

Agnieszka Brenk¹ , Olga Ilona Smoleńska² 

Safety and nature versus tourists, athletes and residents in Sagarmatha National Park Nepal

¹ University of Hotel and Catering Industry in Poznań, Poland

² Nicolaus Copernicus University in Toruń, Faculty of Earth Sciences and Spatial Management, Department of Sport Science, Poland

Abstract

The subject of this publication is Sagarmatha National Park located in Nepal, along with the consequences of its popularity among all worlds and the effects of using the environment on selected specific cases. The main purpose of the work is to illustrate the included natural and social conditions as well as the state and perspectives for the development of operational functions in the park. The economic situation of the country will be also presented, taking into account the conditions conducive to the development of inbound tourism. The main research method was document analysis and own observation one of the authors.

"Natural values of the environment taking into account the essential element of the supply of collections, to those that adapt, its other elements" [Sawicki, Harasimiuk 2014].

High mountains have now become one of the main collections of scientific research. One of the reasons is the intensive transformation available from the mass nature of qualified tourism or mountain climbing. The world has entered the multifaceted era of 'tourism'. The natural values of the environment are currently covered by one of the basic elements of the supply of the harvest. Man cannot be chased from the mountains! It is necessary to include his harmonized sport, tourism and economic interests with nature protection. Tourism supported and contributes to the development of various forms of nature and environmental protection, which are the first national parks and nature reserves: Yellowstone in the USA founded in 1872, the Royal National Park in Australia founded by the British in modern colonies in 1879 or the second historical Banff National Park in Canada created in 1885. Contemporary forms of environmental protection originate from the romantic west over wild nature and associated with progressive industrialization in the nineteenth century by destroying natural ecosystems on an unprecedented scale. Although, the ideas of nature protection may already be sought in antiquity for activities that will then be related to religious worship. In China, the first laws on nature protection were announced 4000 years ago, and in India about 3000 years ago. The declaration on the protection of forest resources was issued in 1671 by the Danish King Christian V, and 34 years later also by Russian Tsar Peter I. In Poland, the first symptoms of care for forest resources concern the place in 1337, during the reign of Casimir the Great, when he announced statutes prohibiting logging in other people's forests. Conscious protection of the disappearing species in the form of royal law takes place at the end of the 16th century, which provisions protect the forced turns as a result of cutting out large tracts of forests.

In Nepal, ecological awareness of the power elites and local people has matured for a long time. Robbery of forest management was widely used, wood for fuel or land was obtained for arable crops. It was not until the mid-1960s that King Mahendra issued the first laws on nature

¹ Agnieszka Brenk, e-mail: agolog@wp.pl, ORCID 0000-0001-6672-1255

² Olga Ilona Smoleńska, e-mail: olgasmolenska@umk.pl, ORCID 0000-0002-2517-9081

protection and provided for penalties for its destruction. The descendant and heir to the throne of King Mahendra - Birendra permanently introduced the protection of natural resources to the country's development plans and, in the first year of his reign (1973), he issued the Act on National Parks and Nature Conservation, which took care of a number of animal species and established the first Royal Chitwan National Park. In subsequent years, new national parks and reserves were created in naturally valuable areas. There are 8 national parks in Nepal. The protected areas cover a total of 13% of the area.

The inspiration to write this study was data analysis and own observation of both the natural resources of the Sagarmatha National Park, as well as, the attitude to the natural environment of its inhabitants, as well as, athletes and tourists.

Keywords: sustainable tourism, sport tourism, national park, Nepal, Himalayan, Mont Everest, trekking, Himalayan mountaineering, high mountain climbing

General characteristics of the area

Nepal - a small country lying south of South Asia, bordering Tibet and India with an area less than half of Poland. It lies on the border of two provinces zoogeographiques: paleoarctique - covering Europe, North Africa and Asia and Oriental - covering almost the entire Indian subcontinent and the greater part of south-east Asia. According to the classification of the World Tourism Organization (UNWTO), Nepal belongs to the Asia-Pacific and South Asia sub-region in international tourist traffic. For this subregion also includes Afghanistan, Bhutan, India, Iran, Maldives, Pakistan and Sri Lanka [UNWTO Highlights, 2017 Edition]. 80% of the territory of northern and central Nepal is located on the southern slopes of the highest mountains in the world. The remaining area of the country is covered highlands and hilly areas are covered with jungle and the northern edge of the Plains Hindustani, called Terai. The highest point in the country is Mount Everest (8848 m), while the lowest point in the plains Terai Kéch Kalan in Jhapie (60 m). The country can be divided into three main geographical regions: the Himalayan region, the central region of hills and the Terai region. Nepal lies at the junction of tectonic plates Eurasian and Indian, which are breaking through at each other uplifting the Himalayas, and the effect of these collisions are tectonic shocks, which cause at 70-80 years of strong earthquakes. The Himalayas are one of the youngest mountain systems on Earth. Their age is estimated to be approximately 40 million years. In these mountains (over 3 000 m) there are alpine pastures and forests moderate bounded by a line of trees to a height of 4000 m above sea level and snow line of 5500 meters above sea level Eight of the 14 eight-thousanders in the world is located in Nepal: Mount Everest (8848 m), Kanchenjunga (8586 m), Lhotse (8516 m), Makalu (8463 m), Cho Oyu (8201 m), Dhaulagiri (8167 m), Manaslu (8163 m) and Annapurna (8091 m). Inner Himalayan valley (above 3600 m), for example Mustang and Dolpa are cold, rocky deserts on the Tibetan plateau. Nepal has so-called "South Asian water towers" with 6000 rivers that are fed with snow or monsoon rains. There are over 30 natural caves in the country, such as the Maratika Cave - also known as Haleshi and as a place of pilgrimage related to Buddhism and Hinduism.

The climatic conditions of Nepal depends on the geographical location. Nepal has five seasons: spring, summer, monsoon, autumn and winter. On the north, summers are cool and winters severe, while to the south tropical summers and mild winters. In the high parts of the mountains the climate is arctic. The Himalayas act as a barrier to cold

winds from Central Asia in winter and form the northern limit of the monsoon wind directions. 80% of all the rains in Nepal comes from the monsoon (June-September) blowing from the Indian Ocean in the months of June-August, which brings moist air mass and therefore heavy rain. In turn, the winter monsoon blows from the continent and brings drought.

According to a recent survey conducted by the Central Bureau of Statistics of Nepal, the population of residents was registered at around 30,5 million and includes roughly 101 ethnic groups speaking 92 languages. Although there are so many dialects, the national language is Nepali, similar to Hindi, the language of northern India. This language is used and understood by most of society. English is used by many government offices and institutions. It is also used in education in most private schools in Kathmandu and several other cities. The dominant religion is Hinduism, worshiped by approx. 75% of the population. The second important religion is Buddhism, namely Lamaism or Tibetan Tantric Buddhism variety. The followers of the two religions coexist very well. Many residents pray in Buddhist and Hindu temples worshipping the deities of both religions.

Nepal is one of the poorest and least developed countries in the world. The country is faced with a serious problem of education as much as 42% of the population over the age of 15 cannot read or write. This number is twice more women than men. Nepal relies on the support received in the framework of multilateral agreements and tourism. Until 1950 it was closed to the outside world, and when it opened its borders to foreigners tourist traffic is growing extremely rapidly.

Nepal's economy vs. tourism development

Economic development of Nepal was attributed mainly in sport and tourism industry. Mountain country's location makes it difficult to set aside agricultural land, yet Nepal manages to be self-sufficient, at least when it comes to the production of rice - a basic food product, and even export some surplus. Nepal industry is in the early stages of development, and the only industrial centres are located mainly in the Terai and the Kathmandu Valley. The greatest importance is the processing of jute, followed by wood industry, textile and confectionery. In 1959, the central authorities set up a department of tourism, and the country became a member of the International Union of Official Travel Organizations (IUOTO) assuming a long-term plan for the development of tourism, which provides infrastructure expansion: civil aviation accommodation facilities, travel agencies, trekking agencies, tourist information and staff training. Currently, Nepal has 6 airports with paved runways of which one, in the capital has the status of international airport. To pursue its objectives the development of tourism throughout the country established the Ministry of Culture, Tourism and Civil Aviation. Also established a governmental organization of Nepal Tourism Board which promotes tourism through websites, social media, tourist information, participation in fairs, etc. The most significant assumptions adopted by the Government of Nepali mainly developing and ensuring the safety of air transport within the country, the establishment of a tourist and trekking, international scientific cooperation, sustainable development of tourism, care for the quality and variety of tourist services, protection of cultural and historical heritage and the training of personnel in the field of tourism and civil aviation. According to data published in the report of the World Tourism Organization in 2017 the revenue from tourism is the amount

of the order of 630 million dollars, where in 2010 the amount was almost half lower - 343 million dollars.³ The devastating earthquake that hit Nepal in 2015 caused the number of tourists in the autumn peak season is dramatically decreased by almost 30% compared to 2014 and was the largest decline in the Asia-Pacific region. They were killed approx. 9 thousand residents and financial losses estimated at over 10 billion US dollars. Nepalese authorities make every effort to restore tourism in the country, because tourism is the dominant sector of the economy. According to the information and statistics published in the report of the Ministry of Culture, Tourism and Civil Aviation in May 2017, the number of tourists visiting Nepal increased by 25% compared to 2016 (Figure 1). 50% of all visitors are tourists from: India (17,1%) , China (11,1%), the USA (8,4%), the UK (5,4%) and Sri Lanka (4,8%).⁴ The greatest number of arrivals is observed in October and then in March (Figure 2). The vast majority of tourists come to Nepal by air (Table 1):.

Tab. 1. Tourist Arrival to Nepal in 2016 and 2017

Indicators	2016	2017	% Change
Tourist Arrival by:			
Air	572563	760577	32,8
Land	180439	179641	-0,4
Total	753002	940218	25
Average Length of Stay	13,4	12,6	-6,0

Source: own study based on Statistics inbound tourism to Nepal, <http://tourism.gov.np/files/statistics/11.pdf>

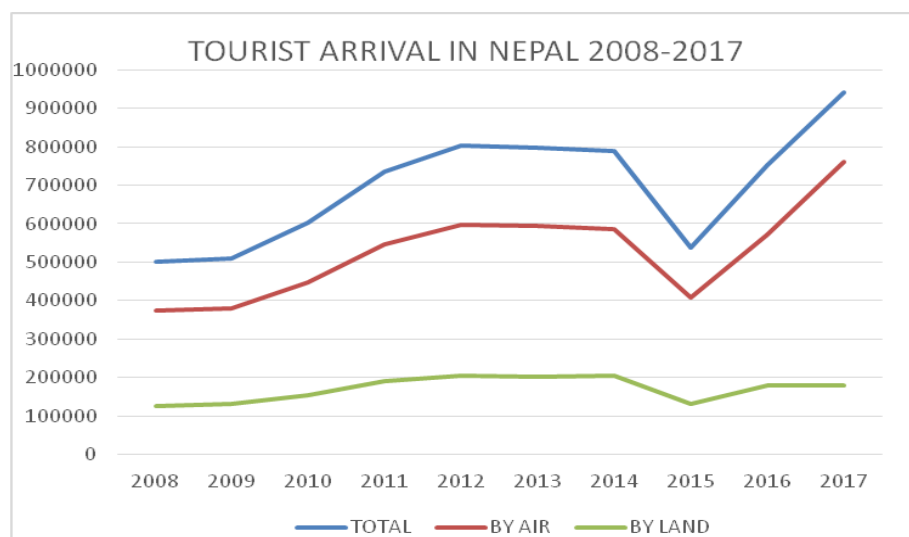


Fig. 1. Own study based on The statistics of inbound tourism to Nepal by year, source <http://tourism.gov.np/files/statistics/11.pdf>

³ <https://www.e-unwto.org/doi/pdf/10.18111/9789284419876> [03.10.2019]

⁴ <http://tourism.gov.np/files/statistics/11.pdf> [03.10.2019]

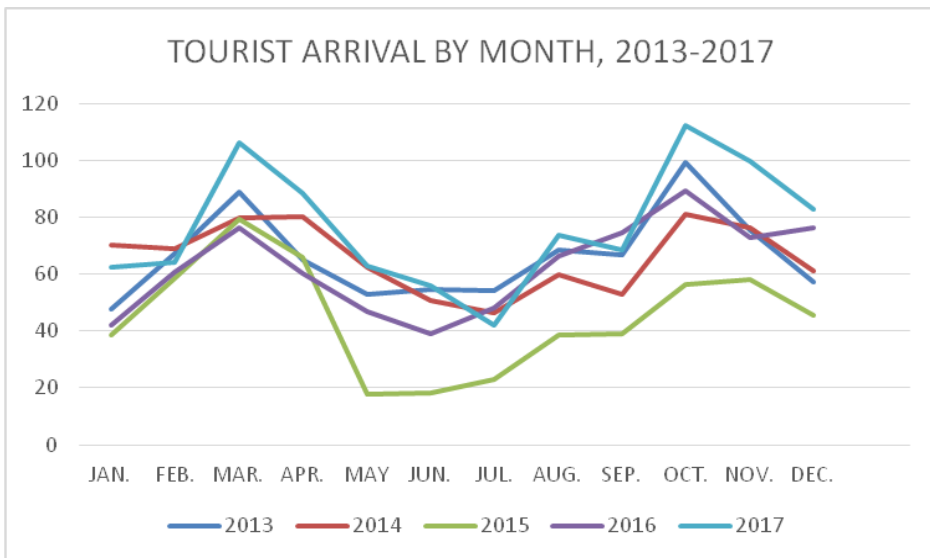


Fig. 2. Own study based on The statistics of inbound tourism to Nepal by month, source: <http://tourism.gov.np/files/statistics/11.pdf>

National parks vs. sport and tourism

Nature is the totality of things and phenomenon of the universe without forming products of human labor [Szymczak 1978]. Protecting her is realized almost from the beginning of use by humans. The world needs to maintain the diversity of the environment and their use in a balanced and equitable. Sustainable use means the use of that diversity in a way that does not lead in the long term to reduce it. According to the International Union for Conservation of Nature (IUCN) protected area is an area of land or sea designated for the purpose of protection and conservation of biodiversity and natural resources, as well as related cultural goods, managed by law or other effective means [Pullin 2017]. IUCN offered 8 categories of protected objects of which 5 have been recognized by the United Nations as an official protected areas categories and they are: strict reserves, national parks, natural monuments, areas of active protection of natural resources. Protected areas in addition to the function of protection also have to serve purposes of tourism and recreation, and ecological awareness. Unpleasant experience has shown. However, that often uncontrolled tourism development may entail specific risks to the natural environment which can be exemplified, even Tatra National Park. On the one hand, tourism contributes to the development of forms of protection of the environment, on the other hand we can often encounter the opinion, that the development of nature protection areas is limited or even impossible tourist traffic resulting in a slowdown in the development of local communities living in these areas. The question should be asked whether, by protecting a valuable natural area, are we activating the development of tourism or are we creating barriers to its development? It worths noting that the natural environment is characterized by dynamism, flora and fauna is not eternal in its present form. In nature, the phenomenon of succession in force, and therefore actions related to the development of tourism in these areas should be implemented in accordance with the

principles of sustainable development. Currently, the progress of environmental degradation either because of natural disasters or due to destructive human activity is almost catastrophic. Often, this is the only opportunity to visitors that they had a chance to commune with exceptional natural values of the region are the protected areas and it is primarily the value of the largest and most valuable national parks. Tourism in Nepal is an integral part of the protected areas of the country because the authorities make noticeable efforts to its development. However, despite the cumulative efforts of the Government of Nepal, the local community and non-governmental organizations, due to the increase in human population, development activities, protected areas face many challenges. Interference in the forest areas and the dependence of local communities from protected areas: pastures, timber, grazing and other forest products is a big challenge, sometimes leading to conflict between the protection of valuable natural areas, and the local community. In order to protect rare and endangered wildlife, created the Department of National Parks and Nature Conservation (DNPWC) setting 8 National Parks: National Park Chittwan, National Park Sagarmatha, Langtang National Park, Rara National Park, Shey-Phoksumdo, Bardiya National Park, National Khaptad Park and the National Park and protected area Makalu-Barun. 3 nature reserves: Suklaphanta, Parsa and Kosi Tappu and one hunting reserve - Dhorpatan, and 2 protected areas: Annapurna and Makalu-Barun National Khaptad Park and the National Park and protected area Makalu-Barun (Figure 3):.



Fig. 3. Map of protected areas in Nepal, source: <http://www.dnpwc.gov.np/>

The tourist season in Nepal is relatively short, due to the location of the country, and thus the conditions for tourism are most favorable in spring or autumn. At this time, trekking routes traverse hundreds of thousands of tourists to admire the biodiversity of fauna and flora, almost only available in protected areas.

The second group of people visiting these areas are certainly avid athletes. The

annual Everest Marathon is held in Nepal - one of the most demanding and highest-performing marathons in the world.⁵ In addition, it is a paradise (sometimes also eternal) for most Himalaists, with the biggest challenge which is Everest itself (Figure 4):

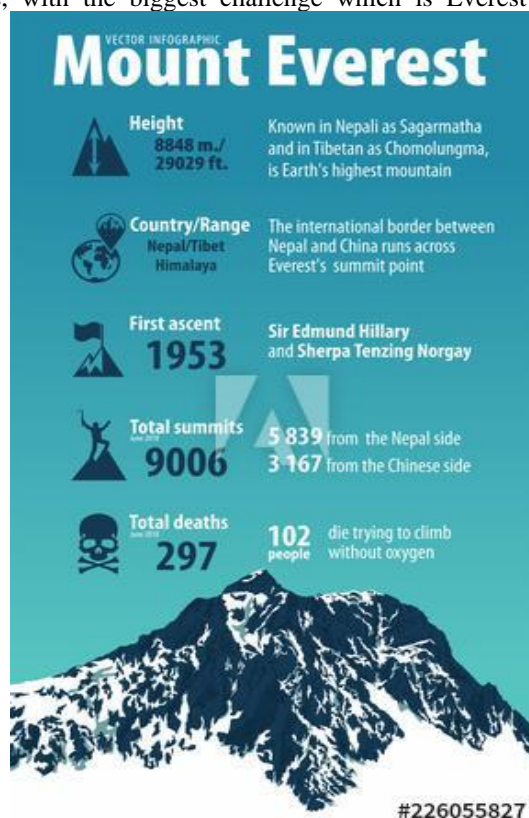


Fig. 4. Statistics of the highest peak in the world Everest, source: <https://www.fototapeta4u.pl/fototapeta/mountain-peak-everest-highest-mountain-in-the-world-vector-infographic-226055827/>

Sagarmatha National Park - in the face of threats

The Sagarmatha National Park (PNS) covers an area of 1148 km² and is located in the Central Himalayas of eastern Nepal, in the Solukhumbu District (Figure 5). Established in 1976, and three years later it was the first to be included on the UNESCO World Heritage List under the National Parks and Nature Conservation Act and is managed by the National Park and Wildlife Conservation Office, the Department of National Parks and Nature Conservation of the Ministry of Forestry of the Government of Nepal.⁶

⁵ <http://everestmarathon.com/>

⁶ <https://whc.unesco.org/en/list/120> [03.10.2019]



Fig. 5. Sagarmatha National Park, source: own data

Effective legal protection in force under the act on the protection of wildlife and national parks from 1973. And the provisions of the Himalayan National Park of 1978. January 2002, established a buffer zone comprising the further area of 275 km². Most of the park (69%) consists of barren land with an area of over 5000 m, of which 28% are pastures, and almost 3% wooded. It is home to more than 20 villages with more than 6000 Sherpas, who lived in the region for the past four centuries. Nowadays, continuing the traditional cultural practices and religious, they are forced to restrict hunting and slaughter of animals and the protection of all living beings. The majority of PNS extends the range of the High Himalayas, in the area of group Chomolungma, whose central point is the highest peak in the land of Mount Everest (8848 m), called such. Tibetan Chomolungma, loosely translated means "Mother of the Gods" or "Mother of the World" the Chinese use Zhumulangma and Nepalese Sagarmatha, meaning "forehead of heaven". A small part of the Park is located in the Himalayas Low. The name comes from the area around the Nepalese name of the summit of Mount Everest- "Sagarmatha". This massif is located between glaciers and Rongphu Kangshung Tibetan side and the Khumbu and Imja Nepalese side. On its site, there are three other eight-thousanders: Lhotse (8516 m), Lhotse Shar (8383 m) and Cho-Oyu (8201 m). This is the highest national park in the world. This area constitutes the main phase of the evolutionary history of the earth and is one of the most interesting geological regions in the world, with a high, relatively young mountains, glaciers, which form unique compositions of the landscape dominated by high peaks and falling deep valleys. Endemic flora and fauna precisely blended into the rich culture of the Sherpas attracts lovers of the exotic from around the world. PNS natural landscape, is determined by several factors:

- geological structure of the area,
- contemporary tectonic movements,
- the nature and dynamics of process modelling area.

"The park was created on the ground granite and metamorphic rocks also places Carboniferous (limestone of Mt. Everest). The main component of the geological structure of the landscape Park, however, are granites and crystalline schists" [Drdoš J. 1990]. In shaping the landscape structure is also significant height above sea level of which depends on climatic conditions and the nature of the vegetation. In the described National Park vegetation is less important in shaping the landscape, his face formed especially powerful form of relief. the park covers the upper watersheds Dudhkoshi and Bhotehoshi and consists largely of difficult terrain and gorges high Himalayas, in many opinions is one of the most picturesque regions of the world. Himalayas are also (in the opinion of indigenous peoples) seat of countless gods, deities and spirits. Religious beliefs are very important for tourism in this region.

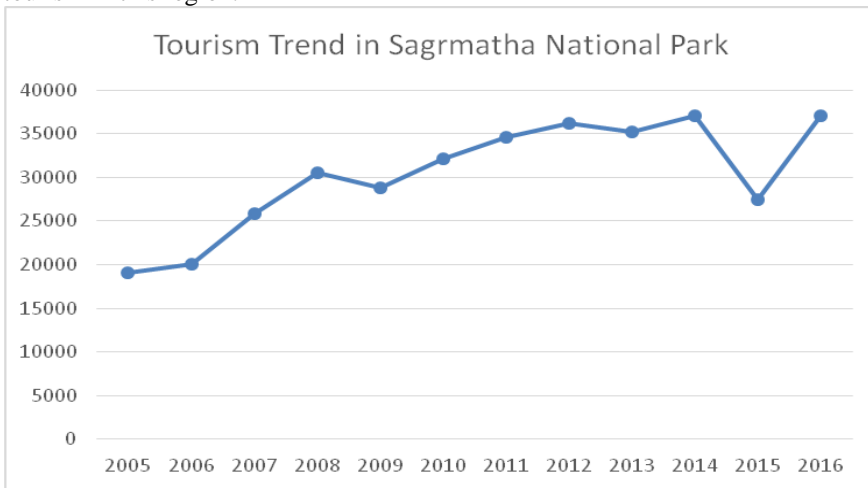


Fig. 6. Own study based on Statistic data for visits PNS monthly section, source: <http://www.sagarmathanationalpark.gov.np/index.php/tourism>

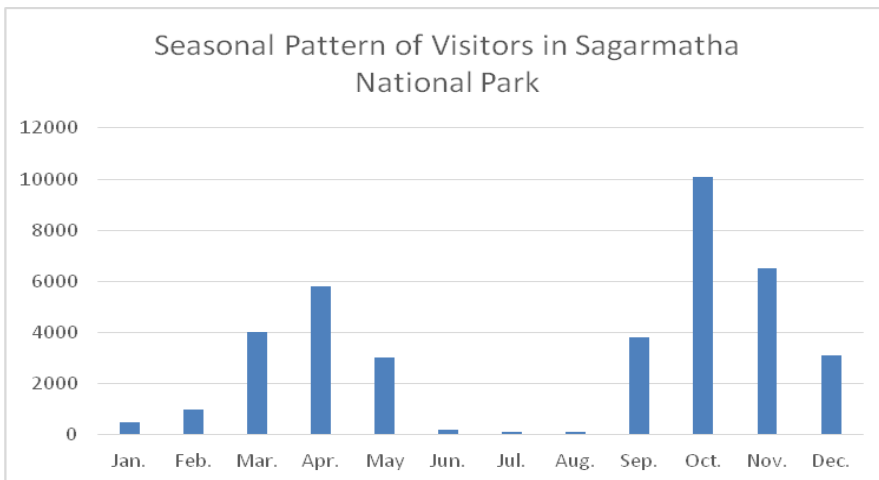


Fig. 7. Own study based on Tourist traffic in the section PNS month, source: <http://www.sagarmathanationalpark.gov.np/index.php/tourism>

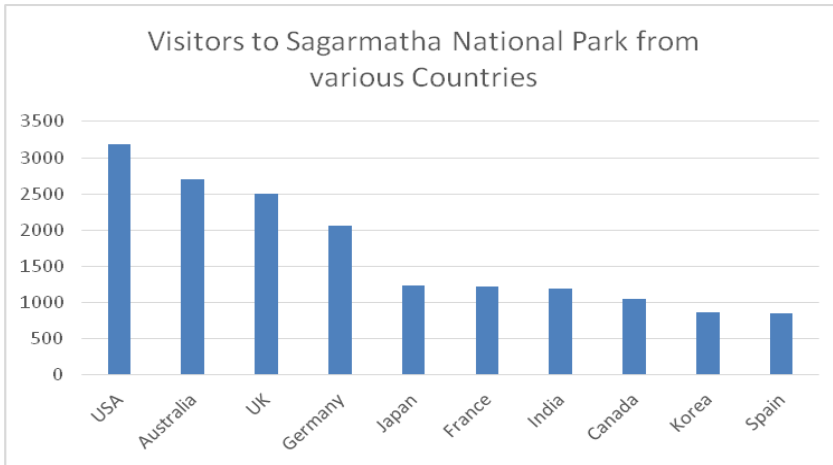


Fig. 8. Own study based on PNS Tourist traffic by country, source: <http://www.sagarmathanationalpark.gov.np/index.php/tourism>

Looking at the statistics of tourist attendance in the attached charts, it is not difficult to say that Sagarmatha National Park enjoys growing interest, and in the last 10 years, except 2015, the number of tourists has doubled (Figure 6 and 7). What does this mean for the region? The density of the local population in the Park is low, an average of 2,4 persons per 1 km². The most densely populated area is the village of Namche Bazaar, which together with the villages creates the main cluster of residents of the Park. The location of settlements in the PNS was influenced by access to water, fuel resources, cropland, grazing land, existing centres of worship, and the danger of floods and landslides slope. Currently, under the influence of increasing tourist traffic they created new settlements, especially at intersections routes, main paths or in other attractive places. "Park most frequent route leading from said settlement Namche Bazaar by the upper valley portion Duth Kosi then deposits: Tengpoche Gonda, Pangpoche, Pheriche and Lobuche to the viewpoint Kala Pattar (5545 m) and to the main base expedition of Mt. Everest" [Drdoš J. 1990].

Sherpas - the population of the areas of the Park are mainly farmers cultivating tiny plots mainly on vegetables and buckwheat or barley. However, the dominant source of income for most residents of the animal park. Due to the damage caused by grazing sheep and goats breeding of these species is prohibited, allowed only yaks and their crosses with domestic cattle. Which are used not only as a source of milk, meat and wool, but also act as a provider of energy sources. They produce a fertilizer which is dried in the sun and then used as fuel. What also perform transport functions, moving goods and supplies for the residents and the needs of tourists. There are also hiking trails for porters accompanying moving through the park to visitors as a communication network composed exclusively of hiking trails. The introduction of road transport does not allow relief. Sagarmatha National Park can be reached by regular air transportation to the village of Lukla or rented helicopter from the selected agencies offering this type of service but are mainly scenic flights or transporting food supplies or injured or exhausted tourists. In the vicinity of the village of Namche Bazaar also functions very primitive landing Syangpoche rarely used due to the lack of infrastructure, and was designed for commercial customers

view Hotel Everest. Sagarmatha National Park is the most popular and the most visited by tourists. The main reason is the highest mountain in the world located in the Park, as well as the attractiveness of other mountains. The aesthetic value of the natural environment and culture of the Sherpas. Admission to the park is paid, and after the earthquake in 2015. Fees for tourists - foreigners increased several times. Large differences in height significantly limit recreational opportunities so that the only possible forms of tourism is alpine and mountaineering. Slope slopes in some parts of the Park creates favourable conditions for skiing but none prior adjustment and energy preclude the practice of such sports. Attractiveness add glacial lakes, waterfalls and glaciers, which form the communication barrier. No go causes many valleys that are not available to tourists:

- accommodation in simple huts of the local population,
- buildings designed to support rural tourists,
- tourist lodge or shelter,
- hotels.

The development of hotels set estimable is highly seasonal tourist traffic and foreign tourism (Figure 8). Other objects adapted to the needs of tourists mainly serve the local population as a modest increase sources of income. The highest standard of tourism services offers hotels negligible amount, a special exception is the already mentioned Everest View. It is a modern hotel built in cooperation Japanese-Nepalese, located at an altitude of 4000 m above sea level with views of the highest mountain in the world (Figure 9). It's also an example of an object built in a sustainable way using natural sources of energy, without serious interference with the natural environment compared to the rest of tourist infrastructure. Widespread burning of garbage created or left behind by the growing number of tourists, discharge of pollutants directly to the mountain rivers is the greatest scourge of the Sagarmatha National Park, especially in the region where Mount Everest climbing expeditions going through many of the world leave behind mountains of garbage and excrement. Residents of moving along the same transport routes slowly accept ecological behavior. Until a few years ago trails are regularly rubbished by the natives, and now quite common and accepted segregation of waste in specially designed containers.



Fig. 9. View of the village Pcheriche, source: own data

Compared to other parts of Nepal, the PNS fauna is relatively poor in mammals, probably partly due to the geologically young origin of the area. They live here among others: snow

leopard called the panther, wolf gray (not seen since 1980), Himalayan black bear, red panda, Himalayan Marmot and musk deer. Smaller mammals are water and Himalayan shrew. Flora is also poor. With softwood fir can meet, even at the height of 4000 m, hemlock, yew sometimes appear very rarely, and cypress. Among the trees and shrubs that occur in large numbers in the PNS is juniper. Small tracts of forests are important as part of creating a landscape in the lower parts of the Park area.

Conclusion

The impact of sport and tourism on the solution to the problem of conservation in the PNS has two faces: positive and negative. The positive, of course, the influx of foreign tourists, and thus an additional source of income for residents of settlements located in this area. The negative is the increasing use of natural resources needed to handle the growing number of travellers, and this causes deepening wasteful economy. It helps in the low level of education of the local population. In addition, insufficient arable land makes residents of the Park are not self-sufficient in food production, and even yields they obtain from their small plots tend to be destroyed by the strong monsoon downpour. Alpine shrubby vegetation also it suffered from grazing yaks which resulted in lowering the number of plant species. The fertilizer which is produced by the grazing causes the spread grew species require good soil quality. The impact of human activity can be described as very unfavourable. Lack of control forest services, corruption and limited reforestation program is a consequence of the current state of affairs. Arrives the local population and tourists arrives. It is not resolved the issue of generating energy as well as drinking water or means of transport. Another question should be asked: how to solve the problem of grazing animals or regular afforestation, especially near settlements? Another issue is the stabilization of slopes against landslides and landslides that especially during the monsoons are a huge threat to the residents of the Park. The development of sport and tourism should be done with minimal interference in the natural environment Park, dream is water supply and transport of waste. The practice cluttering by numerous expeditions, especially in the area of the base camp of climbers who practice high-altitude climbing requires immediate legal regulations and their enforcement by the designated for that purpose service. Solution to these problems is difficult. National Parks are treated as product valuable brand equity and conditioning development especially in the poor countries such as Nepal.

References

- Brenk, A. (2016). Himalaje Nepalu – turystyczna moda czy fascynacja górami, Wybrane aspekty Turystyki i Rekreacji, (eds.) Tauber R.D., Mucha-Szajek E., WSHiG, Poznań.
- Brenk, A. (2017). Wpływ turystyki na życie mieszkańców w obliczu kataklizmów naturalnych na przykładzie Nepalu, Turystyka, Hotelarstwo, gastronomia w teorii i praktyce, WSHiG, Poznań.
- Drdoš, J. (eds.) (1990). Park Narodowy Sagarmatha, Szerpowie i ich ojczyzna pod Mount Everestem, Wrocław-Warszawa-Kraków.
- Dutkiewicz, S. (2010). Nepal-turystyczny tygiel, Akademia Wychowania Fizycznego,

Kraków.

- Kurczab, J. (2013). Himalaje Nepalu, Wydawnictwo Sklep Podróżnika, Warszawa.
- Nowa Encyklopedia Powszechna PWN (1996). PWN, Warszawa.
- Partyka, J. (2015). Parki Narodowe jako obiekty zainteresowania turystycznego w: Stasiak A., Śledzińska J., Włodarczyk B (eds.). Wczoraj, Dziś i Jutro Turystyki Aktywnej i Specjalistycznej, Wydawnictwo PTTK „Kraj”, Warszawa.
- Pullin, A.S. (2017). Biologiczne podstawy ochrony przyrody. PWN, Warszawa.
- Sawicki, B., Harasimiuk, M. (2014). Rola obszarów chronionych w rozwoju edukacji, turystyki i gospodarki. Uniwersytet Przyrodniczy w Lublinie, FREL, Warszawa.
- Szymańska, U., Zębek, E. (2008). Prawo i ochrona środowiska, Wyd. Uniwersytetu Warmińsko-Mazurskiego, Olsztyn.
- Szymczak R. (eds.) (1978). Słownik języka polskiego, PWN, Warszawa.

Websites:

- <https://www.e-unwto.org/doi/pdf/> (03.10.2019)
- <https://www.fototapeta4u.pl/fototapeta/mountain-peak-everest-highest-mountain-in-the-world-vector-infographic-226055827/> (1.12.2019)
- <http://tourism.gov.np/files/statistics/11.pdf> (03.10.2019)
- <https://www.iucn.org/> (04.10.2019)
- http://www.nepaltourism.info/national_park%20in_nepal/index.html (04.10.2019)
- <http://www.dnpwc.gov.np/> (04.10.2019)
- <https://www.welcomenepal.com/> (04.10.2019)
- <https://whc.unesco.org/en/list/120> (07.10.2019)
- <http://www.sagarmathanationalpark.gov.np/> (07.10.2019)