

TOURISM PRODUCTS AND TOURIST SATISFACTION IN NECH SAR NATIONAL PARK ETHIOPIA

Tamirat Haile Chankallo *

*Ethiopian Wildlife Conservation Authority, Nech Sar National Park,
Ecologist, Arba Minch, Ethiopia*

Teka Derebew Mesele

*Ethiopian Wildlife Conservation Authority, Nech Sar National Park,
Tourism expert, Arba Minch, Ethiopia*

Received 07 November 2022; Revised 12 November 2022; Accepted 15 November 2022

ABSTRACT

The objective of the study was to investigate the tourism products and tourist satisfaction in the Park. For the better success of the study design that integrates both quantitative and qualitative research methods. Primary & secondary information sources have also been used; the primarily data collection was made using direct observation. Potential tourist attraction site was recorded with Canon digital camera & Garmin 64 GPS based field observations were used. Questionnaires were used to investigate tourist satisfaction in the park. Data were analyzed using descriptive statistics, MSEXCL programs, QGIS software. According to the finding of the study, majority of tourism products of the park are: Forty springs, God's bridge, Degabule viewpoint, Chamo view point, Nech Sar Plains, Ayemero Selassie Cave, Emporer Haile Selassie, Colonial Mengistu Hailemariam, Hot spring & tourism wild animals. Overall tourist satisfaction indicated, majority 84.5 % & 15.5 % visitors were satisfied & highly satisfied, respectively. On other hand, Visitors source of information, Tourism product preference, Infrastructures problems for visitors were assessed. Tourist flow and income generated status in National Park increasing before the outbreak of covid-19 pandemic virus, whereas decreasing after occurred. About 800,000 ETB has been collected from National Park visitors that were collected from the entrance fee; 2014E.C. Major tourism products problems in the park were assessed. The government should promote the National Park & provide appropriate support for its conservation.

Keywords: Tourism products, Tourist satisfaction, Tourism animals

INTRODUCTION

Ethiopia has an immense potential for tourism industry (Berhanu & Raj, 2020; Tesema et al., 2020). It suffices to say that it has almost all

***Correspondence to:** Tamirat Haile Chankallo, Ethiopian Wildlife Conservation Authority, Nech Sar National Park, Ecologist, Arba Minch, Ethiopia, Tel: +251905448055; E-mail: chankallo33.h@gmail.com

types of primary tourist products: historical attractions, National parks with endemic wildlife, and cultural and religious festivals (Berhanu & Raj, 2020). UNESCO recognizes nine world heritage sites and one natural site (Berhanu & Raj, 2020; Tesema et al., 2020; Hussen, 2021). Tourism is well planned; it can generate benefits at the destination by increasing tourist receipts, government revenue, and employment (Berhanu & Raj, 2020). Successful tourism development, it is crucial to attract tourists and to recommend the destination for others to revisit (Tesema et al., 2020). In order to develop tourism industry, tourist satisfaction has been a considerable goal for many countries (Berhanu & Raj, 2020; Hussen, 2021). In fact, developing the tourism industry is the target of any government all over the world because it can generate GDP and jobs (Teshome et al., 2020). Tourism industry is desirable for all countries because it will benefit not only the industry itself, but also generate a strong flow-through effect in other sectors such as retail, transportation, and construction. In the recent decade, decision makers in the tourism industry have been trying to increase the level of tourist satisfaction in different manners. Consequently, the tourist satisfaction is viewed as an important research topic by both practitioners and academics (Berhanu & Raj, 2020; Teshome et al., 2020; Hussen, 2021). Nech Sar National Park derived from two Amharic words “Nech” meaning white & Sar meaning Grass) is one of 27 National Parks in Ethiopia (Vreugdenhil et al., 2012). The Park was established in 1974 and is 514 km² (Temesgen & Warkineh, 2018; Bililign Zafu, 2016). The Park’s aquatic and wetland areas along the Lake Abaya and Lake Chamo shorelines are natural habitats covering approximately 17% or 96km² of the Park (Fetene et al., 2013). Nech Sar National Park’s rare and endemic mammals, and it’s beautiful scenery, make it a popular destination for National and international visitors (Bililign Zafu, 2016; Tsegaw, 2017; Seid & Kakiso, 2019). The primary draw for this category of tourist are birds, however the presence of other flagship species such as the Burchille’s zebra (*Equus quagga*), Nile crocodile (*Crocodylus niloticus*) & Hippopotamus (*Hippopotamus amphibious*) make it a well-rounded destination (Seid & Kakiso, 2019). Therefore, the present study is aimed at investigating the overall tourism products and tourist satisfaction in National Park.

METHODS

Sampling design & Technique

The research approaches were following mixed study design that integrates both quantitative and qualitative research methods (Creswell, 2003). Both primary and secondary data were used in this study. The primary data was collected through field observation and questionnaires. GPS based field observations were used to mark core attractions site & Questionnaire were used to investigate tourist satisfaction in the park. Whereas the secondary data was gathered from archives, tourism statistics bulletins and books. For tourism products GPS locations of each

destination were recorded Garmin 64 GPS. The representative samples of the respondents were selected purposively. The number of visitors was, 28,490, 862, and 648 for domestic, foreign and foreign residents respectively. Following (Gay, 1996) 5% of the total visitors (n=1,499) was used as sample visitors. Accordingly, the sample size distribution in each visitor was 1,424, 43 & 32 for domestic, foreign and foreign residents respectively. Accordingly, data collected Twelve (12) consecutive Months (July 2021 - June 2022).

Data Collection Methods

Primary and secondary information sources have also been used; the primarily data collection was made using direct observation (personal record) which is supported through Canon digital camera (50*optical zoom & 20.3 mega pixels), 10x42 Binocular and Garmin 64 GPS. On the other hand secondary data were collected from review of relevant different related publications and document reviews. Tourism product data collection a group of the experts and rangers were collaboratively moved to the inside park to explore new and updating old attraction site for the consecutive three months to assess the core tourist potential site. In order to determine the tourism product destination the ground truth points collected via GPS were transferred to QGIS 3.4 software version. The tourist satisfaction data is collected using questionnaire and interview. Questionnaire is very important tool to collect the data from large population. The questions were prepared both in the form of open ended and closed ended questions. In addition, interview was used to collect the data from the respondent. Interview questions also organized in unstructured form and the sequence of questions is not kept during the interview additional questions were raised while conducting the interview in order to get substantiated information for the study.

RESULT AND DISCUSSION

Assessment on Tourism products at Nech Sar National Park was made based on Natural attractions and historical site activities; from the perspective of identifying conservation challenges hindering the management activity and to indorse possible mitigation strategies (**Table 1**).

Ecological units of the park Vegetation

Nech Sar National Park is endowed with diversity of its riverine and groundwater forest, savanna acacia woodland; open savannah (from which the name of the National Park Nech Sar meaning white grass was derived, as the colour of this open savanna is white), escarpment walls, highland acacia forest, hot springs and lake shores (**Figure 1**).

Table 1. Major tourist attracting sites in Nech Sar National Park.

Major Attraction	Distance from HQ	What kind of wildlife you can see (key species in areas)
Forty springs	3.5 km	Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Sylvicapra gramma, Phacochoerus africanus, Hystrix cristata, Orycteropus afer & Panthera pardus
God's bridge	23.2 km	Equus quagga, Traglaphus strepsiceros, Traglaphus imberbis, Traglaphus scriptus, Phacochoerus africanus, Gazella granti, Lycaon pictus, Acinonyx jubatus, Panthera pardus
Degabule viewpoint	25 km	Equus quagga, Traglaphus strepsiceros, Traglaphus imberbis, Sylvicapra gramma, Phacochoerus africanus, Gazella granti, Lycaon pictus, Acinonyx jubatus
Chamo view point	30.1 km	Papio anubis, Equus quagga, Traglaphus strepsiceros, Traglaphus imberbis, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Orycteropus afer, Gazella granti, Canis mesomelas, Canis adustus, Otocyon megalotis, Acinonyx jubatus & Panthera Leo
Nech Sar Plains	27.6 km	Papio anubis, Equus quagga, Traglaphus strepsiceros, Traglaphus imberbis, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Phacochoerus africanus, Orycteropus afer, Gazella granti, Lycaon pictus, Canis mesomelas, Canis adustus, Otocyon megalotis & Acinonyx jubatus
Sermaly River valley	34	Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Traglaphus imberbis, Traglaphus scriptus, Medagua guentheri, Phacochoerus africanus, Hystrix cristata, Gazella granti, Lycaon pictus, Acinonyx jubatus, Panthera pardus & Panthera Leo
Tilku Bonki mountain	17	Cercopithecus pygerythrus, Papio anubis, Erythrocebus patas, Traglaphus strepsiceros, Traglaphus imberbis, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Kobus ellipsiprymnus defessa, Phacochoerus africanus, Hystrix cristata, Orycteropus afer
Wallo wetland	7	Hippopotamus amphibious Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Kobus ellipsiprymnus defessa,
Ayemero-Selassie Cave (founder of Arba Minch town)	6	Hippopotamus amphibious, Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Kobus ellipsiprymnus defessa, Phacochoerus africanus, Hystrix cristata, Orycteropus afer
Emporer Haile Selassie(Breathtaking place)	5	Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Kobus ellipsiprymnus defessa, Phacochoerus africanus, Hystrix cristata, Orycteropus afer
Colonial Mengistu Hailemariam (Breathtaking place)	4.5	Cercopithecus pygerythrus, Papio anubis, Colobus guereza, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Kobus ellipsiprymnus defessa, Phacochoerus africanus, Hystrix cristata, Orycteropus afer, Panthera pardus & Hippopotamus amphibious
Hot spring (Tsebel)	41	Colobus guereza, Equus quagga, Traglaphus strepsiceros, Traglaphus imberbis, Sylvicapra gramma, Hystrix cristata, Orycteropus afer, Panthera pardus & Hippopotamus amphibious
Momme Mountain	41.5	Papio anubis, Colobus guereza, Traglaphus imberbis, Traglaphus scriptus, Medagua guentheri, Sylvicapra gramma, Phacochoerus africanus, Hystrix cristata, Orycteropus afer
Harro Ropi lake	52	High the school of Hippopotamus amphibious, Crocodylus niloticus, & water birds
Crocodile market	17	An area of amazing natural entertainment of crocodile(Crocodylus niloticus) swarming and sun bathing in Chamo Lake

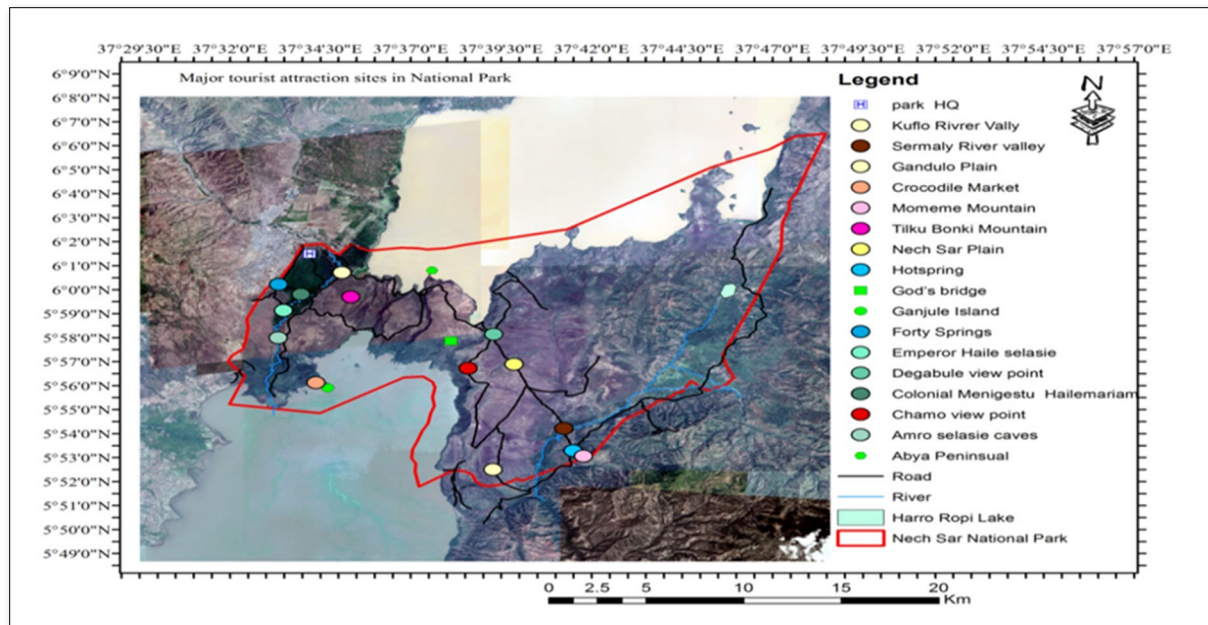


Figure 1. Map of major tourist attraction sites in National Park.

In **Figure 2** a is Bush land with Ganjullo Island, b is groundwater forest with scattered vegetation with GODs Bridge 3.5km narrowest land b/n the two lakes (Beltae Plain), c is Nech Sar Plain (white grass), d is Lake Chamo with visitors (Source: Tamirat & Teka) filed photo (**Figure 2**).

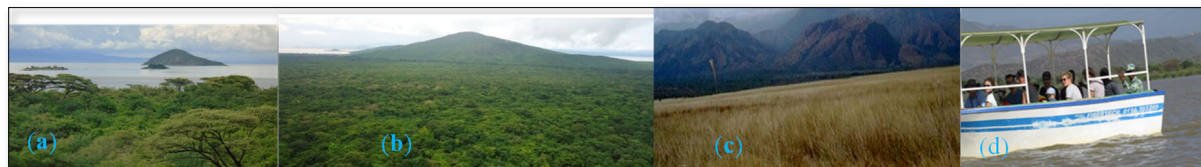


Figure 2. Partial view of different Habitat types of Nech Sar National Park.

BIODIVERSITY

Nech Sar National Park possess more than 103 small & large mammals, 33 Reptiles, 351 Birds, 8 Amphibians, 16 Fish, 21 Snakes, 845 Arthropods, 8 Frog and Toad, 18 Dragonflies flora;- 700-1000 species 6 are endemic similar studies (Clark, 2010). The Swayne's hartebeests (*Alcelaphusbuselaphus swaynii*) were introduced to park which are now locally extinct similar studies (Simon et al., 2020) (**Figure 3**).

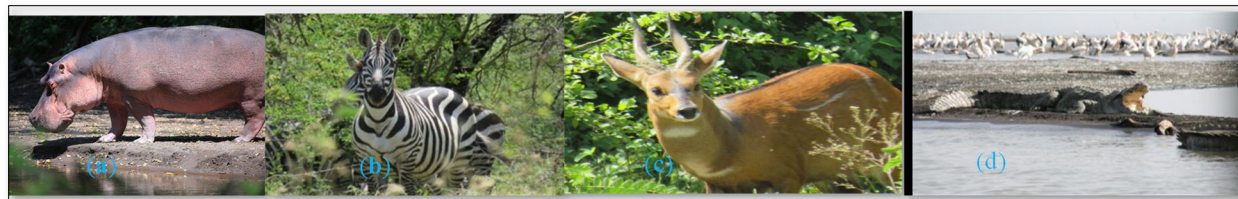


Figure 3. Some Mammals and birds of Nech Sar National Park.

(a) *Hippopotamus amphibious* (source:Aziz), (b) *Equus quagga*, (c) *Traglaphus Scriptus*, (d) *Crocodylus niloticus* & Great White Pelican (*Pelecanus Ononcrotales*) (Source: Tamirat and Teka filed survey).

Tourist satisfaction status

Majority of National Park visitors were in the level of satisfied. From which 84.5 % of visitors were satisfied, 15.5 % of visitors were highly satisfied (delighted) & No dissatisfied visitor were surveyed; whereas most visitors told us orally, what satisfied them was the abundance of multi attraction in the Park (Figure 4).

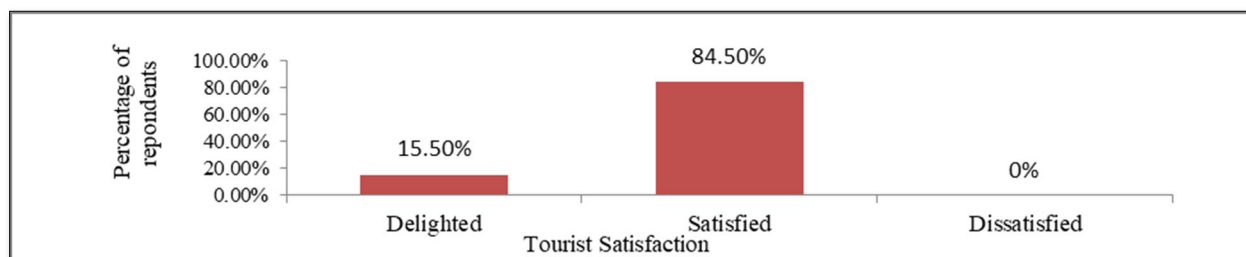


Figure 4. Tourist satisfaction of Nech Sar National Park, 2014 E.C.

Tourists Nationality status

Nech Sar National Park was visiting by foreign visitors, foreign resident visitors & domestic visitors (Figure 5).

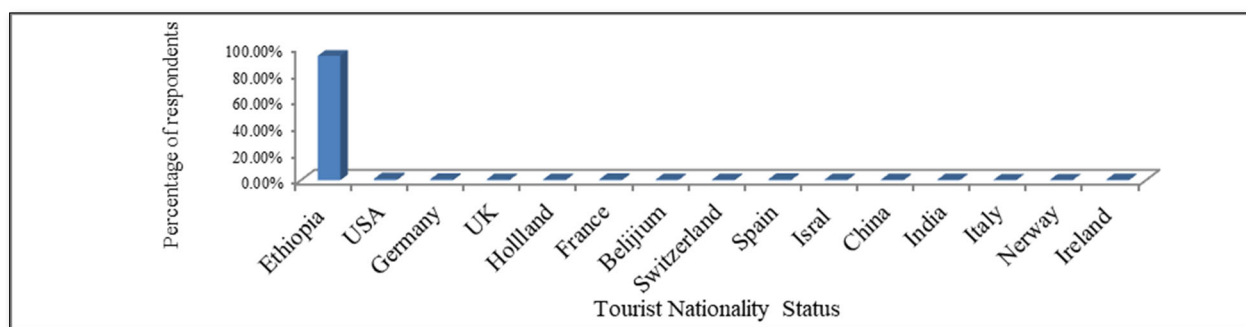


Figure 5. Tourists Nationality status in NSNP, 2014 E.C.

Tourists source of information

There are different source of information that enable visitors to get information about the tourist destinations. In 2014 E.C the most of Park visitor's source of information were friends (friend's visitors told) (Figure 6).

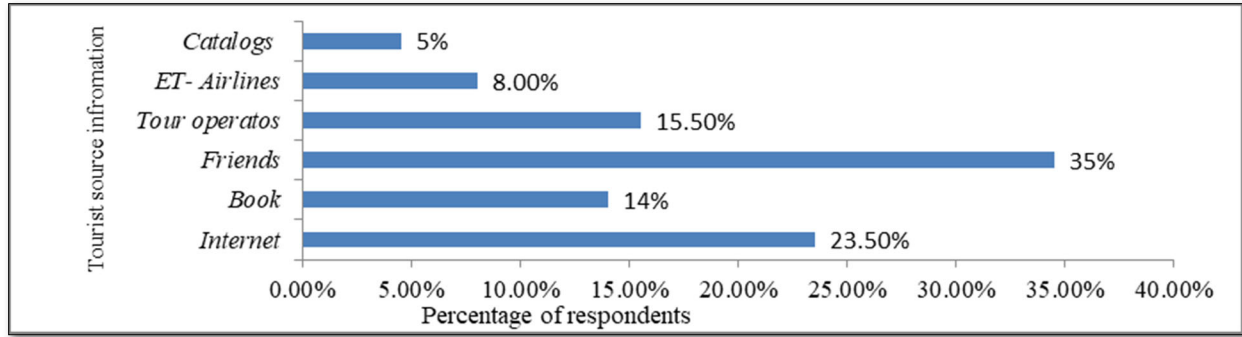


Figure 6. Tourists source of information in NSNP, 2014 E.C.

Tourists Tourism product choices

The charismatic Nech Sar National Park have different attractions that attracted many visitors. Most of Park visitor's interest was to visit the breathtaking groundwater canopy forest (Figure 7).

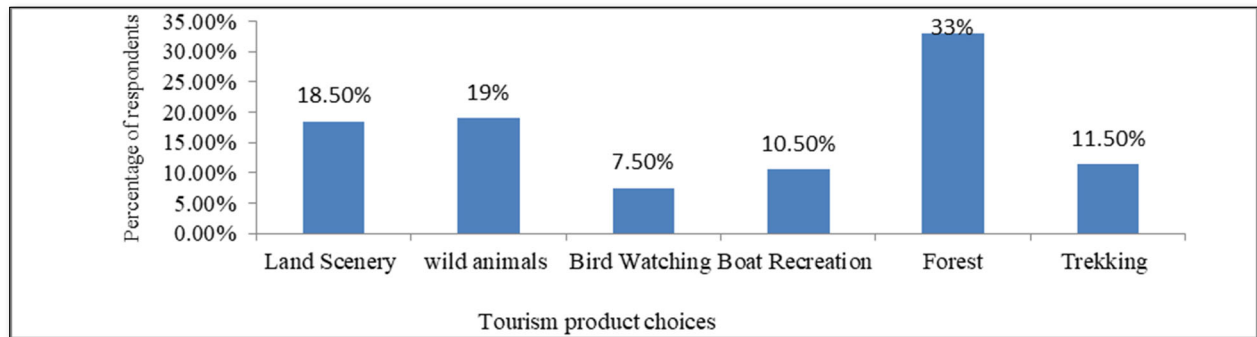


Figure 7. Tourists Tourism product choices in NSNP, 2014 E.C.

Infrastructures challenges for visitors

In Nech Sar National Park one of the biggest tourism development challenge was lack of infrastructure development. Facilities such as Roads across the National Park, Garbage disposal, Outdoor tourist campsite & Eco-friendly toilet didn't construct in Park (Figure 8).

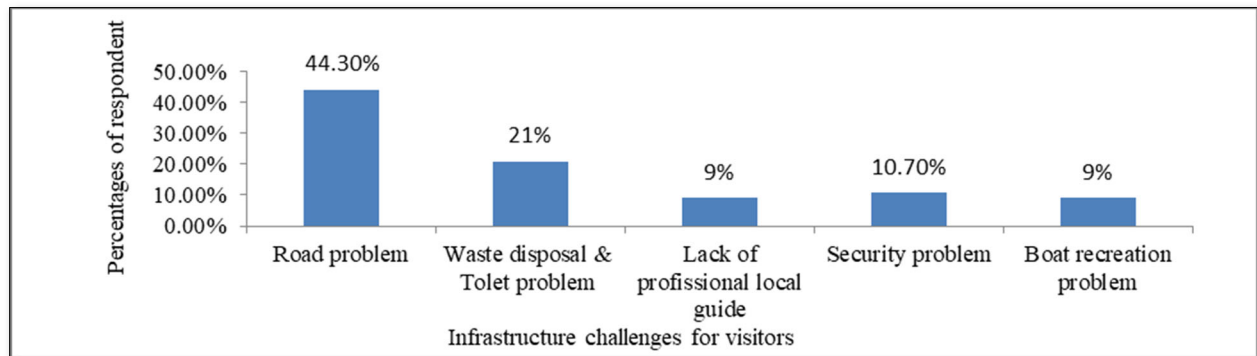


Figure 8. Infrastructures challenges for visitors in NSNP, 2014 E.C.

Tourist Flow & Income Generated Status in 2014 E.C

In 2014 E.C numbers of male visitors were higher than number of female visitors, which were 17,935 & 12,065, respectively. In 2014 E.C total of 30,000 visitors were accommodated at Park, from among about 28,490 were domestic visitors, 862 were foreign visitors & 648 were foreign residents visitors were recorded. National Park was visiting by different visitors & generating income for the country. In 2014 E.C 800,000 Ethiopian Birr has been collected from National Park visitors that were collected from the entrance fee purpose only. Income collected was high on the months of September 103,530 ETB & January 96,045 ETB were collected, whereas relatively to other months of 2014 E.C fewer income was collected on March 26,315 ETB & July 31,555 ETB were collected, respectively (Figures 9 & 10).

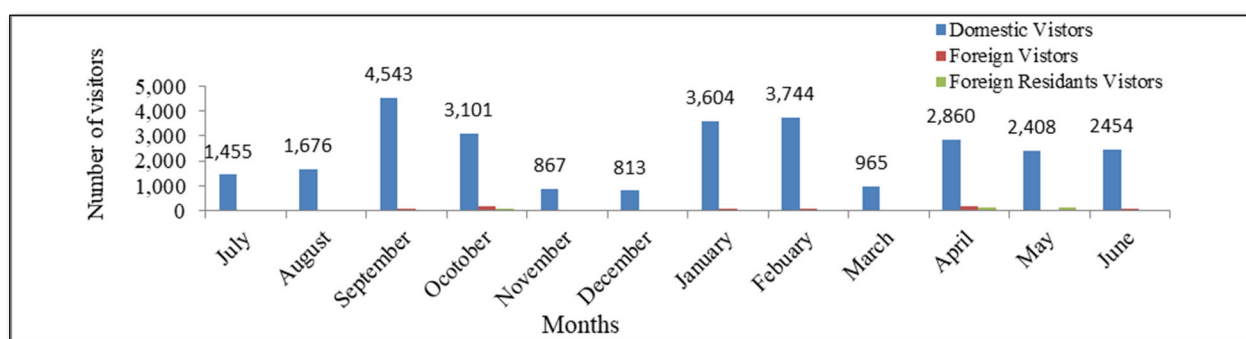


Figure 9. Number of visitors' status.

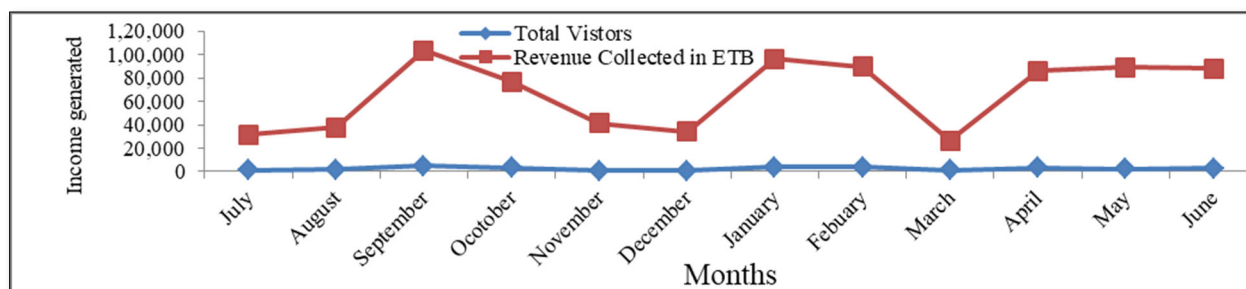


Figure 10. Income generated status in NSNP, 2014 E.C.

Tourist Flow & Income Generated Status from 1987 - 2014 E.C

National Park tourist flows & incomes high before the outbreak of covid-19 pandemic virus. On other hand, unfortunately the emergency of covid-19 damaged the same as the tourist destinations areas. National Park was visiting by domestic visitors, foreign visitors & foreign resident visitors. Comparatively with all years from 1987 E.C up to 2014 E.C number of visitors was highly ordered since on 2008 E.C, 37,570 visitors, 2014 E.C 30,000 visitors were accommodated, respectively. In 2014 E.C income collected was lower than others relatively to its high visitor's number, because most visitors in 2014 E.C domestic visitors, Because of the entrance fee was less than foreign visitors. May up to August, 2012 E.C tourist flow & revenue collection was zero, due to the occurrence of the pandemic covid-19 virus (Figures 11 & 12).

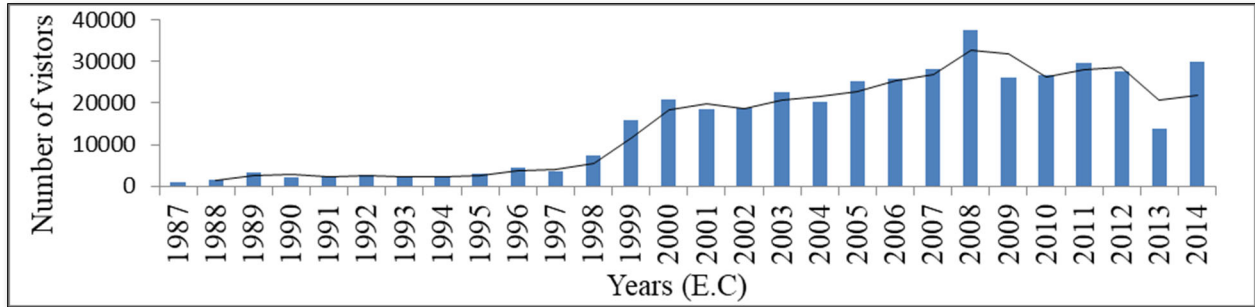


Figure 11. Tourist flow and its trend for the last 27 years at NSNP (Source: Data compiled from; NSNP, EWCA and Self survey).

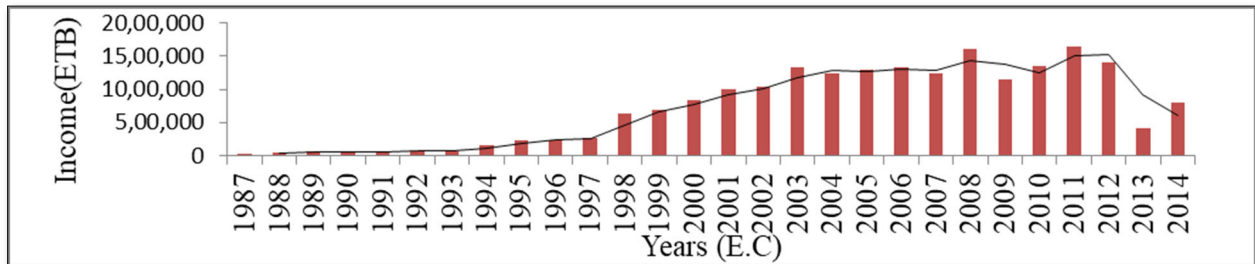


Figure 12. Income from Tourism and its Trend for the last 27 years at NSNP.
Source: Data compiled from; NSNP, EWCA and Self survey.

CONCLUSION AND RECOMMENDATION

This survey is to investigate the potential of tourism products & Visitor satisfactions have been carried out in Nech Sar National Park within 12 months. Currently National Park managed under Ethiopian Wildlife Conservation Authority. The tourism products of Nech Sar National Park are: Ecological units, Biodiversity, & Historical attraction sites. Most visitors are motivated to visit Nech Sar National Park after learning about these areas from tourist information & other sources of information. Visitors' dissatisfaction in National park are emanated mainly due to; - Limited tourism facilities and infrastructures problems. Based on the findings: Avoid shortage in professional skill among local tour guide, Ethiopia wildlife conservation authority and tourism and cultural minister & non-governmental, Regional & Zonal Culture and Tourism Department & Nech Sar National Park organizations could improve services by investing in the park's distinctive attributes, promotion and development of tourism products, infrastructure or tourist facility, affective components, and activities to provide natural and relaxation benefits as well as social benefits increasingly sought by park users & Ethiopia government should pay attention to nature and wild animals tourism conservation; nature and wild animals tourism conservation is master key to sustain employment value.

REFERENCES

- Berhanu, K., & Raj, S. (2020). The relationship between tourist satisfaction and post travel behaviour Evidence from international tourists visiting Ethiopia. *African Journal of Hospitality, Tourism and Leisure*, 9(1), 1-16.
- Bililign Zafu, M. M. A. (2016). Tourist Satisfaction and Service Delivery at Nech Sar National Park of Ethiopia. *Open Access Library Journal*, 3, 1-13.
- Clark, D. L. (2010). An Introduction to the Natural History of Nech Sar National Park. Ethiopian Wildlife and Natural History Society, Addis Ababa, 45.
- Creswell, J. (2003). Research design A qualitative quantitative and mixed method approaches Thousand Oaks CA
SAGE Publications.
- Fetene, A., Yeshitela, K., Prasse, R., & Hilker, T. (2013). Study of Changes in Habitat Type Distribution and Habitat Structure of Nech Sar National Park, Ethiopia. *Ecologia*, 4,1-15.
- Gay, L. R. (1986). Educational research competence for Analysis and Application Pearson/cloth bound/672 pp/.
- Hussen, T. (2021). An overview of current ethiopian tourism.
- Seid, M., & Kakiso, T. (2019). Critical solutions for critical problems Threats to Sustainable use and Management of Nech Sar National Park NSNP in Ethiopia. *African Journal of Hospitality Tourism and Leisure*, 8, 1-20.
- Simon, S., Karen, V., Jozef, D., & Herwig, L. (2020). (PDF) Human Pressure Threaten Swaynes Hartebeest to Point
of Local Extinction from the Savannah Plains of Nech Sar National Park South Rift Valley Ethiopia.
- Temesgen, F., & Warkineh, B. (2018). Biodiversity Status & Conservation Challenges of Protected Areas of Ethiopia Awash & Nechsar National Parks in Focus. *Journal of Natural Sciences Research* Www.Iiste.Org ISSN, 8.
- Tesema, D., Garbole, D., & Umata, T. (2020). Role of Sustainable Tourism and Ecotourism Development in Ethiopia. *Journal of Forestry and Environment*, 2, 25-35.
- Teshome, E., Ayalew, G., & Workie, A. (2020). Community based ecotourism development in Meqdela Amba, Ethiopia Current development barriers. *Journal of Hospitality Management and Tourism*, 11,12-20.
- Tsegaw, W. E. (2017). Tourist Services Quality Gap Analysis in National Parks of Ethiopia Evidence from Nech Sar National Park. *Journal of Tourism & Hospitality*, 06(06), 319.
- Vreugdenhil, D., Vreugdenhil, A. M., Tilahun, T., Shimelis, A., & Tefera, Z. (2012). GAP analysis of the protected areas system of ethiopia.