

Geotourism Potential in Pokhara Valley Hills, Western Nepal

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Abstract

Tourism based on geology and geomorphology, called geotourism, has a strong potential sector in the Nepal Himalayas for socio-economic growth and geo-education. We take in this research on the potential site of geotourism in Pokhara valley, Nepal which is shaped by Himalayan tectonics, river incision, debris flow deposits, and karst processes. This study focuses on eight sites, namely Nirmal Pokhari, Pumdikot, Methlang, Kaskikot, Sarangkot, Dhampus, Dhikidada, and Thulakot, using qualitative and semi-quantitative geosite evaluation criteria, including geological significance, scenic value, accessibility, safety, conservation status, community awareness, uniqueness, infrastructure development, management, and policy support. Results highlight Pumdikot as the most promising site, followed by Sarangkot, Nirmal Pokhari, and Dhikidada, though all sites demonstrate notable geo-tourism potential. Furthermore, the surrounding hills serve as open-air laboratories for understanding geomorphic processes, landscape evolution, and human-environment interactions. This study emphasizes that the government should invest in facilitating infrastructure development, establish geo-information facility centers, and educate local communities for their capacity building. To enhance these fundamentals, efforts much be made to coordinate with local bodies, tourism authorities, and academic institutions to promote sustainable tourism in the studied areas.

Keywords: geotourism, Pokhara valley, landscape, geology, tourism

Introduction

Pokhara Valley is surrounded by hills, middle mountains, and the high Himalayas forming its northern backdrop. Situated in the Midlands of the Nepal Himalayas, the valley extends east-west and is filled up with debris derived from the Annapurna Range. Geologically, the surrounding mountains are composed of some of the older rocks in Nepal (DeCelles et al., 1998; Pearson, 2005; Sherpa et al., 2024). The Seti River - means “white river” - drains the Annapurna Range, entering the valley from the north, turning southeast, and finally exiting to the south. Its spectacular erosional morphology has produced multiple terrace levels and deep, narrow gorges particularly in the central urban area. Major tributaries include the Mardi Khola, Bhoti Khola, Kali Khola, Khahare Khola, Phurse Khola, and Bijayapur Khola.

The scenic beauty of the Pokhara Valley and its surroundings has attracted both Nepalese and foreign tourists, particularly since the first mountaineering expeditions of Mt. Annapurna I in 1950. Informal exploration by Western adventure seekers during the 1960s-1970s enhanced destination visibility, with structured tourism development emerging in the 1970s (Upreti et al., 2013). The evolution of the landscape – its uplift history, river activity shaping erosional landforms, and debris transport, and sedimentation on the valley floor – present compelling

questions for tourist drawn to its spectacular morphology and features such as landscapes, river valleys and terraces, lakes and shorelines, rocks and minerals, flora and fauna. Consequently, geology- and geomorphology-based tourism is considered vital for strengthening local economies by promoting natural attractions and supporting the development of surrounding villages, thereby enhancing economic circulation between rural and urban areas. This development must remain environmentally sustainable, greenery-friendly, and balanced with natural environment.

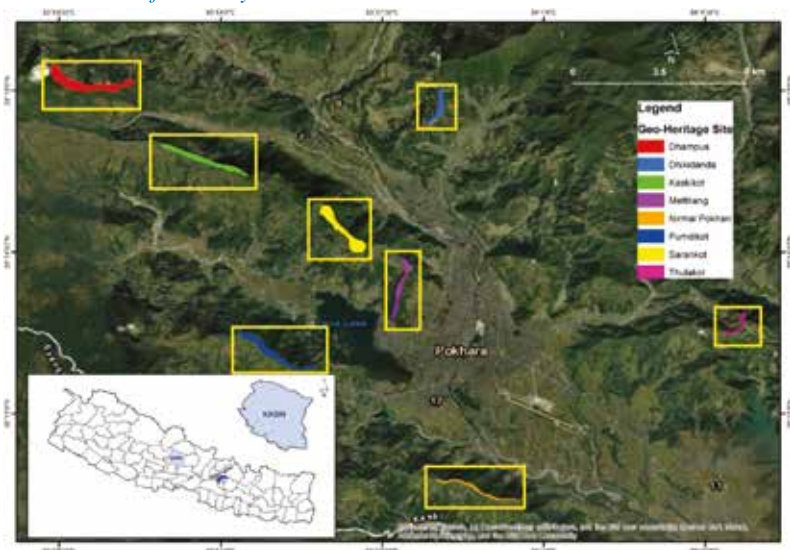
Research on geo-tourism in the Pokhara Valley remains limited. Gilbert and Landsem (2023) evaluated key geo-heritage and eco-tourism sites - including the World Peace Pagoda, Phewa Lake, Seti River Gorge, Davi's Falls, Gupteshwor Mahadev Cave, Annapurna Museum, and the International Mountain Museum -from the perspective of geo-tourism and ecotourism development.

Exploration of potential geo-tourism sites around the Pokhara Valley has not advanced since the initial study by Gilbert and Landsem in 2023. To address this gap, the present research aims to identify geo-heritage sites suitable for geo-tourism development in the surrounding hills of the valley. The study involves assessing the geological and geomorphological significance and natural beauty of selected sites, examining public awareness and perceptions of geo-tourism, and determining appropriate tourism activities. It further seeks to integrate geo-heritage conservation with local socio-economic development to promote sustainable tourism planning.

For effective identification of potential geo-tourism sites, eight locations in Kaski District, Gandaki Province, western Nepal were explored in this study. These sites -Nirmal Pokhari, Pumdikot, Methlang, Kaskikot, Dhampus, Dhikidanda, and Thulakot -range in elevation from 1,100 to 1,800 m above mean sea level. Geologically, they are situated within the Lesser Himalaya and physiographically within the Midland of the Nepal Himalaya (Figure 1).

Figure 1

Map shows the location of the study sites.



Methodology

The study adopted a mixed-method approach, combining field-based observations, literature review, and qualitative assessment techniques to evaluate the geo-tourism potential of selected geo-heritage sites in the surrounding hills of the Pokhara Valley. Eight potential sites were initially chosen based on field observations, accessibility, proximity to Pokhara, geological significance, scenic value, and existing tourism activities. Field investigations documented geological, geomorphological, and landscape features, including rock types, landforms, slope conditions, and viewpoints. Photographic records and GPS-based data were collected during the survey.

Secondary data were also obtained through literature review, including published journal articles, books, reports, topographic maps, and geological maps. The geo-tourism potential of each site was evaluated using qualitative and semi-quantitative criteria adapted from established geo-site assessment frameworks (e.g., Price, 2017). Assessment parameters included accessibility, safety, vulnerability, scenic beauty, uniqueness, observation conditions, educational value, proximity to Pokhara, and cultural significance. All parameters were examined through field evaluation and supported by secondary information.

Finally, the results were synthesized to identify sites with high geo-tourism potential, and recommendations for geo-heritage conservation, education, and sustainable tourism planning in the surrounding mountains of the Pokhara Valley were proposed.

Results

The surrounding hills of the Pokhara intermountain valley play a key role in defining its exceptional geo-tourism potential. The northern, northeastern, eastern, southeastern, southern, and western hills together with the valley, offers striking views of active mountain-building processes coupled with monsoon rainfall, active tectonic, and river driven erosional and depositional dynamics. These processes provide important sites for understanding surface, and subsurface drainage as well as landscape evolution.

Geology

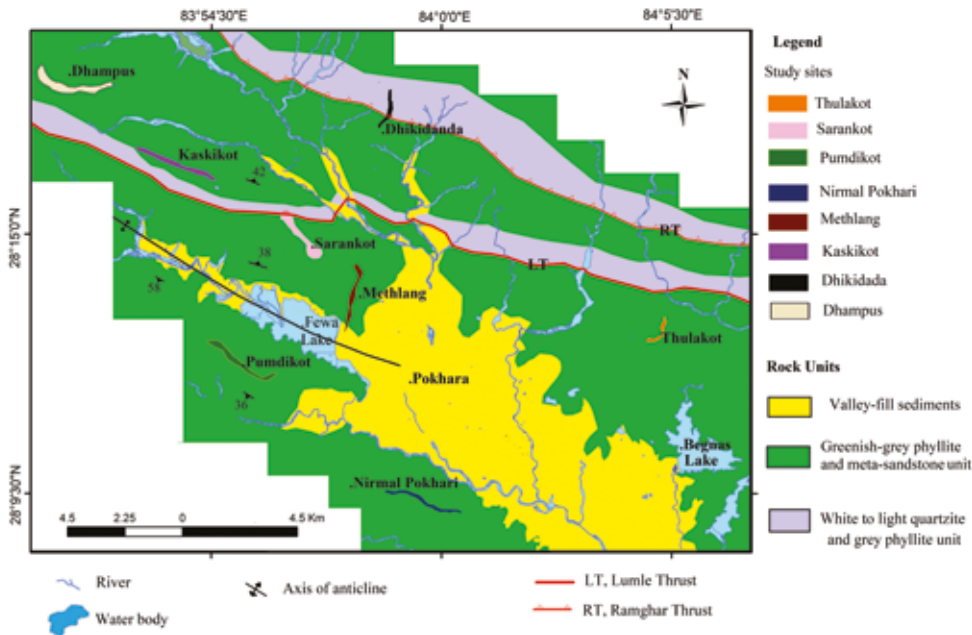
Pokhara Valley, the second largest intermontane basin of Nepal, is surrounded mainly by Lesser Himalayan rocks. Catastrophic debris flow events sourced from the Annapurna Range in the Seti River filled the Pokhara Valley area and the dammed tributaries of the Seti River converted to lakes including Phewa Lake (Yamanaka et al. (1982). These basin-filled sediments consist of conglomerates deposited by normal river flows, debris flows, and muds and clay in lakes. These sediments are around 700 m thick and the oldest and youngest age of sediment deposition in the Pokhara Valley are respectively 15000 years BP to 590 years B.P. by Radiocarbon-14 dating (Yamanaka et al., 1982; Lavé et al., 2023; Sakai et al., 2025). The youngest debris flow sediments were deposited in the Pokhara Valley from the collapse of the mountain elevated more than 8000 m in the Annapurna Range (Lavé et al., 2023; Sakai et al., 2025).

Most of the study sites -Nirmal Pokhari, Pumdikot, Methlang, Sarankot, and Thulakot -lie within the rock formation of greenish-grey phyllite and cloudy white to pink sandstone, while Kaskikot and Dhikidada are located within greenish-grey phyllite, cloudy white to pink sandstone and greenish-grey quartzites. In Methlang area, thick conglomerate deposits occur at an elevation of about 1190 m. These conglomerates were accumulated by the Seti River.

These areas are geologically and geomorphologically significant because major tectonic structures, including the Lumle Thrust (LT), Ramgarh Thrust (RT), and Main Central Thrust (MCT), occur to the north of the Pokhara Valley within a short distance (Figure 2). The thrust places older rocks over the younger rocks. The Lumle Thrust is clearly observed above Ghachowk village and along the ridge between Kaskikot and Sarankot. The Ramgarg Thrust (RT) passes above the Dhikidada hill and near to Keware village.

Figure 2

Geological map of the study sites and its surrounding area.



Note: Modified from Yamanaka et al., 1982; Decelles et al., 1998; DMG, 1999; Paudel and Arita, 2002.

Geotourism Site Assessment

The eight studied locations were evaluated based on a comprehensive sets of eight criteria; geological significance of sites, scenic and aesthetic value, accessibility from Pokhara, safety of sites as well as visitors, present conservation status and elements of vulnerability, awareness of the local community regarding geological sites and promoting tourism, uniqueness of the site for observation, in fractures and logistic, community involvement in sites, site management, and policy support. These geotourism site assessment parameters were rated, as shown in Table 1, during field survey. Based on the assessment parameters, Pumdikot emerged as the most promising geo-heritage site, achieving a score of 410 out of 500. Similarly, Sarankot scored 380, while Nirmal Pokhari and Dhikidada each scored 370 (Table 1).

Table 1

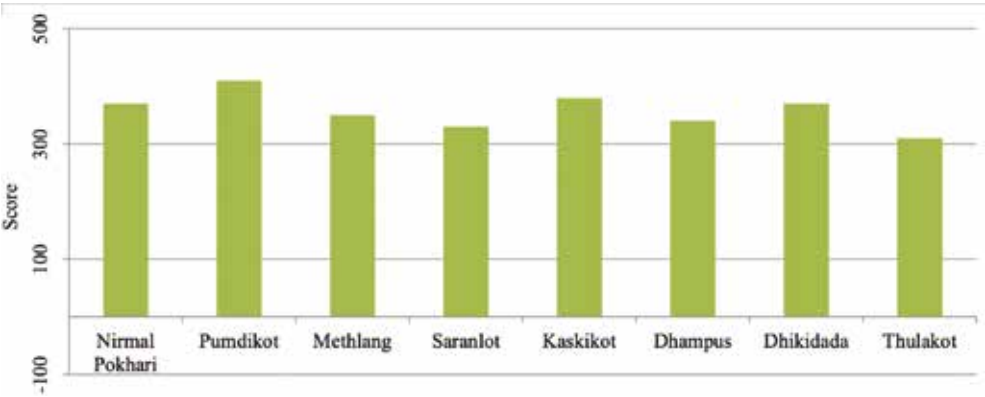
Total score obtained from field assessment focusing the ten influencing parameters of the eight potential geotourism heritage sites.

Parameters	Nimal Pokhari	Pumdikot	Methlang	Kaskikot	Sarankot	Dhampus	Dhikidanda	Thulakot
Geological significance (15%)	5	5	4	4	4	4	4	3
Scenic and aesthetic value (15%)	5	5	4	5	4	4	5	4
Accessibility (10%)	2	4	4	1	2	1	2	2
Safety (5%)	2=4 (Revised score)	3=4	4=2	3=3	3=3	3=3	3=3	4=2
Conservation status and venerability (10%)	1= 5	2=4	1=5	1=5	2=4	1=5	2=4	1=5
Awareness (10%)	2	5	3	2	4	2	3	2
Uniqueness (5%)	5	4	3	5	4	4	5	4
Infrastructure and logistic (15%)	2	4	3	3	4	4	4	3
Community involvement (10%)	4	4	3	2	4	3	4	3
Management and policy support (5%)	4	5	4	3	5	4	3	3
Total rating	370	410	350	330	380	340	370	310

Although Pumdikot currently ranks the highest (Figure 3), all of the studied sites possess significant potential and are equally important for further development as geo-sites for geo-tourism in the Pokhara Region.

Figure 3

Plot of total score of site assessment versus study location.



The explanation of each site is as follows.

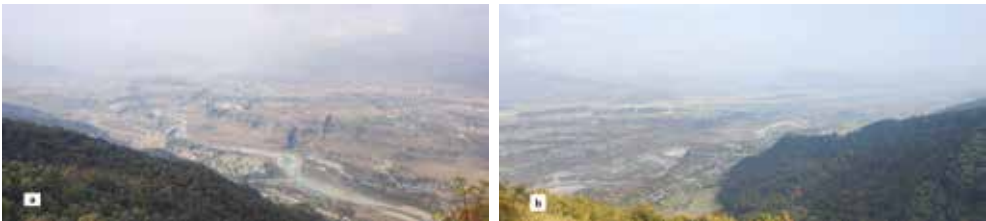
Nirmal Pokhari Site

Nirmal Pokhari area, including Kaule and Foksing villages, is located around 10 km south of Pokhara at an elevation of approximately 1,100 m, forming part of the southern margin of the Pokhara Valley. Panoramic observation from this area (Figure 4) reveal sunrise, sunset, and full moon views, along with the entire valley landscape, including Phewa Lake and the erosional and depositional landforms of the Seti River such as paired and unpaired river terraces. The active river dynamics of the Seti are evidenced by the catastrophic debris flows (Fort, 2010). Most of the valley fill sediments were derived from the Sabche Cirque of the Annapurna Massif, which can be seen from this location (Yamanaka, 1982; Fort, 1987; Hanisch et al., 2013; Lavé et al., 2023).

The north facing slopes illustrate rich biodiversity, with species such as Chilaune (*Schima wallichii*), Katus (*Castanopsis indica*), Pine (*Pinus roxburghii*), Uttis (*Alnus nepalensis*), and various shrubs. Anthropogenic activities are also evident, including aircraft movement at Pokhara International Airport, and the expansion of urban growth in the valley. Additionally, the site is suitable for short, effortless treks around villages on the south-facing slopes, offering insights into local settlement pattern and cultural traditions of mixed ethnic groups -including Chhetri, Puri, Giri, Brahmin, Magar, and Gurung. Terrace farming is another attraction for visitors, with crops such maize, rice, millet, mustard, and seasonal vegetables. Traditional foods like Dhido, Gundruk, Dhikre, and local dairy products are popular cuisines that further promote tourism.

Figure 4

Panoramic view of Pokhara Valley from hilltop of Nirmal Pokhari site looking towards north (a) and southeast (b).



Pumdikot Site

Pumdikot–World Peace Pagoda ridge, located around 7–8 km south of the Pokhara Valley and forming part of its southern margin, overlooks Phewa Lake and the Pokhara Valley (Figure 5). Major religious monuments at the site—including Shiva Statue, Saraswati Statue, and Shanti Stupa—represent significant cultural assets that enhance visitor flow and promote cultural education. According to the Pumdikot Development Committee, more than 15,000 people visited the Pumdikot Shiva Statue on Shivaratri in 2024. It is a famous religious tourism site. Currently, limited information boards related to religious subjects are installed in the area; however, additional explanatory boards highlighting the geomorphology of the surrounding landscape would be essential to strengthen its geo tourism appeal. Because the period from September to January is considered the most suitable season for observing the picturesque 360° panoramic views of the surrounding natural landscape of the Pokhara Valley. From geological point of view, the ridge is composed of greenish grey phyllite and milky sandstones.

Figure 5

Photographs show Shiva Statue (a) and panoramic view of Phewa Lake (b) from Pumdikot site.



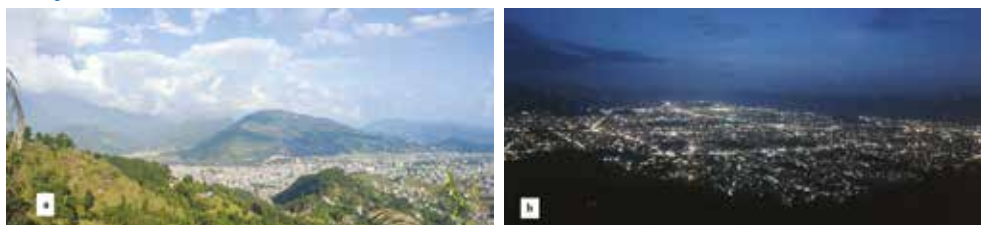
Methlang Site

This site is located about 5 km south of the Pokhara Valley, forming part of its southern margin within Pokhara city. It is easily accessible from city via a combination of paved and earthen roads, as well as foot trails, making it suitable for short visits, day hikes, and educational tours. This area offers a peaceful environment compared to the urban area of Pokhara and is suitable for natural walks, birdwatching, photography, diurnal observations, and community-based tourism.

Geologically, the area is dominated by conglomerate consisting of river transported rounded gravels situated at an elevation of around 1,190 m, while the Seti River bed is situated at around 550 m above sea level. It explains the tectonic uplift of the area as well as erosional incision by Seti River. Furthermore, visitors are drawn to the enchanting natural scenery of the Himalayan Range (Figure 6), water bodies and settlements. The northern slope of this area is covered by dense forest. Thus, the area offers a unique combination of geological significance, natural landscape, and rural environment and is the nearest hill to the valley. Despite good accessibility, tourism infrastructure -such as proper walking trails, waste management facilities, rest areas, signage boards -remains limited.

Figure 6

Photographs show urban area of Pokhara Valley during day time (a) and night time (b) from Methlang hilltop.



Kaskikot Site

The name ‘Kaski’ derives from ‘Kaskikot’; ‘Kaski’ refers to the place, while ‘Kot’ means “Fort,” indicating its strategic importance. There are two main interpretations regarding the origin of the name Kaski. The first links it to a traditional Tamu (Gurung) costume worn from the waist to the knee, which linguistically evolved into Kachhad, suggesting early settlement by Tamu chieftains. The second explanation comes from Hindu Legend, attributing the name

to Sage Kashyap, who is believed to have meditated at the site (Subedi, 2004; Udash, 2013).

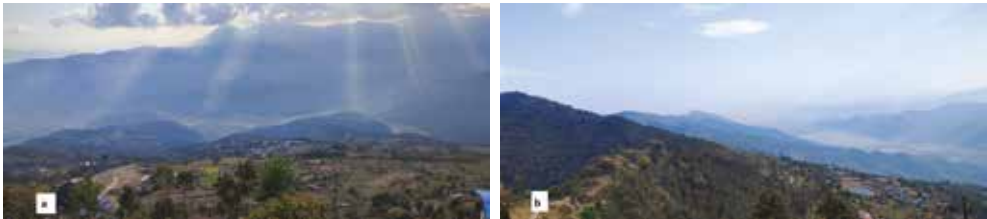
Kaskikot and Gupta Kalika Temple are located at an elevation of about 1710 m, approximately 16 km from Pokhara Valley. The site is accessible by a paved road up to Kalika Chowk, followed by a 30-minute uphill trek. The temple serves as a major religious center, where the Kaski Gutthi organizes especial festival gatherings during Navadurga, Fulpati of main Dashain and Chaite Dashain.

Historically, Kaskikot was one of the 24 principalities of western Nepal before national unification by Shah Dynasty. The archeological relics of the Kaski Palace still exist here, and the area is recognized as an early homeland of the Shah dynasty. Khumandan Shah Khad, believed to be the first king of Shah Dynasty, ruled this region, and his descendant Drabya Shah later founded the kingdom of Gorkha.

The southern slope of this hill is characterized by well-developed terrace paddy farms, which enhance the beauty of the Harpan Khola. During the unification of Nepal, the paddy fields (Figure 7) played a pivotal role in supporting local communities and military campaigns. Rice production from these terraces provided essential food security for both the population and the troops involved in the unification process. At a time when transportation and external supplies were limited, locally produced food ensured the self-reliance and stability of settlements.

Figure 7

Photographs show the views of Harpan Khola watershed area (a) and Phewa Lake (b) from Kaskikot hilltop.



Sarankot Site

The name “Sarankot” is derived from ‘Sarang,’ meaning a war dance performed with swords and drums, and ‘Kot,’ meaning military fort. It is believed that guards stationed at Kaskikot performed the Sarang dance, giving rise to the name (Niraula, 1986; Subedi, 2004). Another interpretation comes from the Kirat language, where “Sarang” means a high station or elevated lookout (Bista, 1983).

It is located about 7 km northwest of Pokhara city at an elevation of 1600 m and is easily accessible by any means of transportation, as the road is blacked topped and close to Pokhara. At present, this location is a prominent tourism destination and is recommended as a potential geo-tourism location, offering panoramic views of the Annapurna, Machhapuchhre, Dhaulagiri, and Ganesh Himal ranges. It also provides majestic views of Fewa Lake and Pokhara City, and is renowned as a popular viewpoint as well as an internationally recognized paragliding center (Figure 8). Moreover, the sunrise over the Annapurna Range and the various levels of Seti River terraces along the valley present a remarkable illustration of the landscape.

Figure 8

Photographs show paragliding activity in Harpan Khola catchment area (a) and culture celebration in Ganesh Temple of Sarankot (b).



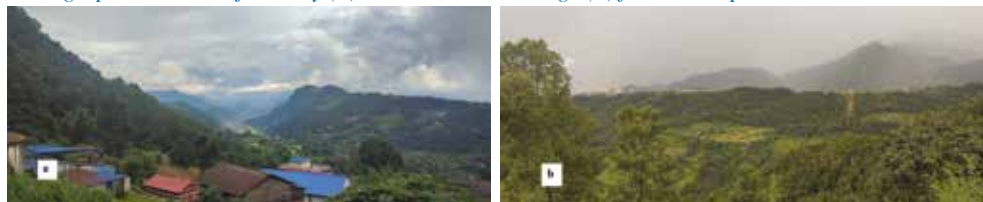
Dhampus Site

Dhampus is a hilly station in Kaski District, located about 25 km northwest of Pokhara at an elevation of around 1750 m. Despite its proximity to Pokhara, it offers a peaceful environment and distinctive natural features. From here, the beautiful Hemja Valley can be observed. Geologically, this view point provides an excellent perspective of the topographic break in the hillside caused by tectonic and geological processes. A nearly 90° bend of Ghate Khola (Dhad Khola) in the Hemaj valley, occurring at its confluence with the Mardi Khola can be clearly seen from Dhampus hilltop. Similarly, Machhapuchhre, Annapurna south, Hiuchuli and Dhauligiri mountains are visible from this location, which also serves as a route for trekking to the Annapurna Base Camp (ABC). In Dhampus, Dr. Harka, Dr. Chandra, Mingma Memorial Rhododendron Eco-Park (NTNC, 2020) can be visited. This eco-park functions both as a tourism destination and a learning center for geography and history, honoring the contributions of these individuals to environmental conservation in Nepal.

Dhampus village promotes ecotourism through community-based homestays, eco-friendly lodges, and trails that connects Phedi, the Australian Camp, and nearby villages. This area is culturally rich and predominantly inhabited by the Gurung community, known for their traditional dances, festivals, crafts, and warm hospitality. Within a short horizontal distance of just a few kilometers, the terrain rises vertically by 500-600 m. This rapid ascent explains the noticeable microclimatic variations (temperature, wind, vegetation, and cloud cover) between Phedi and Dhampus (Figure 9).

Figure 9

Photographs show Hemja Valley (a) and Naudanda Village (b) from Dhampus site.



Dhikidanda Site

Dhikidanda is a mid-hill ridge located in the north-northwestern part of Pokhara Valley, situated about 1500 m above mean sea level. It is moderately accessible by feeder roads, with vehicle access up to a nearby settlement. There are two access routes to this hilltop. One route

passes through the Armala Valley, where nearly half of the road is blacked-top and remainder is a rural track. The alternative route reaches the site via Garmidanda from Amala Biseuni, Pokhara.

Dhikidanda is the most suitable location for observing the geomorphology of the surrounding area compared to other proposed sites as it features several saddles and diverse terrains (Figure 10). From the top of Dhikidanda, the Annapurna Himalayan range is visible toward the north and northwest. Prominent snow-covered peaks seen from this area include Annapurna South, Hiunchuli, Fishtail and various portions of the Annapurna massif. Toward the south and southeast, the expansive Pokhara Valley can be clearly observed, with its flat terrain and surrounding hills beautified by agricultural landscapes. Looking northeast, the Armala valley is visible, well known for its karst-dominated geomorphology, including sinkholes, underground drainage systems, caves and subsidence-prone zones developed within limestone and fine silt layers (Bhandari et al., 2019).

From geo-tourism, and learning perspective, this hilltop serves as a natural laboratory, offering clear views of the Himalayan tectonics, western Nepal fault system, topographic variation, and local climatic differences across a vertical distance of 500-600 m.

Figure 10

Photographs show (a) sinkhole hazardous area (i.e. Armala Valley) looking towards south east, and b) Annapurna Range looking towards north, from Dhikidanda hilltop.



Thulokot

Lekhnath, a part of Pokhara Metropolitan City, is renowned for its numerous natural water bodies such as Begnas Lake, Rupa Lake, Khaste Lake and several small wetlands that are vital to the region's hydrological and ecological systems. Thulakot, a prominent hilltop on the eastern margin of Pokhara, is located about 18 km from Prithvi Chowk at an elevation of 410 m. From this vantage point, the beautiful lakes of Lekhnath can be observed, along with the majestic Himalayan peaks of Annapurna and Machhapuchhre. The surrounding slopes are covered by mixed subtropical forests, providing habitat for birds and small wildlife while offering shaded, pleasant hiking conditions (Figure 11). Refreshing short hikes, avian observation, and nature-based activities fit well within an ecotourism framework, provided trails and visitor flow are properly managed.

Thulakot is closely linked with mixed ethnic settlements, but it is predominately home place to Gurung communities. A vibrant cultural can be observed through local terraced farming practices, traditionally stayed houses and village temples. During the winter season, migratory birds from Central Asia, China, Mongolia, and Siberia visit Begnas Lake to escape harsh climatic conditions (Basaula et al., 2023). Among these species, the Tufted Duck (*Aythya*

fuligula), Great Crested Grebe (*Podiceps cristatus*) and Osprey (*Pandion haliaetus*) are the major attractions for visitors and birdwatchers at Begnas Lake.

Figure 11

Photograph show (a) Begnas Lake looking towards southeast, and b) Thulakot Village looking towards northwest from Thulakot hilltop.



Discussion and Conclusion

The Nepal Himalaya, situated within the Himalayan range, is geologically active and represents a natural laboratory for those interested in understanding the mountain systems. Moreover, its rich biodiversity, diverse ethnic communities with cultural traditions, and historical significance serve as additional attractions. The Pokhara Valley is one of the most important and densely populated regions situated in Midlands of Nepal. It supports numerous rural settlements, rapidly urbanizing towns, and organic agriculture production. The valley is characterized by moderate relief, deeply incised river valleys, and diverse rock and sediment types, making it significant for both geological and human studies. The panoramic views of the snow-capped Higher Himalaya from the hilltops of surrounding mountains to the north, together with the green slopes encircling the valley, offer exceptionally attractive observing sites. The six proposed geotourism sites in the Pokhara Valley and its surroundings each showcase unique geographical landscapes, together with ecological, cultural, and tourism values, establishing the region as a major destination for both national and international geotourism.

Geologically, varied topography surroundings the Pokhara Valley and the northern snow-covered mountains illustrates the Himalayan upliftment processes and active erosion driven by the strong monsoon. Consequently, river dynamic and sedimentation have formed multiple levels of river terraces, which are characteristics features from a geotourism perspective. Additionally, diverse forest species and attractive water bodies in the region serve as important habitats for migratory birds (Bhusal et al. 2020), with foreign species arriving annually during winter, providing opportunities for bird-watching activities. The diverse ethnic communities, with their rich traditions, cultural practices, and unique cuisines further enhance the tourism appeal of the area.

The snow-covered mountain range is one of the most attractive regions for national and international tourism, particularly for mountaineering, trekking, and adventure activities. Consequently, world-famous trekking and climbing destinations round the Annapurna region inspire visitors after experiencing the natural beauty of these sites. The varied physiographic characteristics also provide opportunities for educational tourism, enabling visitors to study geology, biodiversity, and climate change.

The region of the Annapurna Range is composed predominantly of sedimentary rocks deposited in ancient Tethys Ocean, which existed between approximately 500 and 360

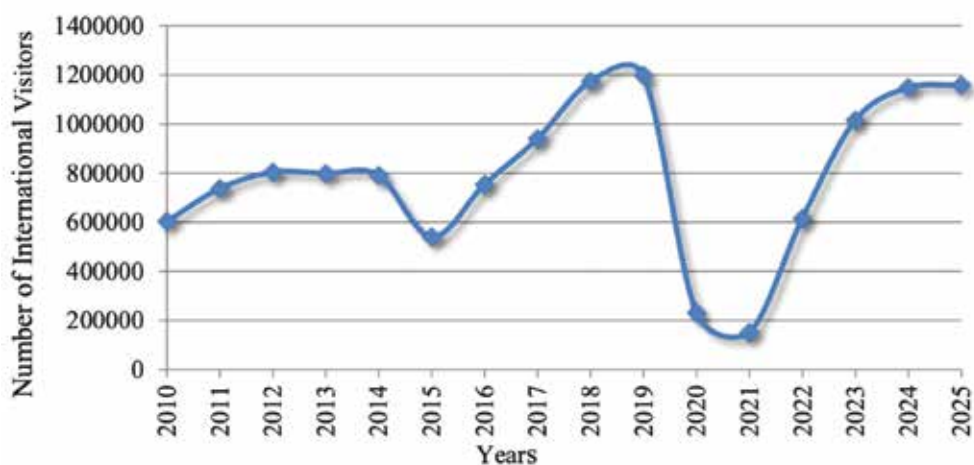
million years ago. The transformation from an early oceanic environment to present-day mountains rising above 8000 m provide visitors with remarkable educational comprehensions into Earth's geodynamic processes. Additional evidence of the region's paleogeography is preserved in fossils such as ammonites (Saligram), brachiopods and gastropods (Heim & Ganseer, 1939; Helmstaedt, 1969), which offer direct testimony of the ancient marine environment.

Accurate interpretation, systematic documentation, and concise presentation of the geological and geographical sites in the study areas are essential to enhance visitors appeal and extend their stay, thereby fostering sustainable tourism in the Pokhara Valley and its surroundings.

Despite political and Institutional challenges, one study indicates that stakeholders have expressed optimism about the future prospects of Nepal's tourism industry (Bhote, 2018), while tourism development and economic growth mutually continue to reinforce one other (Gautam, 2011). According to the Nepal Tourism Board (NTB, 2010-2025, Figure 12), international tourist arrivals in Nepal have been steadily increasing, though significant declines occurred during the exceptional natural calamities of 2015 and 2020. Moreover, record of domestic tourism has not yet been systematically established. Therefore, attracting both national and international tourists to geotourism can strongly support and enhance Nepal's GDP.

Figure 12

Plot reveals number of international visitors in Nepal from 2010 to 2025 (data from Nepal Tourism Board).



Pokhara Valley, with its striking landscapes, diverse cultural heritage, and geomorphic features such as river gorges, terraces, and karst landforms, etc., holds high significance for geo-heritage and geo-education. These sites serve as natural museums and open-air laboratories for observing tectonics, landscape evolution, river incision, and human environment interactions. Visitors include nature enthusiasts, religious pilgrims en route to sites like Muktinath and Baglung Kalika, and researchers engaged in natural sciences. Despite its geological and scenic potential, geo-tourism in Pokhara remains underdeveloped due to limited facilities, inadequate infrastructure, and low public awareness regarding its development. Integrating geo-tourism with cultural, religious, and eco-tourism can enrich

visitor experiences, support local livelihoods, and foster sustainable development. Among eight evaluated geo-heritage sites, Pumdikot, Sarangkot, Nirmal Pokhari, and Dhikidada rank highest for their geological significance, panoramic views, accessibility, and existing tourism activities. Formal recognition, improved interpretive infrastructure, community participation, and strong policy support are essential to advance sustainable geo-tourism in the Pokhara Valley.

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