ailuridae					
1	Red Panda	<i>Ailurus fulgens</i>	EN	EN	I
Family Ursidae					
2	Asiatic Black Bear	<i>Ursus thibetanus</i>	VU	EN	I
Family: Felidae					
3	Leopard Cat	<i>Prionailurus bengalensis</i>	LC	VU	II
Family: Mustelidae					
4	Yellow-throated Marten	<i>Martes flavigula</i>	LC	LC	III
5	Siberian Weasel	<i>Mustela sibirica</i>	LC		
Order: Rodentia					
Family: Hystricidae					
6	Indian Crested Porcupine	<i>Hystrix indica</i>	LC	DD	
Order: Primates					
Family: Cercopithecidae					
7	Nepal Gray Langur	<i>Semnopithecus schistaceus</i>	LC	LC	I
Order: Artiodactyla					
Family: Moschidae					
8	Musk Deer	<i>Moschus sps</i>	EN	EN	I
Family: Suidae					
9	Eurasian Wild Boar	<i>Sus scrofa</i>	LC	LC	
Family: Cervidae					
10	Northern Red Muntjac	<i>Muntiacus vaginalis</i>	LC	VU	
Family: Bovidae					
11	Himalayan serow	<i>Capricornis thar</i>	NT	DD	I
12	Himalayan Goral	<i>Naemorhedus goral</i>	NT	NT	I
13	Himalayan tahr	<i>Hemitragus jemlahicus</i>	NT		



Red Panda fecal pellets



Red Panda fecal pellets

Few Photographs of Species captured in camera traps



Red Panda (*Ailurus fulgens*)



Red Panda (*Ailurus fulgens*)



Red Panda (*Ailurus fulgens*)



Musk Deer (*Moschus Sps*)



Musk Deer (*Moschus Sps*)



Himalayan Black Bear (*Ursus thibetanus*)



Leopard Cat (*Prionailurus bengalensis*)



Leopard Cat (*Prionailurus bengalensis*) holding its prey



Siberian Weasel (*Mustela sibirica*)



Yellow Throated Marten (*Martes flavigula*)



Barking Deer (*Muntiacus vaginalis*)



Himalayan Serow (*Capricornis thar*)



Himalayan tahr (*Hemitragus jemlahicus*)



Himalayan Goral (*Naemorhedus goral*)



Himalayan Goral (*Naemorhedus goral*)



Eurasian Wild Boar (*Sus scrofa*)



Indian Crested Porcupine



Nepal Gray Langur (*Semnopithecus schistaceus*)



Male Blood Pheasant (*Ithaginis cruentus*)



Blood Pheasant (Male & Female) (*Ithaginis cruentus*)



Male Daphe (*Lophophorus impejanus*)



Female Daphe (*Lophophorus impejanus*)

Conservation threats to biodiversity

- *Habitat encroachment, loss and degradation*

Red panda has specific habitat needs. Increasing human pressure is impairing the habitat quality thus making habitat less suitable for red panda survival. Field observations indicated that the quality of red panda habitat is deteriorating due to overexploitation of forest resources: non-timber forest products (NTFPs) like *Daphne bholua* for preparing Nepali handmade paper, *Aconitum heterophyllum*, *Paris polyphylla*, etc, vegetables, firewood for cooking and heating purposes, timber for furniture and construction, and tree limbs as fodder for livestock for their livelihood. In addition, encroachments of the habitats for the construction of cow shelters (*Goth*) and hotels especially along Tamtu-Chauthari-Lagna Dhottachaur trail fragmented intact habitat. The uncontrolled collection of bamboos for various purposes caused a high level of competition for resources between locals and red panda all year round.

- *Forest Fire*

Field observation and consultation with local people also demonstrated that forest fire is one of the major challenges in the study area. Besides, the fire was found to be used to create openings for new agricultural land, stimulate regeneration of edible mushroom species, new vegetative shoots for livestock, and suppress the growth of thorny and unpalatable species like *Rosa sericea*, *Girardinia diversifolia*, *Rubus paniculatus*, *Berberis asiatica* etc. In the dry season poachers were also reported to be using fire to force prey into a narrow range in order to facilitate easier hunting. Setakchini, locally known as Khiraula is the highly traded medicinal plant (Figure 13). The rhizome of *Polygonatum cirrhifolium* and *Polygonatum verticillatum* are in high demand from the Chinese side in the recent years. Residents said that this resource was over-harvested to meet the demand. Per local communities, several hundred collectors from Jajarkot and other districts visited BarekotRM, Kuse and Nalagad Municipality and stayed for about one month to collect Setakchini. Apart from harvesting, the trade of setakchini has severe environmental concern: substantial quantity of fuelwood is required for primary processing, posing double degradation (over-harvesting and excessive fuelwood collection) in the area. People prefer to process rhizome of *Polygonatum cirrhifolium* and *Polygonatum verticillatum* adjacent to water sources as cleaning of these rhizomes require large amount of water. Concomitantly, red pandas prefer to live nearby

water sources so cleaning of rhizomes might have potential impact. The highest share, however, is clinched by traders outside district, not the local residents.

- *Traditional transhumance system of livestock management*

Livestock herding was observed to be pre-dominant in the entire study area. Transhumance herding practices was observed to be detrimental for red panda and other wildlife conservation as their livestock share these habitats regularly and haphazardly throughout the year except a few winter months every year. Grazing and browsing induced tree regeneration inhibition, suppressed bamboo growths and trampling induced damages like soil compaction, crushed vegetation, could be seen even in the prime wildlife habitats. Besides, the demand for fodder, fire wood and timber to construct and maintain herding stations induces deforestation and habitat degradation and the process repeats every year. These herders also rear dogs to guard their livestock which sometimes kill red pandas and other associated wildlife. There is also a fear of transferring livestock contagious diseases to wildlife. The movement of pastoralists and their cattle herds overlapped with the red panda's breeding time. This is one of the major threats to red panda conservation.

- *Illegal hunting*

Hunting of wildlife had been inseparable part of local inhabitants since time immemorial. The area was notorious for illegal and communal hunting and it occurred throughout the year with peak during Dashain festival and post monsoon season.

- *Inadequate awareness and weak law enforcement*

Lack of public awareness is another major wildlife conservation challenge. A large number of herders and general users of these habitats were unaware about its legal protection, ecological importance and benefits of wildlife. The inadequate staffing, poor incentives to the staff, unstable political situation, lack of coordination and collaboration between local government bodies, were revealed as a major underlying cause of weak law enforcement for red panda conservation.

4. Discussion

A total of 13 species of mammals belonging to 11 families of four order has been reported from Camera trap survey in Nalagad. Endangered species like red panda, musk deer, Vulnerable species like Himalayan Black Bear were recorded. Siberian weasel has been reported for the first time from the district.

The participatory planning process was extremely effective in tapping into the unique perspectives of the rural poor, helping to unlock their ideas not only on the nature and causes of the red panda conservation issues that affect them, but also on realistic solutions. Participation helped to carry with the feelings of ownership, and build a strong base for the red panda conservation intervention, which also allowed for a broader range of community perspectives and ideas to ensure more credibility. The pitfalls caused by ignorance of the realities of the community were avoided via local level participatory consultation, FGD and workshops for red panda including other wildlife conservation planning which also provided an opportunity for often disenfranchised groups like herders and herb collectors to be heard. Participatory research approaches involved important players from the outset and had ability to teach skills which last far beyond the project life, and could help to improve the community on the long term. People learnt to run meetings, analyze data, construct strategic plans-in short, to become community resources and leaders for red panda including other wildlife conservation. Hence, this project brought together and establish ties among community members of three different RMs of Jajarkot who might normally have no contact. Such relationships broke down barriers in the different communities among RM and among three different Local governments. With its underpinnings of collaboration, inclusiveness, and empowerment, a participatory approach embodied the ideals that form the foundations of most grass roots and community-based wildlife conservation initiations by Local Government and conservation institutions.

The Local Red Panda Conservation Action Plan clearly stated that the activities proposed in the Action Plan to meet the mentioned objectives will be under the jurisdiction of different tiers of Government and urged for collaboration and cooperation with conservation partners and among themselves in case of implementing conservation activities in overlapping red panda habitat. However, our work does not end here. Regular monitoring and evaluation for impactful conservation intervention is much needed.

We assessed the quality of citizen scientist data and how quickly citizen scientists learned to place cameras and identify wildlife pictures through expert review of all photos identified by citizen scientist. We predicted that citizen scientists would: 1) improve their ability to setup cameras and identify species over time; 2) increase their knowledge about the abundance of mammals; 3) improve attitudes toward conservation; 4) share information learned during or from the project with more people in CFUGs and others in their networks, and 5) be more likely to share information if they detected rare or charismatic wildlife, such as predators, on their camera traps. As per our expectation, Kiran Bahadur Singh recently took videos of red panda in its habitat and share photos of red panda that he has captures. This is a representative case of enhanced observation of wildlife and capturing their pictures for future references.

SECTION 2: School and Community Awareness and Outreach Activities

2.1 Background

Humans in general have a very short-term memory. For our conservation campaign to be successful we had to introduce a complete package of conservation awareness among masses. Awareness meetings, informal discussions, were organized, presentations were made during the programs in fringe villages of red panda habitat and PSA entitled “Habreko Gaun” was showcased and shared via social media.

2.2 Objectives

- 1 To conduct a community outreach program.
- 2 To promote awareness of the significance of red pandas and their habitat conservation to school children in and around red panda habitats.

2.3 Methodology

Direct observation, personal interviews and communication with officials of Department of National Parks and Wildlife Conservation, Department of Forests, Division Forests Office, Jajarkot community leaders, including school teachers and stakeholders like landholders, farmers, herders, herbs collectors, honey hunters etc., were used to gain insight about the attitudes of local people towards biodiversity particularly red panda. We developed one story e storybook entitled “Habreko Gaun”, PSA entitled “Habreko Gaun”, one Red Panda Conservation Sticker and ten Red

Panda Conservation flexes comprising of general introduction of Red Panda status, ecology, conservation threats and conservation importance, legal provisions pertaining to red panda (including other associated wildlife) conservation. After presentations we conducted quiz competition and storytelling session a part in their local dialect among the children. Information Education and Communication (IEC) materials related to red panda were distributed among the students and teacher and other local stakeholders in fringe areas. Informal discussions, awareness meetings were also organized for local people. During the discussion we gathered information about the species and tried to clear the misconception and wrong ideas prevailing among villagers by providing more information about the species and its importance via these IEC materials.

2.4 Results

E Story book “Habre ko gaun” and PSA “Habreko Gaun”, Conservation Sticker and Red Conservation Flex are IEC materials produced as outputs of the projects as illustrated below, Similarity one can find “Habreko gaun” @ <https://www.youtube.com/watch?v=FVdB55Hv5ok>

हाब्रे संरक्षणमा हाम्रो सहभागिता



समन्वय र सहकार्य



कटे गाउँपालिका,
गाउँ कार्यपालिकाको कार्यालय,
कटे थामा, आबखेट
क्याम्प प्रदेस, नेपाल



चारेचौत गाउँपालिका,
गाउँ कार्यपालिकाको कार्यालय,
सिमाना, आबखेट
क्याम्प प्रदेस, नेपाल



नवपाट नगरपालिका,
नगर कार्यपालिकाको कार्यालय,
दुनी, आबखेट
क्याम्प प्रदेस, नेपाल



विजिवा बा, आबखेट,
आबखेट



मन्त्रिकिया कार्यक्रम
२०८०

सहयोग



IDEA WILD







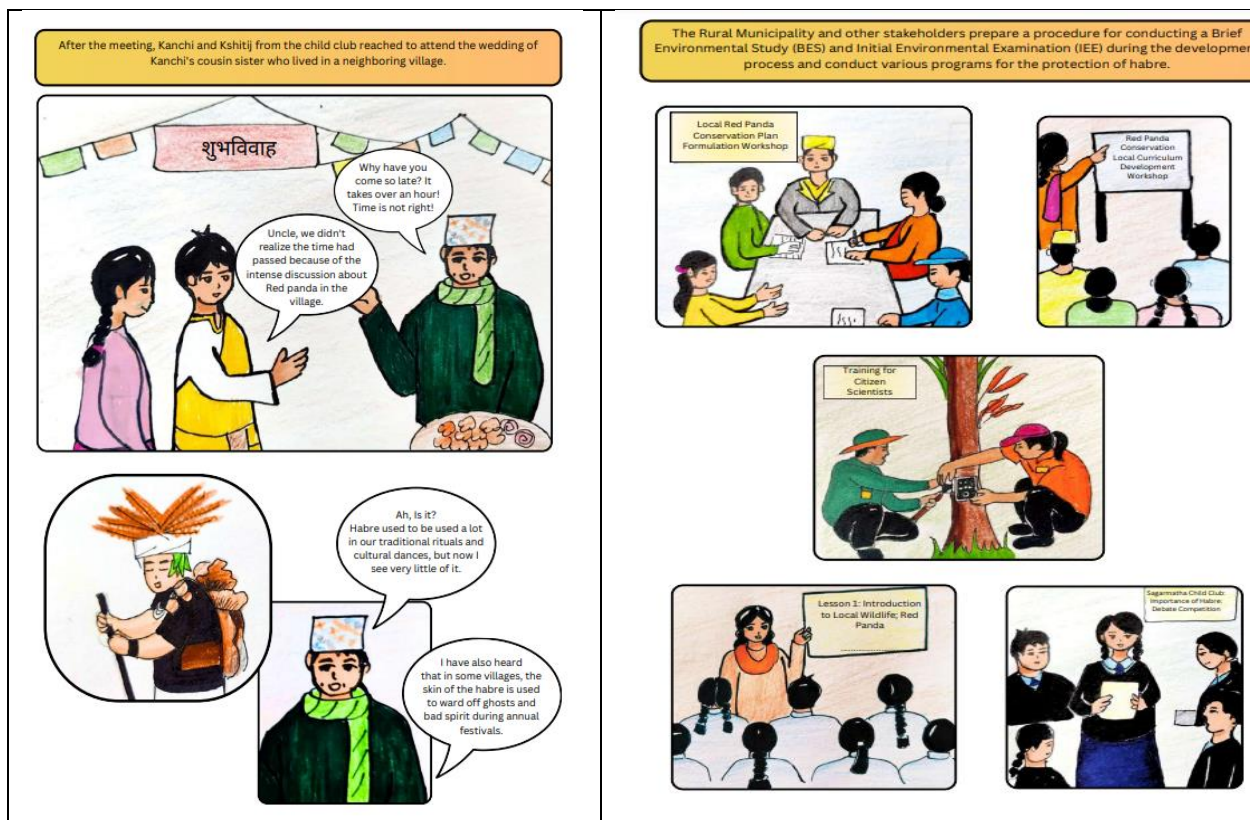
Figure 4: Title Page of Habreko Gaun



Figure 3: Conservation Outreach IEC

Table 4: Some Glimpses of Story book entitled “Habreko Gaun”





School Outreach Activities

Altogether seven awareness programs were conducted in seven different schools of the fringe villages close to red panda habitat namely: Shree Tapobhumi Sec. School, Shree JanaBikash Basic School, Shree Himalayan Sec. School, Shree Durga Sec. School, Shree Saraswati Sec. School, Shree Malutakura Sec. School, Shree Bhagawati Sec. School. Altogether 379 students and 50 teachers from these schools were directly sensitized on red panda including other wildlife conservation issues and other components of mountain biodiversity to let them take charge of their biodiversity from their formative stage as shown in Table 4. The school outreach program basically included red panda awareness class, storytelling in their own dialect and quiz activities. Awareness materials like posters, and PSA “Habreko gaun” were showcased during awareness campaigns.

Table 5: School Outreach event program conducted venue, address and number of participants

School Outreach Program						
S. N.	Name of School	Date	Address	Participants'		
				Classes	Number	
1	Shree Tapobhumi Sec. School	10 October, 2023	Dhyargaun Nalagad-10	6,7,8,9,10	55	
2	Shree JanaBikash Basic School	11 October, 2023	Rawatgaun Nalagad-10	6,7,8	22	
3	Shree Himalayan Sec. School	12 October, 2023	Tallubagar, Nalagad-12	6,7,8,9,10	54	

4	Shree Durga Sec. School	7 May, 2024	Bharma, Kuse-07	6,7,8,9,10	41
5	Shree Saraswati Sec. School	10 May, 2024	Rijapahade, Kuse-08	6,7,8,9,10	61
6	Shree Malutakura Sec. School	19 May, 2024	Tamti, Kuse-04	6,7,8,9,10	45
7	Shree Bhagawati Sec. School	23 June, 2024	Jiree, Barekot-04	6,7,8,9,10	48
8	Shree Himalayan Basic School	11 September, 2024	Gothgaun, Barekot-04	5	53
	Total				379

Table 6: School outreach activities' highlights



Photo after School Outreach at Bhagawati Sec School, Jiri, Barekot RM



PSA Habreko Gaun Showcasing at School



School outreach activity's Participant in Saraswati Sec School, Rijapahade, Kuse



Group Photo in Durga Sec School, Bharma, Kuse RM



Participants with Pretest at Malutakura Sec School, Tamti, Kuse RM-04



Group discussion about red panda in open field due to earthquake damaged structures of Durga Sec School, Bharna, Kuse RM



Citizen Scientist Kiran Bahadur Singh with Students after School outreach activity at Shree Himalayan Basic School, Gothgaun, Barekot-04



Showcasing PSA "Habreko Gaun"



Citizen Scientist Dharendra Dhyar with Participants in Shree Himalayan Sec. School, Tallubagar, Nalagad



Citizen Scientist Dharendra Dhyar with Participants in Shree Tapobhumi Sec. School, Dhyargaun, Nalagad

Community Outreach Activities

Ten event of awareness building workshops were organized in Divisional Forests Office, Jajarkot, Divisional Forests Office, Jajarkot, Baniyagaun, Nalagad Municipality-11, Dhyargaun, Nalagad Municipality-10, Malutara, Kuse RM-08, Chalna Chaur, Kuse RM-08, Lathachuli, Kuse RM-08,

Bharma, Kuse RM-06, Dhottachaur Barekot RM-04, Tamtu Barekot RM-04, and Social Development office, Jajarkot. Altogether 206 local stakeholders were sensitized and motivated for the conservation of Red Panda including other wildlife like Himalayan Black Bear, Leopard through these workshops as illustrated in Table 7. Representatives from Forest Users group, mother groups, youth club, political, social activists, entrepreneurs, local hoteliers, and herders participated in the events. Group discussions techniques were used in awareness building activities. The conservation and awareness module were basically focused on sensitizing local people towards red panda conservation and other wildlife issues via lectures, Flex and PSA. The use of IEC materials during program may differ depending on where we are conducting program, whether resources like power is available to showcase PSA in that particular location or not.

Table 7: Meeting and Community Outreach Program with venue, date and number of participants

S.No	Community Outreach and Meeting Venue	Date	Number of Participants
1	Divisional Forests Office, Jajarkot	25 April, 2024	12
2	Baniyagaun, Nalagad Municipality-11	9 November, 2023	29
3	Dhyargaun, Nalagad Municipality-10	6 November, 2023	44
4	Dhottachaur CF, Barekot RM-04	3 May, 2024	18
5	Social Development Office, Jajarkot	5 May, 2024	24
6	Tamtu, Barekot RM-04	7 May, 2024	10
7	Chalna Chaur, Kuse RM-08	10 May, 2024	40
8	Malutara, Kuse RM-08	22 April, 2024	7
9	Lathachuli, Kuse RM-08	13 May, 2024	9
10	Bharma, Kuse RM-06	18 May, 2024	13
	Total		206

Table 8: Stakeholders Meetings and Community outreach activities



Group photo after Community outreach program at Bharma in Kuse RM



Community outreach program with hoteliers and herders at Dhottachaur



Citizen Scientist Kiran Raj Singh sharing his experiences encountering and taking photographs and video of red pandas with herders/ hoteliers after conservation awareness at Dhottachaur



Showcasing PSA “Habreko gaun” to community People at Tharpu in Kuse RM

Group photo after Community outreach program at Lagna in Berekot RM



Red Panda Conservation awareness program at Daha, Berekot-04



Photo shoot with herders/ hoteliers after conservation awareness at Dhottachaur



Showcasing PSA “Habreko gaun” to community People at Social Development Office, jajarkot



Discussion during Red Panda Conservation awareness program at Bharma, Kuse



Discussion during Red Panda Conservation awareness program at Dhyargaun, Nalagad

2.5 Discussion

The audio-visual programme was very popular among the masses as compared to previous practices. We found that the PSA, audio-visual programme and quiz competition were important tools for changing the behavior of the school children. Children, teachers and other local stakeholders were later on found to answer questions regarding red panda when revisited.

During this proposed yearlong project period we cover three Local Government of Jajarkot district. However, for long-term conservation of red panda and its habitat, we must facilitate sustained awareness drive in fringe villages of all potential habitats targeting mainly school children. Additionally, follow-up programmes will also be important in terms of the success of long-term impact of Red Panda including other wild mammals' conservation.

Section 3: Public Service Announcement Development

3.1 Background

Both the National as well as Local red panda conservation action plan has clearly identified inadequate awareness as an important conservation threat prevailing in the region. Hence, video development has been identified as an important activity that could have a greater impact to address the threats to red panda conservation. Videos containing wildlife are important pathways for highlighting wildlife and conservation science to a broad audience for educating on wildlife initiatives and have the potential to make a meaningful impact with emotional blending in linking different generations on future conservation.

Wildlife biologists, their relatives and video content creators can benefit from participating with and directly contributing to entertaining and educational digital media efforts beyond traditional means of scientific communication like posters, and booklets. We attempted the production of posters, story books in previous projects and get to know what general audiences have and how can we offer inspiration for their future endeavors. Video development and its broadcasting via social media help to deliver scientific content to a general audience, to those not able to participate in a conference setting, and to those without access to embargoed research. Social media can also deliver content in a more understandable (and enjoyable) way to the public, with links back to the original research. However, the use of social media data by much of the scientific community remains limited (Toivonen et al., 2019) especially with regards to conservation science (Wu et al., 2018). Examination of the types of ecological stories and visuals can provide conservation practitioners and policymakers an understanding of what interests a general audience and can offer inspiration for their future endeavors. Social media is an increasingly far-reaching but affordable communication channel (Casola et al., 2020). Hence, we plan paper-free tutoring with a broader reach via e-story book and video development and promotion via social media.

3.2 Objectives

To develop a Public Service Announcement (PSA) video to put a lighthearted spin on a serious red panda conservation issue.

3.3 Methods

As the part of awareness and outreach activities, an e-story book entitled “Habreko Gaun” has been drafted in association with Nepal Environmental Research Institute (NERI) funded by Rufford Foundation, UK, and Mohamed Bin Zayed Species Conservation Fund, Abu Dhabi, United Arab Emirates and based on same story book, animated PSA entitled “Habreko Gaun” was developed. A total of one female professional and two male professionals were deployed to draft design and produce story content, and sketch story characters accordingly and produce PSA. Concomitantly a total of 10 persons were involved in PSA with respective roles and responsibilities like story concept, writing, illustration, narration, voice over and editing.

Table 9: Name of persons involved in PSA with respective roles and responsibilities

S.No.	Name	Role and Responsibilities
1	Badri Baral	Story Concept, Writing and Editing
2	Upama Tamla Rai	Story Concept, Writing and Editing
3	Ganesh Bahadur Magar	Illustration, Voice over, Animation and Editing
4	Shailendra Sapkota	Story Narrator

5	Namuna Tamang	Voice over
6	Ayush Baral	Voice over
7	Sushmita Baral	Voice over
8	Prashiddha Baral	Voice over
9	Aayushma Baral	Voice over
10	Prabesh Baral	Voice over

3.4 Results

The e-story book and PSA had been developed in both Nepali Language and English Language for both the local and international readers. Habreko Gaun's Plot has been presented herein.

Habre ko Gaun Plot

The lives of a group of people who live in Hariyali gaun were good. They were happy. With the arrival of tourists, the villagers were making a lot of income by operating various goods and services-oriented businesses such as homestays, shops, guide, and souvenir shops. The village was more developed than other villages in terms of, infrastructure such as drinking water, health, education etc. After some time, the business was shattered, no tourist came to visit Hariyali gaun, it had already been six months that tourist left reaching their village. Parents were now unable to pay school bills of their children. Youths operating home stay business started leaving village with a hope to get visa of good country to work. Elderly Citizens, Children were left behind.

To address the issue, the village president organized a village meeting to identify the crisis they were all facing and also the possible solutions in the presence of various stakeholders such as elected government representatives, community forest committee representatives, homestay managers, youth club and child club representatives, tourism professionals, political party representatives and, teachers. They identified gradual decrease in the number of red panda and associated chances of observation in their village as prime cause of tourist decline as they used to reach there for red panda based-tourism, and research.

Habitat degradation and encroachment by herders and hoteliers to construct cowshed and hotels, traditional taboos of using its parts to ward off ghosts and bad spirit, lack of public awareness, and infrastructure development without environmental studies and research were identified as major causes for the decline of red pandas.

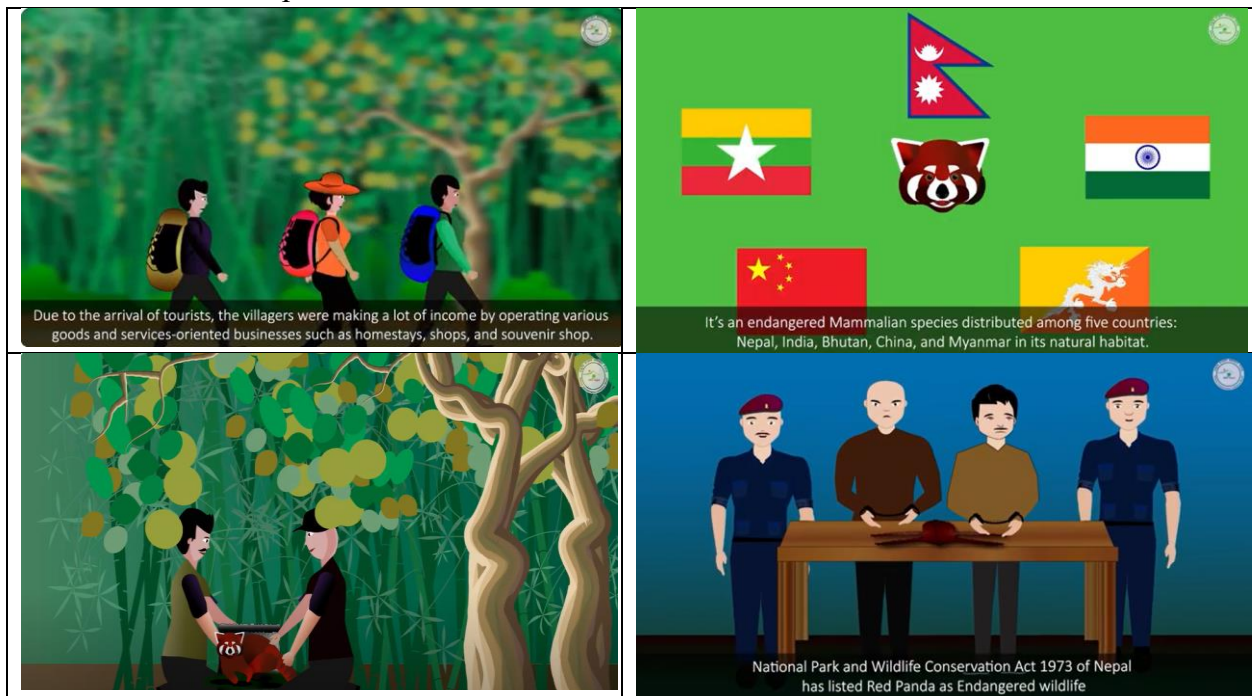
Identifying bottle necks, hotspots, priority areas and site-specific conservation threats, developing a local curriculum and teach about endangered wildlife., drafting red panda conservation chapter in forest operational plan and informing everyone about the provision and other regulations, promotion red panda conservation via naming as red panda Homestay, intergenerational traditional knowledge transfer to students in wildlife related issues, promotion of research on local flora and fauna and transferring research skills to students, infrastructures development only after research and environmental studies and collaboration and coordination with red panda including high altitude conservation partners, universities, researchers, increasing police patrols to fight against poaching and poachers were identified as key solutions to the problem that the hariyali gaun was facing.

Then the rural municipality and other stakeholders prepared a procedure for conducting a Brief Environmental Study and Initial Environmental Examination during the development process and conduct various programs for the protection of habre, endorsed Local Red Panda Conservation Action Plan, developed Local Red Panda Conservation Curriculum and conducted training to Citizen Scientists in collaboration with conservation partners.

Kanchi and Kshitiz, members of ecoclubs on the way home amid forests heard humming sounds of poachers while returning from meeting. They caught pictures and videos of poachers capturing red pandas and hurriedly complained with village president. They were skeptical; village president assured to keep their name confidential, mobilized police to arrest them and punished in accordance with law and acknowledged them for providing the information.

After about four years of hard work and effort, the arrival of domestic and foreign tourists gradually started to increase. A huge plantation program was organized as a celebration. After the return of red panda in their forest, Youths leaving village with a hope to get visa of good country to work returned to spend their life with family and friends. Last but not the least, they have developed their village as a model red panda habitat in any time zone and decided to transform the name “Hariyali Gau” into Habreko Gaun (Red Panda’s Village).

Table 10: Some Glimpses of PSA entitled “Habreko Gaun”





SECTION 4: Conservation impact

Our Programme to link citizen science to turn paper results into red panda conservation outputs in Jajarkot District, Karnali Province, Nepal has been highly appreciated as we had reached out to the community surrounding red panda habitat. There was active participation in preparation in community outreach, school outreach and red panda including other species' habitat survey and monitoring. Concomitantly, we have conducted ten events of Community outreach despite of proposed six and directly reached 206 community people. Similarly, we reached out to eight schools instead of proposed four schools at least over three hundred seventy-nine adults directly; however, it is difficult to quantify the impact of IEC materials like PSA and story book. But the students were highly motivated to convey the messages regarding red panda conservation. We trained a total of nine citizen Scientists and mobilize them during field work for camera trap installation. Red panda has been taken as a subject of pride by citizens of Barekot RM, Kuse RM and Nalagad Municipality, Jajarkot it has become a flagship species for the area. The programme has been so successful that the Community people from nearby RM, Junichande RM of Jajarkot and Naumule RM of Dailekh is now demanding for red panda conservation activities in their communities as well.

Section 5: Future goals

- Publications
- Further capacity building of stakeholders
- Expansion of conservation intervention based on research findings

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Annex

Table 11: Permission, major agreement and MoU signing

20-July-2023	Agreement with Barekot RM, Jajarkot
29-September-2023	Agreement with Kuse RM, Jajarkot
27-September-2023	Agreement with Nalagad Municipality, Jajarkot
10-November-2023	Agreement with Social Welfare Council (SWC)
21-April-2024	Permission from Department of Forests and Soil Conservation
25-April-2024	Permission from Division Forests Office, Jajarkot

Table 12: Recommendation Letter from Respective Rural Municipality



नलगाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
दिल्ली, जाजरकोट
कर्णाली प्रदेश, नेपाल
२०७३

पत्र संख्या:- २०८०/०८१
च.नं. २२५२

मिति: २०८१/०२/२२

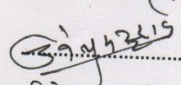
विषय:- श्रमिक खटाईएको सम्बन्धमा ।

श्री प्रकृति संरक्षण अभियान नेपाल
गोकर्णेश्वर नगरपालिका-०५, काठमाण्डौ ।

प्रस्तुत सम्बन्धमा तहाँ कार्यालयको च नं ३७ मिति २०८१।०१।२२ गतेको प्राप्त पत्रानुसार नलगाड नगरपालिकाका विभिन्न जंगलहरुमा वन, वन्यजन्तु संरक्षण र अनुसन्धान कार्य संचालन गरेकाले उक्त कार्यमा सहयोग गर्न विभिन्न समयमा गरी जम्मा २० दिनका लागि देहायका उल्लेखित दुई जना नलगाड नगरपालिका अन्तरगत रोजगार सेवा केन्द्रमा सुचिकृत बेरोजगार, १ जना वन जंगलहरु घुमेको अनुभवी श्रमिकहरुलाई आर्थिक व्ययभार श्री प्रकृति संरक्षण अभियान नेपालबाट व्यहोने गरि खटाईएको व्यहोरा अनुरोध छ । साथै तहाँ संस्थाद्वारा उक्त कार्यको प्रारम्भिक कार्य भई सकेको व्यहोरा समेत अनुरोध छ ।

देहाय:

क्र.स.	श्रमिकको नाम	ठेगाना	खटाईएको क्षेत्र	कैफियत
१	धिरेन्द्र ध्यार	नलगाड-१०	वन जंगल सम्बन्धि अनुभव	
२	राजेन्द्र ध्यार	नलगाड-१०	बेरोजगार सूचिबाट	
३	अभिनास ध्यार	नलगाड-१०	बेरोजगार सूचिबाट	



दिनेश भट्टराई
प्रमुख प्रशासकीय अधिकृत
दिनेश भट्टराई
प्रमुख प्रशासकीय अधिकृत

"समृद्ध र सफा नगर, दिगो विकास र सुशासनको शहर"

फोन नं.- ९८५८०२३३६३, ईमेल:- ito.nalgaadmun@gmail.com, Web Site:- www.tribeninalgaadmun.gov.np



बारेकोट गाउँपालिका
गाउँ कार्यपालिकाको कार्यालय

रोजगार सेवा केन्द्र
लिम्सा जाजरकोट
कर्णाली प्रदेश नेपाल

9858080815

barekotrm@gmail.com

बारेकोट गाउँपालिका

website: www.barekotmun.gov.np

प.सं. :- २०८०/०८१

च. नं. :- २२५५



मिति २०८१/०२/१६

विषय: श्रमिक खटाइएको सम्बन्धमा ।

श्री प्रकृति संरक्षण अभियान नेपाल,
गोकर्णेश्वर न. पा. ०५ काठमाण्डौ,
नेपाल।

प्रस्तुत विषयमा तहाँ संस्थाबाट बारेकोट गाउँपालिकाका वडा नं ४ र ६ का विभिन्न जंगलहरुमा वन वन्यजन्तु संरक्षण र अनुसन्धान कार्य सञ्चालन गरेकाले उक्त कार्यमा सहयोग गर्न विभिन्न समयमा गरि जम्मा २० दिनका लागि तपिशलमा उल्लेखित दुई जना बारेकोट गाउँपालिका अन्तरगत रोजगार सेवा केन्द्रमा सुचिकृत बेरोजगार दुई जना वन जंगलहरु घुमेका अनुभवी श्रमिकहरुलाई आर्थिक व्ययभार श्री प्रकृति संरक्षण अभियान नेपालबाट व्यहोरिने गरि खटाइएको व्यहोरा अनुरोध छ । साथै तहाँ संस्थाद्वारा उक्त कार्यको प्रारम्भिका कार्य भइ सकेको व्यहोरा समेत अनुरोध छ ।
तपशिल

क्र सं	श्रमिकको नाम	ठेगाना	खटाइएको क्षेत्र	कैफियत
१	जनक बहादुर सिंह	बारेकोट ४	बेरोजगार सूचिबाट	
२	राजेन्द्र सिंह	बारेकोट ४	बेरोजगार सूचिबाट	
३	जय बहादुर सिंह	बारेकोट ५	वन जंगल सम्बन्धी अनुभवी	
४	किरण बहादुर सिंह	बारेकोट ४	वन जंगल सम्बन्धी अनुभवी	

(खगेन्द्र बहादुर बन्धारी)
रोजगार संयोजक

स्वच्छ स्वस्थ एवं समृद्ध बारेकोट निर्माण - गरिवी निवारण रोजगारी सृजना उत्पादन वृद्धिमा हाम्रो अभियान

URL: <https://www.barekotmun.gov.np>

Mail: info@barekotmun.gov.np



कुशे गाउँपालिका
Kushe Rural Municipality
गाउँ कार्यपालिकाको कार्यालय
Office of the Rural Municipal Executive
थर्पु भार्मा, जाजरकोट
Tharpu Bharna, Jajarkot



पत्र संख्या : २०८०१०८१
व.नं. १३२२

कर्णाली प्रदेश, नेपाल
Karnali Province, Nepal

मिति: २०८०/०२/०६

श्री प्रकृति संरक्षण अभियान नेपाल,
गोकर्णेश्वर ५, काठमाडौं ।

विषय: प्रारम्भिक कार्य सम्पन्न गरीएको सम्बन्धमा ।

प्रस्तुत विषयमा मिति २०८०/०६/१२ गते यस पालिका भित्रका विभिन्न क्षेत्रहरूमा हात्रे संरक्षण सम्बन्धि परियोजना सञ्चालनका लागि अनुमति दिईए अनुसार रुफोर्ड फाउण्डेनको आर्थिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले यस पालिकामा खटिएका तपसिलका कर्मचारीले प्रारम्भिक कार्य सम्पन्न भएको सिफारीस पाउँ भनि आफ्नो प्रतिवेदन सहितको निवेदन दिए अनुसार हात्रे पहिचानका लागि लार्ताचुलीमा ५ वटा, रातापाटनमा ३ वटा, व्याउली दुङ्गामा ४ वटा, पाथिभरामा २ वटा गरी जम्मा १४ वटा क्यामेरा ट्याप (Camera Trap) राखिएको साथै नागरिक अन्वेषण तालिम, विद्यालय स्तरीय जनचेतना, सामाजिक सचेतना कार्यक्रम सञ्चालन गरी आफ्नो उद्देश्य पुरा गरी प्रारम्भिक कार्य सम्पन्न भएको भनि सिफारीस गरिन्छ ।

तपसिल:

क्र.सं	नाम	पद	कैफियत
१	बद्री बराल	कार्यक्रम संयोजक	
२	रमेश कठरिया	फिल्ड अफिसर	
३	मोतिराम नेपाली	नागरिक अन्वेषक	
४	जागृति शाही	नागरिक अन्वेषक	


कृष्ण बहादुर शाही
निमित्त प्रमुख प्रशासकीय अधिकृत

"सुन्दर शान्त र समृद्ध टाउँ कुशे गाउँपालिकाको शान्त
विकासका पूर्वाधार निर्माण गर्ने हाम्रो अभियान"

ईमेल: kusheruralmunicipality@gmail.com, वेबसाइट: <http://www.kushemun.gov.np>

Table 13: Recommendation Letter from Schools

विद्यालय कोड नं. ६१००७०००४

मो. नं.: ९७६८०४४२७२, ९७६८०५१७३१

Email : durgadevimavi2032@gmail.com



श्री दुर्गा देवी माध्यमिक विद्यालय

कुशे गाउँपालिका-६ भार्म जाजरकोट



SHREE DURGADEVI SECONDARY SCHOOL

Kushe Rural Municipality-6 Bharma, Jajarkot

Estd : 2032

पत्र संख्या:- २०८०/०८१

चलनी नं.:- १२८

मिति: २०८१/०१/२५ गते

श्री प्रकृति संरक्षण अभियान नेपाल
गोकर्णेश्वर, ५ काठमाण्डौ ।

विषय:- सिफारिस सम्बन्धमा ।

उपरोक्त सम्बन्धमा रफोड फाउन्डेसनको आर्थिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले यस जाजरकोट जिल्ला कुशे गाउँपालिका स्थित श्री दुर्गा देवी माध्यमिक विद्यालय भार्म कुशे - ६ जाजरकोटमा आज मिति २०८१/०१/२५ गतेका दिन टोलि लिडर वद्री वराल, सदस्य रमेश कठरिया, जीवन राई, दिपक राज वस्नेत तथा नागरिक अन्वेषक जागृति शाही, र मोतिराम नेपाली आई यस विद्यालयका कक्षा ९,१० का विद्यार्थीहरूलाई हात्रे संरक्षण सम्बन्धी क्रियाकलाप तथा जनचेतनामुलक कार्यक्रम सञ्चालन गरी सम्पन्न भएको व्यहोरा अनुरोध गरिन्छ ।


प्रधानाध्यापक
हेमन्त बँहोदुर सिंह

९७४८०४९३८२

SEE कोड नं.०५६

कोड नं. ६१०१९०००६



श्री सरस्वती माध्यमिक विद्यालय

कुशे गाउँपालिका-८ रिजापहाडा, जाजरकोट



पत्र संख्या:- ०८०/८५७

चलानी नं:- ४३


स्था. २०२४

मिति:- २०७१/०१/१५

विषय:- विफारिस सम्बन्धमा

श्री प्रकृति खरसुण अभियान नेपाल
गोकर्णेश्वर, ५ काठमाडौं ।

उपरोक्त सम्बन्धमा रफोर्ड फाउन्डेसनको आर्थिक सहयोगमा प्रकृति खरसुण अभियान नेपालले यस जाजरकोट जिल्ला कुशे गाउँपालिका स्थित श्री सरस्वती मा वि स्थापना गरी कुशे-८ जाजरकोटमा आज मिति २०७१/०१/१५ गतेको दिन येल्ले लिडर बद्रिलाल, सदस्य रमेश कर्णिया, जीवन राइ, दिपक राज कल्लेव तथा नागाछि अन्वेषक जाड्गीव शाही, र प्रोत्तिवम नेपाली आइ यस विद्यालयका कक्षा ५, ३, १० का विद्यार्थीहरूलाई हावे खरसुण अभियान तथा उत्तमचेतनाशुलभ कार्यक्रम संचालन गरी सम्पन्न भएको गणना अनुसन्धान गर्दछ ।


प्रधानाध्यापक
केशव राज जाजरकोट



श्री मालटाकुरा माध्यमिक विद्यालय

SHREE MALTAKURA SECONDARY SCHOOL

कुशे गाउँपालिका, ताम्ती, जाजरकोट
Kushe Rural Municipality, 04 Tamti, Jajarkot
स्था. - २०४४

P.N.-117449545
IEMIS Cod: 610010002
SEE Cod : 64051
NEB Cod: 61033

प.सं. : २०८०/०८१

च.नं. ८१

श्री प्रकृति संरक्षण अभियान नेपाल
गोकर्णेश्वर, ५ काठमाण्डौ ।

विषय: रेडपाण्डा सम्बन्धि विद्यालय स्तरीय जनचेतनामुलक
कार्यक्रम सम्पन्न गरीएको बारे ।

उपरोक्त सम्बन्धमा रफोड फान्डेसनको आर्थिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले यस जाजरकोट जिल्ला कुशे गाउँपालिका स्थित श्री मालटाकुरा मा. वि.कुशे, ४ तम्लि जाजरकोटमा आज मिति २०८१/०२/०६ गतेका दिन टोलि लिडर वद्री वराल, सदस्य रमेश कठरिया, जीवन राई, दिपक राज वस्नेत तथा नागरिक अन्वेषक जागृति शाही, र मोतिराम नेपाली आई यस विद्यालयका कक्षा ८, ९ र १० का विद्यार्थीहरुलाई हात्रे संरक्षण सम्बन्धि क्रियाकलाप तथा जनचेतनामुलक कार्यक्रम सञ्चालन गरी सम्पन्न भएको व्यहोरा अनुरोध गरिन्छ ।

काली बहादुर शाही
प्रधानाध्यापक



श्री तपोभूमि माध्यामिक विद्यालय,



नलगाड नगरपालिका धरारगाऊँ जाजरकोट

पत्र संख्या :- ०८०/८१

स्था. २०२५

मिति :- २०.०८.१९

चलानी नम्बर :- ११

विषय :- सिफारिस सम्बन्धमा ।

श्री. अशोक श्रेष्ठ

उपरोक्त सम्बन्धमा सुर्जित फाउन्डेसनको प्राथिक सहयोगमा प्रकृति संरक्षण अभियान नेपालको जाजरकोट जिल्लाको कुसे बारीकोट गाउँपालिका र यससँग विद्या जीविका नलगाड न.पा.का विभिन्न क्षेत्रमा हाम्रो संरक्षण सम्बन्धि अनुसन्धान समूहको केन्द्रित चेतनामूलक कार्यक्रमहरू तथा समुदायको सक्रिय सहभागितामा हाम्रो संरक्षण अभियानलाई विशेष प्राथमिकताका साथ संचालन गर्ने वातावरणको विकास गर्ने लक्ष्यका साथै हाम्रो संरक्षण कार्ययोजना तथा गरी यस नगरपालिकाका विभिन्न संरक्षणका कार्यक्रमहरू संचालन गर्ने क्रममा यस विद्यालयमा दोस्रो संस्थाका लागि अनुभवको श्री धिरेंद्र श्याम, श्री राहु श्याम, श्री अविताश श्याम विद्यालय केन्द्रित हाम्रो संरक्षण ईको क्लब गठन र चेतनामूलक कार्यक्रमहरू संचालन गणिका सिफारिस गरिएको छ ।

Bipana Shrestha
Bipana Shrestha
 Headteacher

श्री वीरेन्द्र हिमालय माध्यमिक विद्यालय

नलगाड नगरपालिका १२- तल्लु, जाजरकोट
कर्णाली प्रदेश, नेपाल
स्थापित: २०१७



Shree Birendra Himalaya secondary school

Nalgad Municipality -12, Tallu, Jajarkot
Karnali Province, Nepal
Estd. 2017

(सामुदायिक विद्यालयमा प्राविधिक शिक्षा कार्यक्रम)

Technical Education in Community in School (TECS) Program

पत्र संख्या :- २०७९/०८०

मिति :- २०८०/०६/२५

चलानी नं.:- ३६

सिफारिस सम्बन्धमा

महोदय,

उपरोक्त सम्बन्धमा रुफोड फाउन्डेशनको आर्थिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले जाजरकोट जिल्लाको कुशे, वारेकोट गाउँपालिका र यस संग सिमा जोडिएका नलगाड नगरपालिका विभिन्न क्षेत्रमा हाब्रे संरक्षण सम्बन्धि अनुसन्धान, समुदाय केन्द्रित चेतना मुलक कार्यक्रमहरु तथा समुदायको सक्रिय सहभागिता हाब्रे संरक्षणका क्रियाकलापलाई विशेष प्राथमिकताका साथ संचालन गर्ने वातावरणको विकास गर्न स्थानिय हाब्रे संरक्षण कार्ययोजना तयार गरी यस नगरपालिकामा विभिन्न संरक्षणका कार्यक्रमहरु संचालन गर्ने क्रममा यस विद्यालयमा सो सस्थाका स्थानिय नागरिक श्री धिरेन्द्र ध्यार ले विद्यालय केन्द्रित हाब्रे संरक्षण ईको क्लब गठन र चेतनामुलक कार्यक्रमहरु संचालन गरी हाल ती का सम्पन्न भएको व्यहोरा यसै पत्र साथ सिफारिस गर्दछु।

चन्द्र बहादुर के.सी.
प्रधानाध्यापक

चन्द्र बहादुर के.सी.
प्रधानाध्यापक



श्री जन विकास आधारभुत विद्यालय
नलगाड नगरपालिका १० शिवतगाउँ जाजरकोट
कर्णाली प्रदेश, नेपाल
स्था: २०३२

पत्र सं ०८०/८१
च.नं. - ४०

मिति २०८०/०७/२४

श्री. प्रकृति संरक्षण अभियान नेपाल,

विषय: सिफारिस सम्बन्धमा ।

प्रस्तुत विषय सम्बन्धमा रुफोड फाउन्डेशनको आर्थिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले जाजरकोट जिल्लाको कुसे, बारेको गाउँपालिका २ यससँग सिमाजोडिएको नलगाड नगरपालिका विभिन्न क्षेत्रमा हात्रे संरक्षण सम्बन्धि अनुसन्धान समुदाय केन्द्रित चेतनामुलक कार्यक्रमहरु तथा समुदायको सक्रिय सहभागिताका हात्रे संरक्षणका क्रियाकलापलाई विशेष प्राथमिकताका साथ संचालन गर्ने वातावरणको विकास गर्न स्थानिय हात्रे संरक्षण आयोजना तयार गरी यस नगरपालिका विभिन्न संरक्षणका कार्यक्रमहरु सञ्चालन गर्ने क्रममा यस विद्यालयमा सो संस्थाका स्थानिय नागरिक अन्वेषक श्री धिरेन्द्र ध्यारले विद्यालय केन्द्रित हात्रे संरक्षण ईको क्लव गठन र चेतनामुलक कार्यक्रमहरु स.सञ्चालन गरी हाल ती काम सम्पन्न भएको व्याहोरा यसै चलानीका साथ अनुरोध गर्दछु ।

श्रीधर पाण्डे
प्रधानाध्यापक
शर बहादुर थापा
शर बहादुर
प्रधानाध्यापक



श्री हिमालय आधारभुत विद्यालय

बारेकोट ४ गोठगाउँ जाजरकोट

वि कोड नं ६१०१८०००१

पत्र संख्या:-०८०।०८१

चलानी:- १०



himalayaschool4@gmail.com

मिति : २०८१/०५/२६

श्री श्री जय श्री सम्बन्धित छ ।

प्रस्तुत विषय सम्बन्धमा रुफोर्ड फाउण्डेशनको द्वार्षिक सहयोगमा प्रकृति संरक्षण अभियान नेपालले जाजरकोट जिल्लाको बारेकोट गाउँपालिका र यससँग सिमाना जोडिएको नलगाड नगरपालिकाका विभिन्न क्षेत्रमा हाम्रो संरक्षण सम्बन्धि छान्वसन्धान शुरुवाप तथा विद्यालय केन्द्रित चैतनाश्रुलक कार्यक्रमहरू तथा समुदायको सक्रिय सहभागितामा हाम्रो संरक्षणको कार्ययोजना तयार गरी सो संस्थाको प्रतिनिधिहरू बढी बराला जीवन राई, दिपकराम बस्नेतले स्थानीय नागरिक पुनर्वैशाख श्री किरावहाइर सिंह लगायत जनक बहाइर सिंह जयबहाइर सिंह र राजेन्द्र सिंहलाई हाम्रो लगायतका प्रशका बासस्थानमा पाईने झरप बन्धनहरूको शुरुवालीत क्याम्पको प्रयोग गरी अध्ययन र बासस्थानको झरपगमन विधि सम्बन्धि तालिम पिरको र तालिम प्रप्रचात श्री किरा बहाइर सिंहले विद्यालय केन्द्रित चैतनाश्रुलक कार्यक्रमहरू सञ्चालन गरी ती काम सम्पन्न भएको व्यहोरा प्रशका साथ झररोच छ ।

Handwritten signature
 देवकाभर सिंह
 प्रधानाचार्य