MICROHABITAT ASSESSMENT AND COMMUNITY CONSERVATION AWARENESS FOR CHEER PHEASANT IN MYAGDI DISTRICT, NEPAL

A Final Report

Submitted to

Institute of Science and Technology, Tribhuvan University, Kirtipur, Kathmandu, Nepal

Submitted by

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May 2024

DECLARATION

This final report, titled **"Microhabitat Assessment and Community Conservation Awareness for Cheer Pheasant in Myagdi District, Nepal,"** marks the culmination of my research journey within the framework of the research project requirements at the Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal. The invaluable guidance provided by Dr. Bishnu Prasad Bhattrai in the Department of Zoology at IoST, T.U., Nepal, has significantly contributed to the depth and quality of this study. In addition to assessing microhabitats crucial for the survival of the Cheer Pheasant, this report delves into the community's awareness and engagement in conservation efforts. Through field observations, data analysis, and community interactions, a comprehensive understanding of the conservation status and challenges faced by the Cheer Pheasant population in Myagdi District has been achieved. It is important to note that the findings and insights presented in this report are entirely original, having not been previously submitted in any form to any other university or institute. This work aims to contribute meaningfully to the conservation discourse, advocating for sustainable practices and heightened awareness among stakeholders towards the protection of biodiversity in Nepal.

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Signature

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17/May /2024

RECOMMENDATION

I would like to endorse Mr. Keshab Chokhal for his exemplary work in completing the final report titled **"Microhabitat Assessment and Community Conservation Awareness for Cheer Pheasant in Myagdi District, Nepal"** under my mentorship. As far as my knowledge extends, this report has not been submitted to any other institution, showcasing Mr. Chokhal's dedication and adherence to academic integrity. Throughout the process, Mr. Chokhal has met all the requirements set forth by the Institute of Science and Technology (IoST), Tribhuvan University (T.U.), demonstrating his comprehensive understanding of the subject matter and his ability to carry out rigorous research in the field of conservation biology. His work not only assesses microhabitats critical for the Cheer Pheasant's survival but also delves into raising community awareness for conservation efforts, reflecting a holistic approach to wildlife conservation. I wholeheartedly recommend Mr. Keshab Chokhal for his commendable efforts and the quality of work presented in this final report, which contributes significantly to the conservation discourse in Nepal.

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I extend my heartfelt thanks to all the dedicated teachers, staff, and friends at the Central Department of Zoology. I want to give special recognition to my field assistants, including Mr. Biplop Baniya, Mr. Sher Bahadhur Paija, Mr. Harka Bahadhur B.K, and Mr. Bir Bahadhur Gharti, for their invaluable contributions. I extend my profound gratitude to Mr. Laxman Poudyal for his encouragement and support during my field study. Furthermore, I express my thanks to my family members and relatives for their continuous support and encouragement in my academic pursuits.

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ABSTRACT

The Cheer Pheasant is endemic species to the foothills of the Western Himalayas. In January 2024, a survey was carried out across forty-three sites in the Myagdi district to study its microhabitat preferences and start a conservation awareness campaign. Data collection utilized direct observation methods, while the awareness program featured slide presentations. The survey findings revealed affirmative regression between the presence of Cheer Pheasants and the plentiful availability of herbs (0.019 *, $P<0.05$), ground cover (0.051˙, $P<0.05$), and gravel (0.064˙, $P<0.05$). Conversely, it was negatively impacted by the number of trees (-0.164, $P>0.05$). Camera traps have employed to detect Cheer presence; although species was not captured, other wildlife species were successfully recorded.

Habitat disturbance was primarily caused by fire (68%) and road construction (20%), with poaching/snaring (6%) playing a minor role but increasing steadily across study sites. A community conservation awareness program was conducted at Jyoti Primary School, Sida Santi Secondary School, and Dipshika Secondary School, involving a total of 70 participants. Drawing competitions were held among intra-class and inter-class students to promote Cheer Pheasant conservation in the study areas. The collaboration between the head teacher and the school management committee facilitated the distribution of prizes for the winners of the drawing competition. Continuous conservation monitoring and raising awareness among local communities are crucial for the conservation of Cheer Pheasants in the Myagdi district.

INTRODUCTION

1.1 Background

The scientific name "Cheer" was bestowed by the British Botanist Nathaniel Wallich, identifying it as Wallich's Pheasant. Cheer is an only one species under the genus Caterus (Del Hoyo *et al*. 1994) and is an indigenous bird of the Midwestern Himalayas (Grimmet *et al*. 1991). This species is globally distributed in Nepal, India and Pakisthan from West of Kaligandaki River to Hazara district Pakisthan. Beyond Nepal, Cheer pheasants are globally reported in Pakistan, India, and Nepal (Birdlife International 2017). The Dhorpatan Hunting Reserve is a hotspot region for the conservation of Cheer pheasants globally, serving as the primary area within its range (Gatson and Baral 2007). Breeding populations have been reported in the Dhorpatan Hunting Reserve, Muri, and Dana Myagdi (Subedi 2003; Basnet 2016; Singh *et al*. 2011; BirdLife International 2015). Calls were recorded in Ghansa Mustang (Inskipp *et al.* 2003; Aacharya 2006), and sightings were reported in Rara National Park (Budathapa 2006; Singh and KC 2008), Simikot, Humla (Ghimirre 2011), and Apinampa Conservation Area (Thaakuri and Prajapati 2012). Local reports also mention sightings in far-western Nepal, including Batitadi, Bajura, Acchham, Dolpa, and Doti. In Pakistan, sightings include Jhelum Valley, Azad Kashmir, Nandi Valley, Muzaffarabad district, Jhelum Valley, and Machira National Park (Omaston 1927; Burt 1988; Roberts 1991; Awan *et al.* 2004). In India, calls were heard in Kugrti near Budhalnalla (Gaston *et al*. 1981), and small resident populations were observed around Wachhum village in March and June (Young *et al.* 1987). Female Cheers build nests on the ground, typically concealed under rocks, overhanging vegetation, or grassy bushes (Baker 1930).

Physically, the female Cheer measures 60-70 cm, while the male is slightly larger, ranging from 90-118 cm (BCN 2017). Distinguished by its long tail, buff-barred coloration, red facial skin, and broadly banded tail, the Cheer pheasant is visually striking. Male and female features are easily discernible, with males exhibiting a pale-grayish color under the throats, heavily buff-barred necks, black mantels, and irregular long buff-barred bands on the breast. The male's tail is broad, long, and white-banded (Grimmett *et al.* 1998). The loud and indifferent calling of Cheer Pheasant is a "Chir-a-Pir, Chir-a-Pir, Chir, Chirwa-Chirwa" (Ali and Ripley 1987; BCN 2017).

Steep grassland habitat with a scattered tree and dense herbs vegetation is major habitat of Cheer Pheasant (Chokhal *et al.* 2020). In terms of habitat, Cheer pheasants are gregarious terrestrial birds, forming flocks of 5-15 individuals (Bist *et al*. 2003). They exhibit a preference for tall grasses, steep terrain, and stunted trees, favoring mixed vegetation near human settlements on northeastern slopes. Notably, they avoid dense forests and high, steep terrain, with sightings recorded in areas with high grass, ground cover, and low canopy cover forest (Awan *et al.* 2004).

Cheer pheasants typically inhabit slopes with a 70-85 degree angle, 80% forest cover, 65% shrubs, and 90% long grass (Awan *et al*. 2004). Their diet includes roots, tubers, seeds, berries, larvae (Ali and Ripley 1987). Unlike other Galliformes, they exhibit less seasonal movement (Ali and Ripley 1968; Inskipp and Inskipp 1991). Fire, grazing, poaching and habitat encroachment are major threats of Cheer Pheasants. Recognized as a protected species among the eight pheasants in Nepal (HMGN 1987), the Cheer pheasant is nationally endangered and globally vulnerable according to CITES (I) classification (BCN 2017).

Despite their presence in Myagdi district, there is a noticeable absence of consistent research focused on Cheer pheasants. Studying Cheers is vital for ecotourism development and genetic protection, as their population is declining due to anthropogenic activities and habitat destruction. A conservation gap exists between protected and non-protected areas, with Cheers receiving some protection within Conservation Areas. Since they are located close to human settlements and rely partially on traditional agricultural landscapes, surveys should focus on areas beyond Protected Areas where human-induced threats are more pronounced.

1.2 Objectives of study

With an aim to collect baseline information of Cheer pheasant found in Myagdi district.

1.2.1. General objective

To assess the microhabitat and community conservation awareness for Cheer pheasant in Myagdi district, Nepal.

1.2.2 Specific objectives

- To examine the micro-habitat in a Myagdi district.
- To conduct the community conservation awareness in a Myagdi district.

2. LITERATURE REVIEW

Numerous studies have delved into the distribution and habitat preferences of the Cheer Pheasant, although much of this research has been exploratory in nature. For instance, in the Athazar Parbat Region of Nepal (Lelliot 1981) identified Cheer Pheasants in north and south-facing aspects, spanning altitudes from 1400 to 3000 meters. Similarly, in Muri Myagdi, (Singh *et al*. 2011) noted their presence for north- and east-facing slopes at elevations ranging from 1700 to 3200 meters. In the Dhorpatan Hunting Reserve, (Basnet 2014) observed Cheer Pheasants primarily on south, south-east, and north-facing aspects at altitudes of 2844-3005 meters with slopes ranging from 0 to 400. They tended to favor rocky terrain with craggy hillsides, along with mixed vegetation comprising grasses and shrubs (Lelliot 1981; Subedi, 2003). A similar habitat preference was seen in Rara National Park, characterized by mixed vegetation including long grass, steep terrain, scattered trees, shrubs, and herbs by (Singh and K.C. 2008; Thakuri 2013). Interestingly, present of Cheer Pheasant in various regions showed correlations with specific environmental factors. In Muri Myagdi, their presence was inversely related to canopy cover but less connected to grass canopy cover (Singh *et al*. 2006). Conversely, in the Dhorpatan Hunting Reserve, their occupancy was positively linked to the availability of water resources (Basnet 2014). Outside of Nepal, Cheer Pheasants were also documented in different habitats. In the Western Himalayan foothills, they favored elevations ranging from 1200 to 3050 meters and 1850 to 2750 meters (Baker 1930). In India, habitats varied from south-facing slopes in Chail Wildlife Sanctuary (Akthar *et al*. 2004) to southwest and northeast aspects in the Great Himalaya National Park (Shah 2004; Iftikhar *et al.* 2017) identified northeastern and southeastern slopes as significant habitats for the species. Despite their adaptability, Cheer Pheasants face numerous threats across their range. In Nepal, these include poaching, overgrazing, forest fires, habitat fragmentation, wood harvesting, and egg gathering (Basnet 2014). Similarly, in the Indian Himalaya, snaring and poaching pose significant risks to the species (Baker 1930). These challenges highlight the importance of ongoing conservation efforts to safeguard the Cheer Pheasant population

3. MATERIALS AND METHODS

3. 1. Study Area

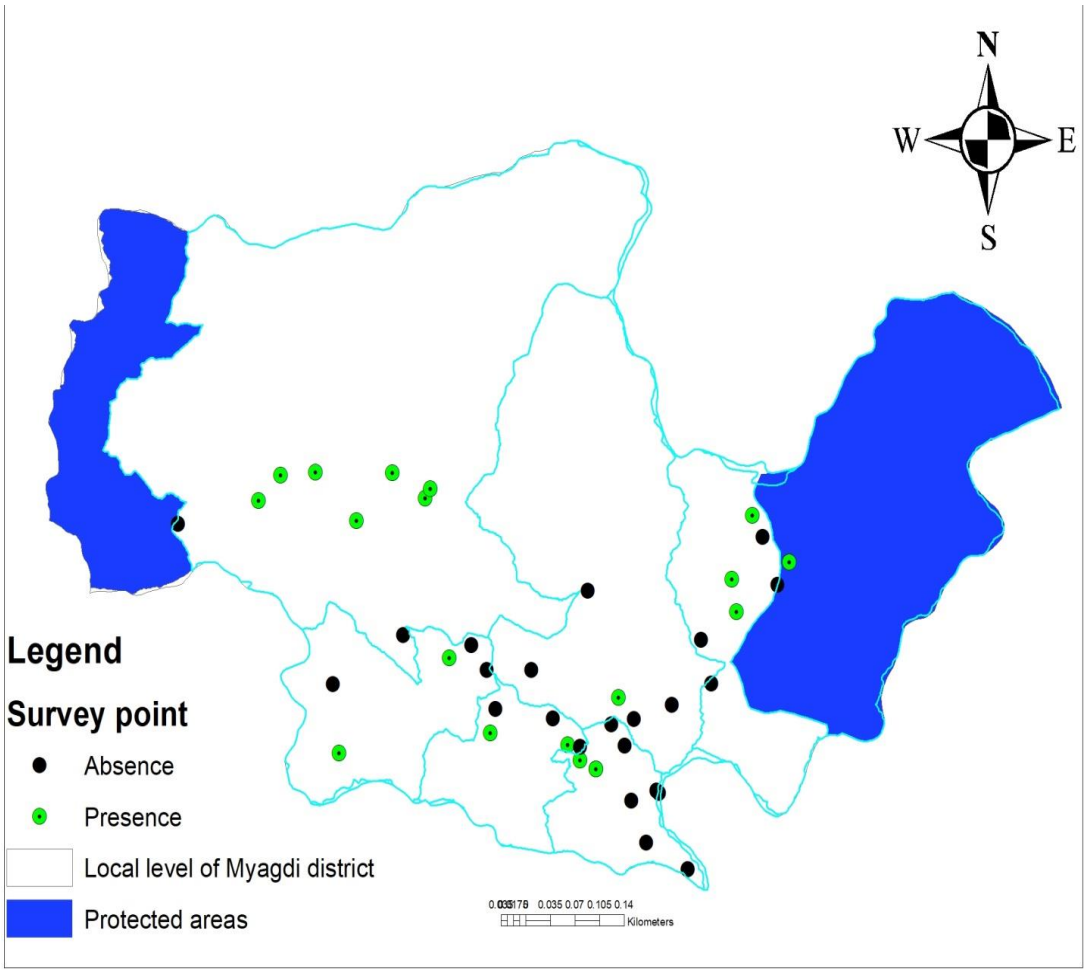

Figure 1: Present/absent of Cheer Pheasant

Myagdi district is divided into three river basins: MyagdiKhola, Raguganga River, and Kaligandagi River. The research focused on seven Village Development Committees (VDCs) in Myagdi district – Muna (28.51170204 and 83.32561598), Mudi (28.51411703 and 83.34538998), Hidi (28.3951 and 83.65768), Daduwa (28.38903699 and 83.49451904), Tatopani (28.493273 and 83.63538598), Dana (28.56255102 and 83.63318103) and Kuhu. Among these, Kuhu, Daduwa, Muna, Hidi, Mudi, Thaibang, Chaurakhani are VDCs adjacent to the Myagdi River, while Dana and Tatopani border the Kaligandagi River. Myagdi district boasts rich biodiversity, with various flora and fauna diversifying across its altitudinal gradient. These include mixed broadleaves and conifers, *Pinus roxburgai*, Utis *Alnus nepalensis*, (*Pinus wallichlli*, *Rhododendron spp*. and *Betula utilis* at higher altitudes whereas grassland is growing on some steep slopes and bamboo is found in gullies (DFO 2016). Myagdi district provides habitat for several vertebrate and

invertebrate fauna, such as *Pseudoius nayar*, *Naemorhedus goral*, *Hemitragus jemlahicus*, *Ursus thibetanus*, *Muntiacus muntjak*, *Panthera pardus*, *Moschus chrystogaster* and *Unci auncia*, Lower Kaligandagi is the only known area in Nepal where all six Himalayan Pheasant species, including *Catreus wallichii, Tragopa satyra, Ithaginis cruentus, Pucrasia macroloph, Lophophorus impejanus,* and *Lophura leucomelanos*, are reported. Various bird species are also found in this study area (DFO 2010). Gurja, Mudi, Kuinemangale, and Chimkhola are located within the purposive Dhaulagiri Conservation Area (Subedi and Subedi 2016). The main sites of the study area are Myagdi, Kali, and Raguganga river sites. In this intensive study area, four local parliaments are situated within the six local municipalities and Rural Municipality. Conservation awareness programs were conducted in three schools in Myagdi district: Shree Jyoti Primary School in Daduwa, Dipishika Secondary School in Kuhu, and Siddha Shanti Secondary School.

3.2 Materials

- Densitometer
- Infra –Thermometer
- Laptop
- Mini projector
- Measuring tape
- Field guide book
- Topographic map (1:50000)

3.2. Research design

A study's design with a total size of the research area of 3147.42 km2 in Myagdi districts, the survey procedure was created utilizing five separate sampling sites with a 5*5km^2 divided into 55 km2 grids. A literature review and preliminary investigation identified prospective habitat regions, and 43 calling sites were generated using Arc GIS 10.1. Based on the potential areas and literature review, field surveys were chosen from each location. Detailed project plans were developed, and necessary information was gathered to facilitate the research and conservation awareness activities on the Cheer Pheasant in Myagdi district during January 2024.

3.3. Methods: Several techniques were employed for the study:

3.4.1. **Preliminary Survey**

A pre-field study survey were done by using the direct interview with a local people and literature review were done from related journal book and secondary sources of review materials.

3.4.2. **Acoustic Survey**

The population distribution and nesting sites of Cheer Pheasants were identified through the use of acoustic survey techniques. Both male and female Cheers emit loud calls during the morning and evening hours. Surveys were conducted starting 30 minutes before sunrise and continuing up to 60 minutes after sunset, with repeated counts carried out every three consecutive days.

3.4.3. **Direct Observation Method**

GPS technology was utilized to determine the distances between habitats and cultivated land, major roads, human settlements, and water resources. Soil temperature was gauged using a thermometer, while ground and canopy coverage were assessed with a densitometer. Quadrates measuring 1*1m² were designated for herb analysis, 5*5m² for shrubs, and 10*10m² for overall vegetation analysis. Additionally, 10*10m ² quadrates sizes were used for a sampling of large stone number and a fallen log. Direct observation methods were employed to measure rock cover, fire occurrences, grazing intensity, presence/absence of gravel and leaf litter, and slope steepness. The dimensions of large trees were determined using a measuring tape, while elevation was calculated via GPS technology.

Capacity Development Program

A conservation awareness program lasting one week was organized, engaging school students, teachers, as well as members from Local Forest User Groups, local organizations, and School Management Committees. The program included a Cheer Pheasant drawing competition and the distribution of educational materials such as brochures, posters, pamphlets, and notebooks.

3.4.5. **Social Media Awareness Campaign for Conservation**

A Save Cheer page and channel were established on social media platforms, including Facebook and online media, to regularly disseminate information to the general public.

4. RESULTS

4.1. Microhabitat Assessment of Cheer Pheasant

The survey covered Forty Three sites in Myagdi District. Camera traps were employed in different elevations (1600m to 2200m) for two days but no Cheer image captured from camera traps.

Table 1: Generalize linear model of the habitat factor with a distribution of Cheer Pheasant

Call:
glm(formula = pre.ab ~ Trn + TreeS + Shrn + Hern + Culd + Rod + Wad + Hud + Grco + Canco + SoT + Slo + Ele + Aflo + Stn + Roc + Fire + Graz + Let + Grav, family = gaussian)

Coefficients:

	Estimate	Std. Error	Pr(>|t|)	t value
(Intercept)	2.200e-01	3.377e-01	0.651	0.522
Tree number (m^2)	-8.291e-03	5.737e-03	- 1.445	0.164
Large tree size (Meter)	5.323e-03	1.889e-02	0.282	0.781
Shrubs number (m^2)	-3.536e-03	3.599e-03	-0.982	0.338
Herbs number (m^2)	1.070e-02	4.184e-03	2.556	**0.019 ***
Cultivated Land distance (m)	1.523e-04	3.198e-04	0.476	0.639
Major Road distance(m)	7.765e-05	1.660e-04	0.468	0.645
Water sources distance (m)	-2.442e-04	2.212e-04	- 1.104	0.283
Human settlement distance (m)	-8.947e-05	1.830e-04	- 0.489	0.630
Ground cover (percentage)	7.147e-04	3.449e-04	2.072	**0.051 .**
Canopy cover(percentage)	-1.303e-03	2.576e-03	- 0.506	0.619
Soil Temperature (degree)	-6.024e-03	1.038e-02	- 0.580	0.568
Slope (degree)	-1.619e-03	3.478e-03	- 0.465	0.647
Elevation(Meter)	2.710e-06	9.437e-05	0.029	0.978
A fallen log	1.733e-03	2.009e-03	0.863	0.398
Large stone number	1.173e-03	2.381e-03	0.493	0.362
Fire (Presence/absence)	4.601e-02	7.414e-02	0.621	0.542
Rock Cover(Percentage)	9.409e-04	7.004e-04	1.343	0.194
Grazing (Presence/absence)	5.254e-02	7.590e-02	0.692	0.497
Leaf Litter(Percentage)	9.029e-05	1.611e-03	0.056	0.956
Gravel or small number of pebbles (Presence/Absence)	2.129e-01	1.086e-01	1.961	**0.064 .**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Dispersion parameter for gaussian family taken to be 0.02896587)
Null deviance: 9.90476 on 41 degrees of freedom
Residual deviance: 0.60828 on 21 degrees of freedom
AIC: -14.67
Number of Fisher Scoring iterations: 2

The analysis of data revealed the presence of Cheer Pheasants, detected through call recordings and direct sightings. The occurrence of Cheer was positively correlated with the abundance of herbs (0.019 *, P<0.05), ground cover (0.051 ., P<0.05), and gravel (0.064 ., P<0.05). Conversely, it was negatively impacted by the number of trees (-0.164, P>0.05). The accuracy of classifications using the generalized linear model also supported these findings. The data analysis encompassed forty three across all directions of Myagdi district, comprising a total of 78 photos, although none captured images of Cheer; instead, other species such as marmots and squirrels were observed.

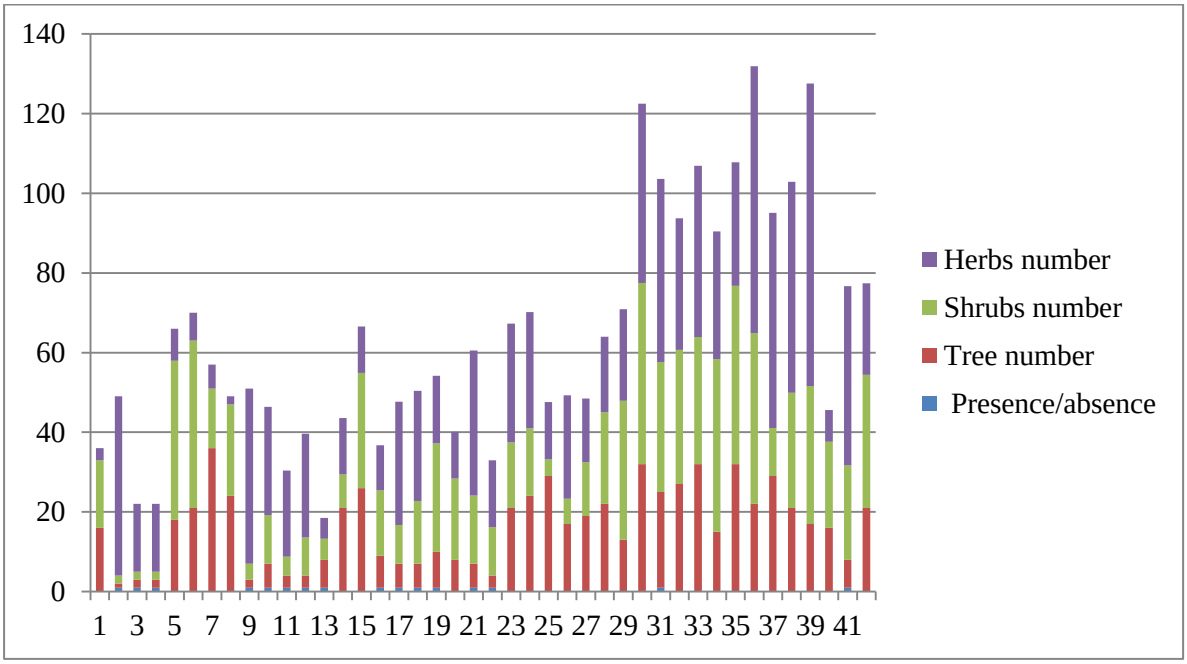

Figure 2: Distribution of Cheer influences from Vegetation number

Herbs significantly influenced the distribution of Cheer positively, while Trees had a negative impact, and Shrubs played a minor role.

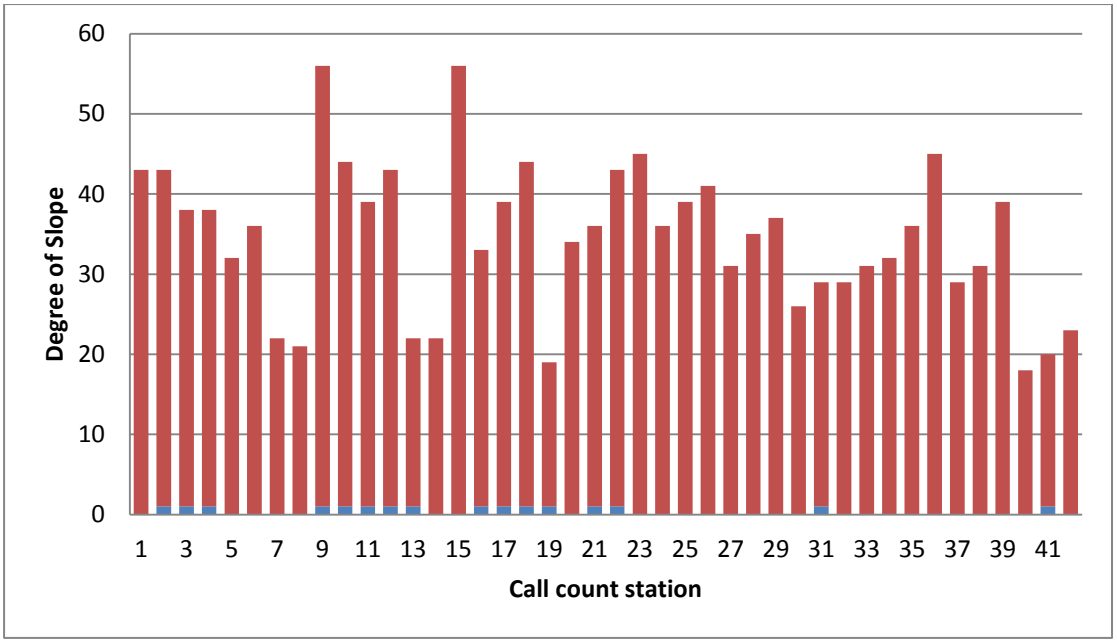

Figure 3: Distribution of Cheer interrelated with a degree of Slope

The Distribution of Cheer was co-exist with a Slope range more than 20 degree to below 60 degree however (Chokhal *et al.* 2020) Cheer Pheasant was also recorded from same elevation range from above 10 degree to less than 60 degree almost the range is similar because the study area has similar.

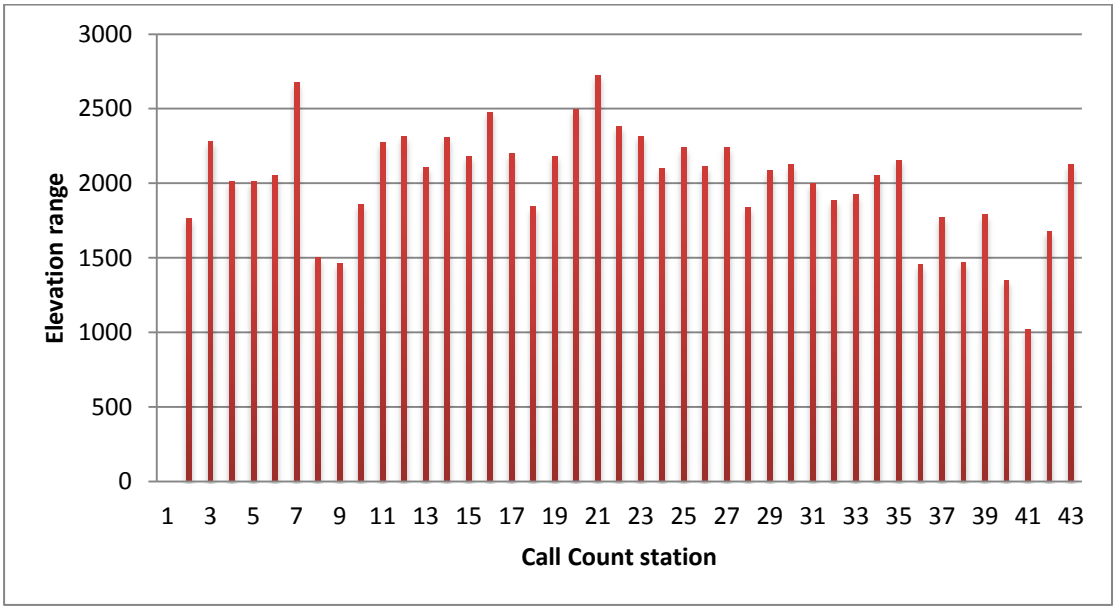

Figure 4: Distribution of Cheer interrelated with an elevation range

The majority of Cheer distribution was documented at elevations below 2500m and above 1600m in the study area. Chokhal *et al*. (2020) the The cheer was reported from more than 1600m and below 2200 the both survey was same because the study sample sites also same.

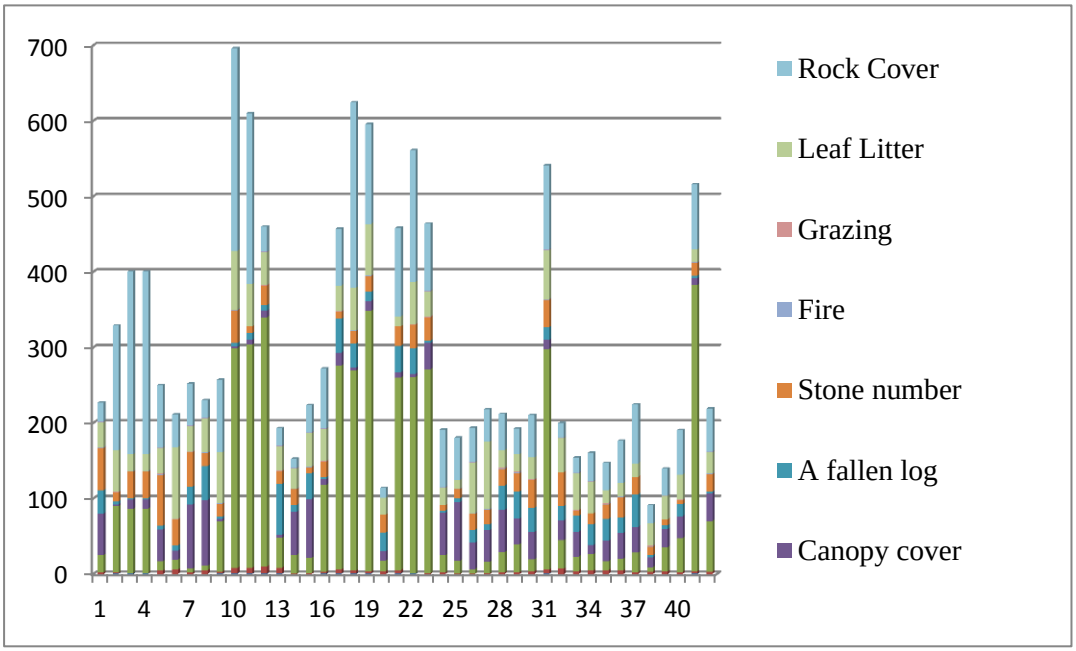

Figure 5: Distribution of Cheer interrelated with a physical factor

Ground cover and rock cover were significant factors directly related to the distribution of Cheer, whereas the abundance of large stones was contradictory. The results were least affected by other factors such as grazing, fire, and fallen logs.

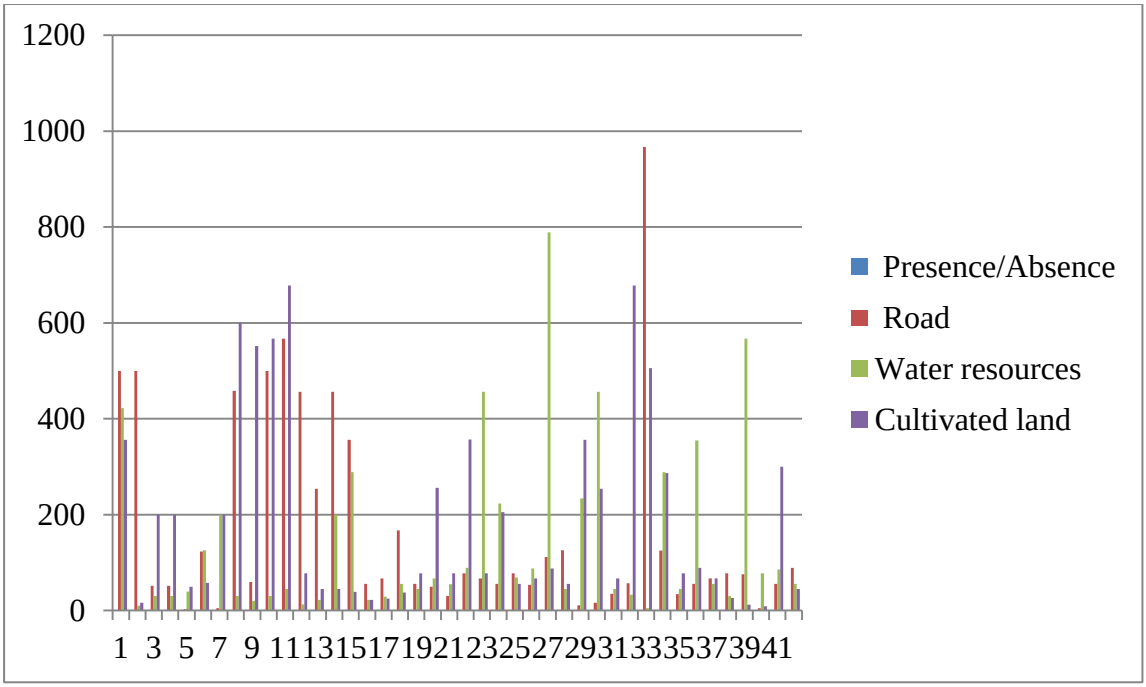

Figure 6: Distribution of Cheer effected by Distance factor

The species distribution showed a negative correlation with cultivated land distance, indicating that the habitat of the Cheer was impacted by the proximity of major roads, which in turn were influenced by the Cheer habitat. A significant portion of road construction occurred within the key Cheer habitat area, posing an additional challenge to Cheer protection in Myagdi.

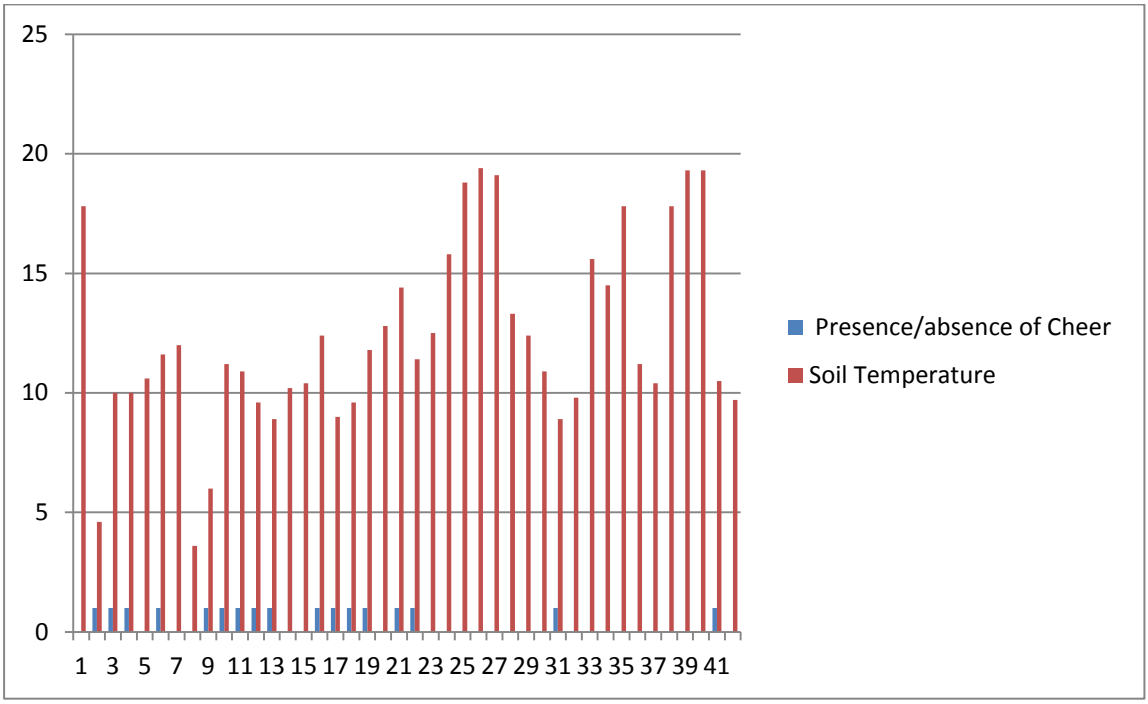

Figure 7: Distribution of Cheer influences from Soil Temperature factor

Climate is not a major factor influencing Cheer distribution in Myagdi; however, consistent minor temperature variations are another factor affecting the Cheer gene pool, posing a significant global challenge for Cheer conservation efforts.

In the realm of community conservation awareness, a program was organized at Shree Jyoti Primary Secondary School Daduwa, Dipshika Secondary School (grades 1-12), and Sidha Santi Secondary School. A 1.30-hour PowerPoint presentation engaged students, teachers, and members of local forest user groups, local-level representatives, and citizens. The program distributed posters providing concise techniques for protecting Cheer Pheasants in the near future. Subsequently, a drawing competition was initiated, involving participating students. Winners, first and second runners-up received special prizes, while those under the top 10 received simpler prizes. At the end of the session, feedback was collected, and plans for Cheer conservation were discussed. On the last day of the field study, a visit to the District office allowed for a conversation with the District Forest Officer of Myagdi. The discussion focused on the current status of Cheer in Myagdi, and a request was made to formulate a short-term plan for Cheer conservation. A Cheer Conservation application letter was submitted to the District Forest office for further processing and authentic consideration of Cheer conservation efforts in Myagdi.

Bhumika Paija, Sachin Kishan, and Smir Darzi emerged as the winners of the drawing competition. The prizes, including a diary, pencil, pen, and copy, were distributed by the Head Teachers (Min Bahadur Khatri, Jaman Bhadur Khatri, Nanda Bahadur Khatri) and the main guests (Dammar Bahadur Baniya, Hem Bahadur Serpunja, and teacher Krishna G.C.) across the three different schools. The local online journals MyagdiKali.com, Benionline.com, and Myagdikhabar.com covered the news, while national online media outlets such as OnlineKhabar.com, Ratopati.com, and NagarikNews.com also prioritized the research and conservation awareness program.

4.2. Conservation Threats

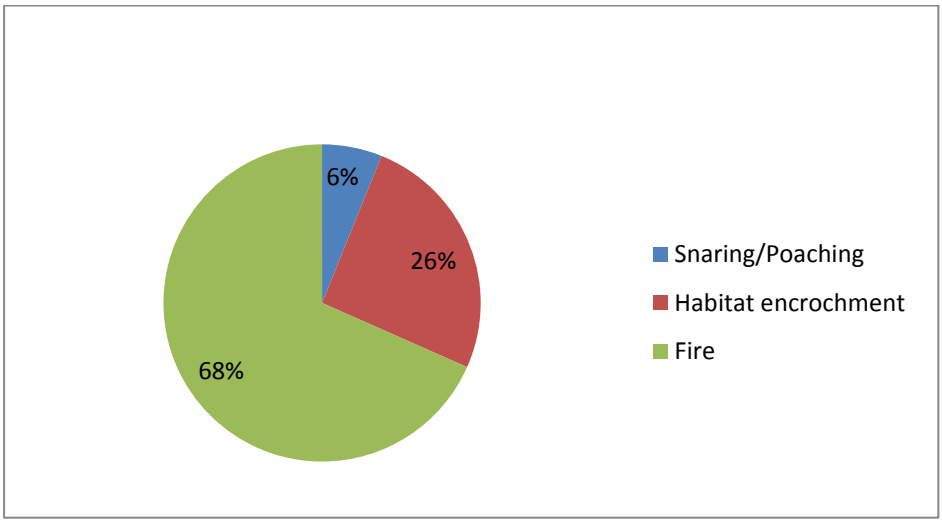

Figure 7: Conservation Threats in the study sites

Conservation threats were survey by using the direct observation methods in the field sites. Seven factors of threat were observed in the study sites whereas fire (68%) was the major factor. The distribution of Cheer pheasant was effected by the fire and also habitat encroachment (20%). The habitat was shrinkage by the grazing, forest expansion, infrastructure development. Snaring and poaching (6%) were a minor factor but these factors were steadily increased in the study sites.

5. DISCUSSIONS

5.1. Microhabitat assessment

The study findings demonstrated a significant positive correlation between the presences or absence of Cheer pheasants and the abundance of dense ground cover composed of heavy herbs with a small pebbles number. Conversely, the presence of dense tree cover had a negative impact on Cheer pheasant abundance. These results align with a previous survey conducted by (Chokhal *et al*. 2020) which also noted the influence of moderate steep slopes, east and south facing aspects, and heavy herb ground cover on Cheer pheasant distribution. However, this current study introduced a new microhabitat factor, rock cover, which was found to be relevant in determining Cheer pheasant habitat suitability. Support for these findings can be seen in Singh *et al*. (2011), who observed a direct correlation between heavy ground cover and Cheer pheasant population density, while inversely noting the impact of tree density. This is consistent with earlier studies by (Subedi 2003 and Basnet 2014), highlighting the significance of sloppy herb and shrub vegetation as specific habitats for Cheer pheasants in the Dhorpatan Hunting Reserve even though sloppy higher grassland was a most favoured habitat of Cheer Pheasant which was depends on the elevation range in Rara National Park (Singh and KC 2008).

5.2. Conservation Threats

Threats to the Cheer pheasant population identified in the study area included grazing, poaching, fires, road construction, human encroachment, and habitat shrinkage, with fire and road construction emerging as major concerns. Similar concerns were reported by (Chokhal *et al*. 2020), emphasizing the threats of grazing, habitat loss, poaching, snaring, and illegal trades, with road construction being a newly identified threat. Furthermore, ongoing habitat invasion from dense forests was noted. These findings resonate with previous studies by (Subedi 2003; Singh *et al*. 2006; Garson, and Baral 2007), explored that snaring, hunting, overgrazing, deforestation, and forest fires as major threats to Cheer pheasants in Nepal. Results also supported from (Awan *et al*. 2014) also find out those observations, noting human settlements, fires, livestock grazing, hunting, and non-timber forest collection as significant contributors to Cheer pheasant population decline in the Jhelum Valley.

6.3. Conservation awareness

Efforts to raise conservation awareness have been undertaken, including programs in schools within the Mygadi district, which were deemed crucial for fostering conservation awareness among students. Similar initiatives by (Basnet 2016) in Bajura, Nepal, supported by the Oriental Bird Club, were found to be effective. Currently, the Nepal Ornithological Union conducts regular conservation awareness programs in the Dhorpatan Hunting Reserve and its buffer zone, yielding positive results for Cheer pheasant conservation efforts.

6. CONCLUSIONS AND RECOMMENDATION

The study remarks that presence of Cheer Pheasants has been depended in the abundance of herbs (0.019 *, P<0.05), ground cover (0.051˙, P<0.05), and gravel (0.064˙, P<0.05). Conversely, it was negatively impacted by the number of trees (-0.164, P>0.05). Camera traps were employed to detect Cheer presence, although species was not captured, other species were successfully recorded.

Fire (68%) was major threats that were prime cause of Cheer habitat disturbances. Conservation awareness efforts were successfully implemented in three public schools situated in Beni Municipality, Mangala, Dhaulagiri, Raguganga, Malika and Annapurna rural municipalicity. Hidi and Thaibang were a new site where as Cheer presence was recorded but Cheer Pheasant was not recorded in Kuhu sites. The program engaged school students, teachers, local-level representatives, community forest user group members, female organization representatives, and local residents. Regular Cheer population monitoring and breeding ecology study is a suggested point for the Cheer conservation in Myagdi district.

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LIST OF PHOTOGRAPH

Photo 1. After Prize distribution in Sidhasanti School

Photo 2. News published through a local online

Photo 3. After Prize distribution in Nawajyoti School

Photo 4. *Semnopithecs* species in study area

Photo 5. Habitats of Cheer Pheasant

Photo 6. Conservation awareness poster used in field area.

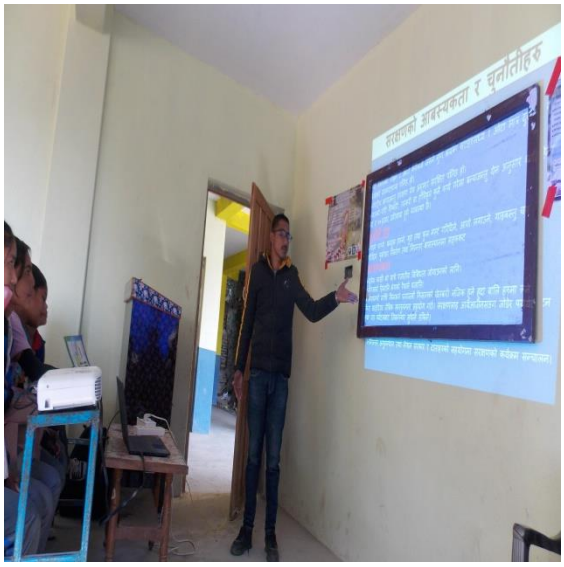

Photo 7. Conservation awareness presentation

Photo 8. Data collection in field area

Photo 9. Walking towards a habitat sites

Photo 10. Prize distribution program

ANNEX

Table 2: List of participant in awareness program

Name of School	Post	Teachers name	Students Name
Shree Jyoti Primary School	Head Teacher	Min Bahadur Khatri	Bhumika Paija (1st)
	Teacher	Om Bahadhur Bhandari	Amrit Darji (2nd)
	Teacher	Purna Bahadur Bhandari	
	Teacher	Bhagawati Sharma	
	Teacher	Susma G.C Karki	
	Teacher	Kalpana Thapa	
	Teacher	Pashupati Khatri	
	Children Learning assistant	Jashmaya Roka	
	Office helper	Dev Kumari Baniya	
	Ward member	Dammar Bahadur Baniya	
	Health volunteer member	Susmita Khatri	
	Local people	Harka B.K.	
	Local people	Min Bahadur Bhandari	
Sidha Santi Secondary School Hidi	Head Teacher	Jaman Bahadur Khatri	Sachin Kishan (1st)
	Teacher	Gaudevi Purja	Habin Phagami (2nd)
	Teacher	Hira Devi Aachrya	Pratik Pun
	Teacher	Nikesh Khadka	Suresh Darji
	Teacher	Bel B.B.K.	Dev B. Pun
	Teacher	Naresh Nepali	Bibash Roka
	Teacher	Tilak Rokhya	Riya Roka
	Teacher	Sarita B.C.	Sijan Urale
	Teacher	Mina Kumari Poudel	Himat Pun
	Teacher	Talmati Khatri	Milan Roka
	Teacher	Pobi Pun	Sachin Kishan
	Teacher	Tulsi Subedi	Yamuna Poudel
	Ward Member	Jagat Bahadur Purja	Kusum Pun
	Chairperson of School Management Commission	Hem Bahadur Serpunja	Smriti Pun
	Secretory of Dashkhoria Community Forest	Balkrishna Purja	Sijan Urale
			Himat Pun
			Milan Roka
Dipkshika Secondary School		Nanda Bhadhur Khatri	Samir Darji (1st)
		Harikrishna Bhattrai	Samira Darji (1st)
		Dhan Bahadur GC	
		Susila GC	
		Ruk Bahadur Khatri	
		Aashis Bhatrai	
		Bel Bahadur Purja	
		Balkrishna Khatri	