



International Tourism Marketing Analysis in Nosy Be Island

Análisis de marketing turístico internacional en la isla de Nosy Be

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Abstract: Nowadays, due to the communication technology revolution and transportation system development, more and more visitors are internationally willing to discover exotic Island and less known destinations as Nosy Be. However, compared to most of Pacific and Caribbean ones, few information and research work are available about the tourism aspect in this Island. An innovative research survey on the Nosy Be Island international tourists marketing evolution never being done before is investigated in the present paper. The developed study was performed from a random and voluntary survey of Nosy Be traveler foreigner and Malagasy citizen visitors. Doing this, first, the unique culture, geographic, historic, economic, wonderful climate, beautiful landscape and environmental situations of the under-study Island are described. Since the target population is domestic and international visitors to Nosy Be, the bilingual questionnaire was designed. As research work outcome, it was emphasized that during the last three decade, tourists select Nosy Be as destination mostly because the Island authenticity, nature, blue space, sand, fresh air, relax, leisure, sports or adventure activities. Some internal strengths and weaknesses of the destination can have positive or negative effect to the international tourist attraction. The performed study helps the Nosy Be local authorities to improve the quality of tourism products. A useful background in the planning of tourist marketing strategies can be designed. Thus, the economy competitiveness in the global travel market can be enhanced to make Nosy Be as a top-class sustainable international destination.

Keywords: *Turista internacional; Marketing turístico; Isla de Nosy Be; Encuesta socioeconómico; Atributos del destino.*

Resumen: Hoy en día, debido a la revolución de las tecnologías de la comunicación y al desarrollo de los sistemas de transporte, cada vez son más los visitantes internacionales dispuestos a descubrir islas exóticas y destinos menos conocidos como Nosy Be. Sin embargo, en comparación con la mayoría de los destinos del Pacífico y el Caribe, hay poca información y pocos estudios disponibles sobre el aspecto turístico de esta isla. En el presente artículo se investiga una innovadora encuesta sobre la evolución del marketing turístico internacional de la isla de Nosy Be, nunca antes realizada. El estudio se llevó a cabo a partir de una encuesta aleatoria y voluntaria a viajeros extranjeros y ciudadanos malgaches que visitaron Nosy Be. Para ello, en primer lugar, se describen la cultura única, la geografía, la historia, la economía, el maravilloso clima, los hermosos paisajes y las condiciones medioambientales de la isla objeto de estudio. Dado que la población objetivo son los visitantes nacionales e internacionales de Nosy Be, se diseñó un cuestionario bilingüe. Como resultado del trabajo de investigación, se destacó que, durante las últimas tres décadas, los turistas eligen Nosy Be como destino principalmente por la autenticidad de la isla, la

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naturaleza, el espacio azul, la arena, el aire fresco, el relax, el ocio, los deportes o las actividades de aventura. Algunas fortalezas y debilidades internas del destino pueden tener un efecto positivo o negativo en la atracción turística internacional. El estudio realizado ayuda a las autoridades locales de Nosy Be a mejorar la calidad de los productos turísticos. Se puede diseñar un marco útil para la planificación de estrategias de marketing turístico. De este modo, se puede mejorar la competitividad económica en el mercado turístico mundial para convertir a Nosy Be en un destino internacional sostenible de primera clase.

Palabras clave: *Turista internacional; Marketing turístico; Isla de Nosy Be; Encuesta socioeconómica; Atributos del destino.*

INTRODUCTION

In the mid-20th century, Island tourism began with the technological and transportation system revolution. Therefore, Island study tourism activities have received research attention by geographers and academics (Swan & Combs, 1976; Baum, 1999; Buhalis et al., 2006; Cook et al., 2018; Kakazu, 2018). According to (Almeida-Santana & Moreno-Gil, 2018;), there is an urgency and important need for further research to examine the potential antecedents of customer loyalty in tourism related studies.

The Island international tourism was significantly developed because of the air transportation which made travelling easily possible to far-flung destinations (Bell & Bramwell, 2005). A tourist destination refers to a place whose location is far from the visitors' home and comprises a group of destination tours or mobile destinations (Cook et al., 2018). In the 1980s and through to the early 1990s, the international tourism was slowly extended into the realm of services marketing (Swan & Combs, 1976; Bitner et al., 1990; Bleuel, 1990). It is undeniable that tourism is one of the major forces for economic growth (Stylidis & Terzido, 2007; Ashley et al., 2007) and globally recognizes as a multi-billion industry in most of countries through the world regardless of their level of development (Herzberg et al., 1959). When it comes to great countries like China where tourism market has transformed into one of the world's most-watched inbound and outbound tourist markets. It was estimated that the number of domestic trips in China would increase to about 2.38 billion trips by 2020. It indicates an increase of over 50 percent compared to the number of trips made within China ten years ago.

The tourism sector becomes one of industries that tend to be sensitive to either bad or good economic conditions and can rapidly recover from bad economic conditions or other environmental effects (Cook et al., 2018). The island tourism activities depend on rich natural landscapes including natural resources (marine ecology, animal and plant, beach, intertidal belt, outlying islands, unique geological land type) and humanities resources (historical cultural monuments). The natural resource diversity of islands makes them as reasonable destinations for tourism and its development (Bell & Bramwell, 2005). In particular, geographical isolation, a unique culture, and an attractive climate and

environment are an island main attraction. The distinctive natural ecosystem and unique lifestyle, differentiation, small scale, unique culture, wild ecosystem, marginal life, and primitive environment are characteristic of island tourism (Baum, 1999; Buhalis et al., 2006). Some scholar such as (Kakazu, 2018) thinks that while studying about island tourism, it is important to know about the contribution of tourism small Island in the economy.

The study of tourist satisfaction research started relatively late. The researchers have mainly focused on the extension of tourist satisfaction connotation, the measurement, the influence factors, tourist service quality and shopping satisfaction in recent years. So, the domestic and foreign researches mainly concentrated on the concept, connotation, influence factors, assessment system model, and great achievement has been realized. But the tourist satisfaction studies on advocating low carbon economy ideas. However, its development ways in scenic areas are not in abundance and need to be further studied. It was reported that tourist satisfaction is a key factor in the success of the tourism industry (Cadotte & Turgeon, 1988). Satisfied tourists will revisit or recommend to others, share a positive word of mouth on social media, and ultimately build customer loyalty. Research found that satisfaction is a customer's emotional response when evaluating the discrepancy between expectation regarding the service and the perception of actual performance and they mentioned that increased customer satisfaction may lead to increased customer loyalty, higher profitability, and increased market share (Ali & Kaldeen, 2017;). When tourist satisfaction is the key to the success of the tourism industry (Sadeh et al., 2012), several studies state that tourists who have been satisfied with their visit will come back or recommend it to others. It is also approved that satisfied tourists tend to communicate their positive experience to others (word-of-mouth) or sharing on social network and they tend to buy the product repeatedly (re-buy), which resulting into customer loyalty.

We should not have to ignore the fact that those assumptions can vary through years and the development of marketing strategy. On the research of expand tourism market in Asia-Pacific, the World Trade Organization (WTTC, 2022) explained that one of the first role of tourism is being an engine of growth, as tourism industry is considered as the fastest growing industry from 20 to 70 % of the whole world current extend receipts are from tourism industry. Looking to the most of small Islands (Briguglio et al, 1996), there are particular common criteria related to the growth and development such as natural resources, climatic conditions, well-organized transport network plays also an important role like developed country islands as in Japan and US (WTTC, 2022). Finally, those islands are politically stable, offering warm-hospitality, the market size is too small so manufacturing industry is not really viable.

Tourism is an important contributor to many countries' economy, an up-to-date overview of the country's tourism performance. To highlight some of the sector's key challenge and provide a select set

of recommendations for addressing such challenges is remains necessary. Especially when it comes to one of its most popular destinations in the country which is Nosy Be Island. The present research work objective is the analysis of Nosy Be international tourist marketing in order to provide in the future relevant answers to the local economic demand. The developed research methodology is expected as the reference for the local authorities and industries. The impact of the study is expected to guide them to find models that would maintain the economic and industrial competitiveness of Nosy Be on the international tourist market under today conditions of globalization.

METHODOLOGY

Nosy Be Geo-Socio-Political Description

As basic knowledge about the unique Island to international visitors, the socio-politico-geographic situation and tourism marketing overview of Nosy Be Island is described in the present section.

Nosy Be politico-geographic and historic situation

Literally means “big island” or “large island”, the unique island was named in Malagasy Nosy Be in 1842. Nosy Be Island is located in 8 km of the northern coast of Madagascar which is in turn a coastal island located in the Mozambique Channel as situated in Figure 01.

FIGURE 01: Madagascar Island map.



SOURCE: Hotel Au Sable Blanc (2023).

Nosy Be stretches for about 26 km from North to South and 20 km from East to West. The Nosy Be Island mapped in Fig. 2 (Hotel Au Sable Blanc, 2023) is a department attached to the Diana region of Madagascar. It is a volcanic Island with an area of 321 km². The beginning of the 15th century, the first habitant who explored Nosy Be was Indians and Swahili traders. From the beginning of the 19th century, Nosy Be became an important trading post on the west coast of Madagascar. Nosy Be is the most famous sightseeing and cultural spots attract numerous international tourists every year. The capital of Nosy Be is Located at the extreme south, “Hell Ville” named after the admiral Hell. In 1841, The Sakalava tribute queen Tsiomeko ceded the island to French protectorate led by the admiral Hell to protect the island from Merina invasion. It was in 1842 that the French baptized the island by decree “Nossi-Bé” which means the big island or “the pearl of the Indian Ocean”. Nosy Be is also called “the Perfume Island” because of its scents of ylang-ylang. That plant is a very scented flower from which one extracts a perfume essence and endemic plant, including vanilla, sugar cane and cocoa plant.

FIGURE 02: Nosy Be Island map.



SOURCE: Hotel Au Sable Blanc (2023).

Cultural attractions of Nosy Be visitor

One of Madagascar best tourist attractions and most popular beach resort was appointed to be “the leading destination and reference” in 2017 (Hotel Au Sable Blanc, 2023). It comes to one of most popular destinations in the country. Nosy Be Island is surrounded by small islands that have not only quality beaches but also diverse landscapes of flora and fauna. During their trip, most of the Tourists rush to climb on Mount Passot about 350 m in order to see the panoramic view of Nosy Be in all its beauty. Its tourist attractive assets are jagged coasts, numerous bays, and lovely coves, deserted beaches, crystal-clear water and beautiful sunset. Further, beaches, sea, and natural beauty are Nosy strengths that attract the most international tourists but the local infrastructure, services, and facilities are still underdeveloped and not enough.

In 2017, the Malagasy government objective was to ensure restoration of economic activities, the strengthening of airport infrastructures and the security in Nosy Be, respectively (Daré & Rakotonirina, 2014;). Nosy Be Island attracts many tourists all year long. It is the most visited place in the country as small islands are more important destinations than for mainland destinations. Natural scenery and cultural attractions attract many international visitors every year. In 2014, Nosy Be was named one of the top islands in the world by Trip Advisor. In 2017, the Perfume Island was recommended as “the leading destination and reference place” of the country.

Annual climate of Nosy Be

Nosy Be has a tropical climate, and superb location that makes it Madagascar’s beach-resort destination par excellence. The climate indicator has a great impact on the number of arrivals all year alone. The island of Nosy Be and its archipelago has a particularly pleasant climate with an annual average temperature of 26°C. The sea temperature is suitable for swimming all year round. The most favorable months in terms of climate in Nosy Be are May, June, July, August, September, and October. January is the rainiest month. February and March are the periods of cyclone and heavy rain. From mid-May to September, tourists come to attend the Somaroho and Donia Festival, which consists of a series of concerts, shows, and parties until the end of the night. July to October, have the convenient weather for the tourists to see the whales playing in the warm water of Nosy Be. Between the beginnings of October, numerous cruise ship is lining up for a sea excursion enjoying the whale's sharks and sea turtles’ parade. They come to feed in the waters of Nosy Be between October and December 2019, Nosy Be ranked as the best destination in the world to see whales’ sharks on the Fodor’s travel. One of the reasons Nosy Be is also known as “the Pearl of the Indian Ocean” the first seaside resort of Madagascar, and home of marine life.

Nosy Be economic brief description

Nosy Be economy dynamism is considerably dependent on tourism besides attendance. Although the island has more outstanding tourism product to keep its popularity. According to (Lonely Planet, 2023;), Nosy Be is considered as the most expensive destination in Madagascar, where some visitors denounce lack of major key development and the worth style worth an extra euro. Several studies state that tourists who have been satisfied with their visit will come back or recommend it to others. It is also approved that satisfied tourists tend to communicate their positive experience to others (word-of-mouth) or sharing on social network and they tend to buy the product repeatedly (re-buy), which resulting into customer loyalty.

To ensure maximum safety of tourists who choose the destination, a quality service in infrastructure standards is offered. However, the improvements are more related to financial and economic development. Hence, a better understanding of tourist satisfaction and a more scientific approach using data to evaluate tourist level of satisfaction while visiting the island remain missing. The study of loyalty and image destination requires deep research which is favorable to the field of study. The theory of one-dimensional evaluation has different indicators that can determine customer's satisfaction which are called "attributions and factors".

RESULTS AND DISCUSSION

Nosy Be Tourism Industry And Marketing

The tourism marketing and the associated industrial aspect of Nosy Be Island is described in the present section.

Tourism industry in small Islands

The tourism industry has no much competition and has two major roles:

- The one role of island tourism in the economy is as it plays the role as composite industry. The tourism industry is defined as "a service industry". Transportation, Insurance and labor are defined as external "service receipts". "Tourist expenditures" are the "serve receipt" to contribute into the balance payment. The local consumption such as meal, transportation is classified as "tourist expenditure". The contribution of tourism in the islands helps to diversify the conservation of the resources such as historical, marine and cultural assets. In the case of Okinawa, the tourism industry is related to information communication technology, local culture and production sector. The agriculture and manufacture are also considered as a trade-off, while supposed to be

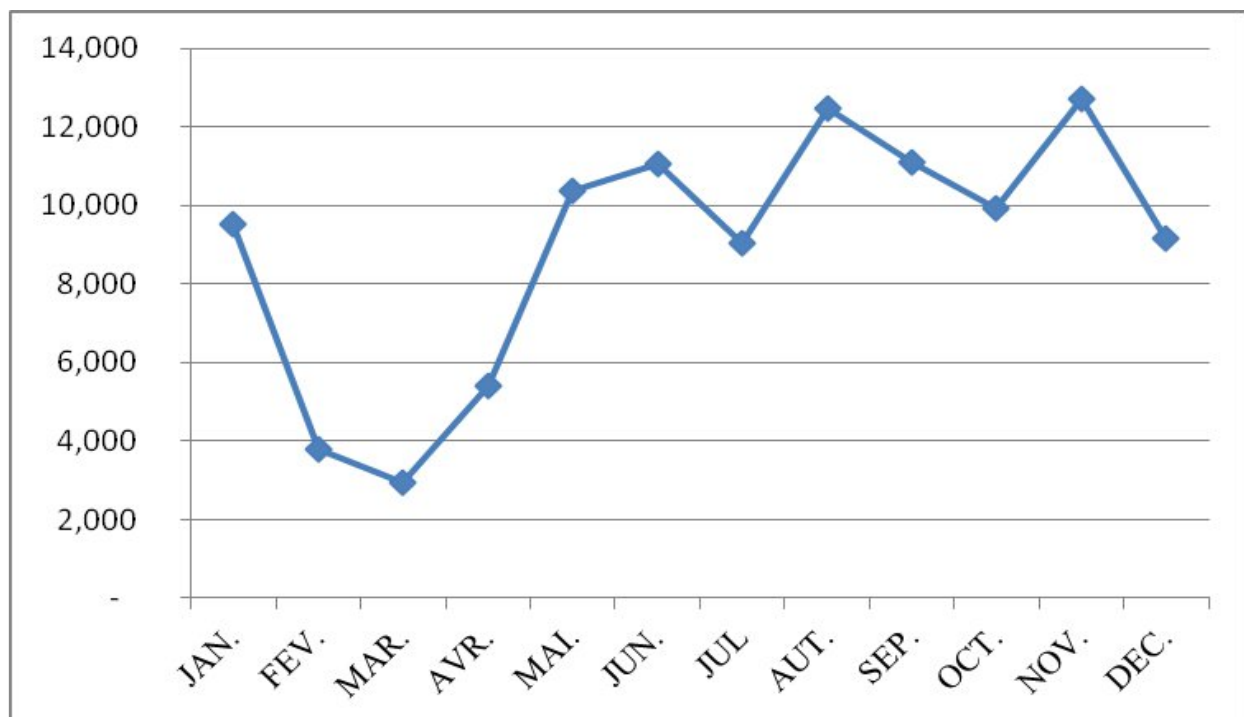
completing in the study of heartland of Japan in the comparison of economic impact of tourism expenditures for selected regional economics.

- The other role of contribution is to make tourism as export industry. Differ from “service receipt” for local income; it can also send to the external balance. The export sold to non-resident is also a great contribution to the basket. Tourism island is also seen as “cultural catalyzer friction” as non-economic factors. In any island tourism destination, not only from tourist income or employment there is a common rooted from island people for being reputed for a sense warm hospitality.

Tourism arrival in Nosy Be

To highlight some of the sector key challenge and provide a select set of recommendations for addressing such challenges is remains necessary. In recent years, the Island has become a new trend in tourism. Madagascar is the African island destination in the Indian Ocean and the fourth largest island in the world. Tourism is a fast-growing industry in the island destination. Madagascar was voted by Forbes as the ten coolest countries in 2019. The country main tourist attractions are mainly sandy beaches and high rate of biodiversity. According to the World Tourism Organization, tourism currently contributes 7% of GDP to the country and is a pillar industry (WTTC, 2022).

FIGURE 03: Typical evolution of tourist arrival during the peak and low season.



SOURCE: Nosy Be immigration police (2025).

Nosy Be Island is the most famous tourist destination in Madagascar and was called “the most attractive destination”. Tourists choose Nosy Be to look for authentic, natural, blue spaces, beaches, fresh air, relaxation, leisure, sports, or adventure activities. In 2017, there were 107,469 visitors whose population evolution reported by immigration Police is illustrated by Fig. 3. The local government goal is to improve the security of the airport infrastructure and ensure that Nosy Be tourism develops rapidly. However, all policies are mainly aimed at the economy and finance, and there is less attention to the satisfaction of tourists.

Tourists circuit of Nosy Be

The beaches of Ambatoloaka Andilana and Madirokely are amongst the most popular destination in Nosy Be. They are superb beaches with fine, colored, turquoise and pearly white sand and postcard sunset view. Apart from seascapes, Nosy be is a blessed island where nature has donated much of the rich and varied biodiversity that can be found nowhere else. Nosy Be has a string of islets which are more quiet, isolated and has an idyllic description from visitors which deserve a small touring such as:

- Nosy Tanikely, which means Small Island, is located 10 km west of Nosy Be. One of the most visited are of sites of Nosy be, is a protected marine reserve well-known as a real living aquarium, home to a multicolored underwater world of such as coral, fish, and turtles.
- Nosy Sakatia, Nosy Iranja, and Nosy Mitsio are well-known being idyllic resorts beaches, picture-perfect beaches for sailing days, diving and swimming. Nosy Sakatia, quiet and tiny about 3sq km is also famous for its Orchid; Nosy Mitsio, 55 km Northeast of Nosy be is still virgin dive sites; Nosy Iranja consists of two islands connected by 1.5 km-long sandbars, where visitors are witness sea turtles laying their eggs on the beach.
- Nosy Komba or the Lemur’s Land, is the first zoological nature reserve of Nosy Be. The main village is Ampangorina, famous for craft-market, cut-work embroidery, wood carvings, and paintings. Well-preserved, Nosy Komba is prime hiking territory. Its summit reaches a mighty 622 m. Taking about five hours to walk up to the summit from Ampangorina and back down. Nosy Komba is housing a rich and exceptional endemic flora fauna to discover. Among them are the Nocturnal and diurnal lemurs, insects, chameleons through frogs like tomatoes frogs, snakes and crocodiles. Tourists visiting Nosy Komba are seeking for Napoleon, the oldest turtle island, over aged 200 years and hundreds of species of birds.
- The Lokobe Reserve represents a famous circuit for tourists from Nosy Be. The Lokobe Strict Reserve or Réserve Naturelle de Lokobe is home to 376 animal species recapitulated by Table 1. The Malagasy Kingfisher is the most remarkable species of birds that visitors can discover, and

crocodiles proliferate in crater lakes and wildlife experience to meet famous black lemurs, Fitsidiky or *Lepilemur dorsalis* a nocturnal lemur; the famous panther Cameleon, butterflies and 17 birds visible in Madagascar and the Owl of Madagascar.

TABLE 01: Nosy Be animal species quantity.

Species	Quantity
Carnivores	4
Insectivores	3
Rodents	5
Bats	16
Primates	11
Ungulates	1
Birds	103
Reptiles	84
Amphibians	34
Rhopalocera	112
Total	376

SOURCE: Research data (2025).

Economic growth and Madagascar tourism marketing

It is undeniable that Tourism is one of the major forces for economic growth and globally recognizes as a multi-billion industry in most countries through the world regardless of their level of development. Recent studies show that the island tourism is a new trend of tourism maintaining the most significant asset and leads as the most important industry in the economy. The tourism sector is a promising sector in Madagascar, the fourth biggest island in the world. In Dec 2018, Madagascar had been selected as the top ten coolest countries to go in 2019 by Forbes. The tourism industry has 7% of shares in the GDP, and it is the biggest generator of currency of the country. The Madagascar tourist attractions include its beaches and biodiversity. From high mountains to fertile plains sown with terraced rice fields, vast dry savannahs to tropical forests, 5,000 km of coast protected largely from reefs coral reefs with many tropical islands with beautiful white sand beaches, spectacular limestone landscape with many karst towers to underground rivers and various caves. According to UNTWO (World Tourism Organization), the direct contribution of travel and tourism to GDP of the island was MGA 2,245.8 bn (USD 678.9 mn), 6.3% of total GDP in 2017 as addressed in Table 02.

TABLE 02: Currency generated by tourism industry 2007-2017.

(Source:)

Year	2007	2008	2009	2010	2011	2012
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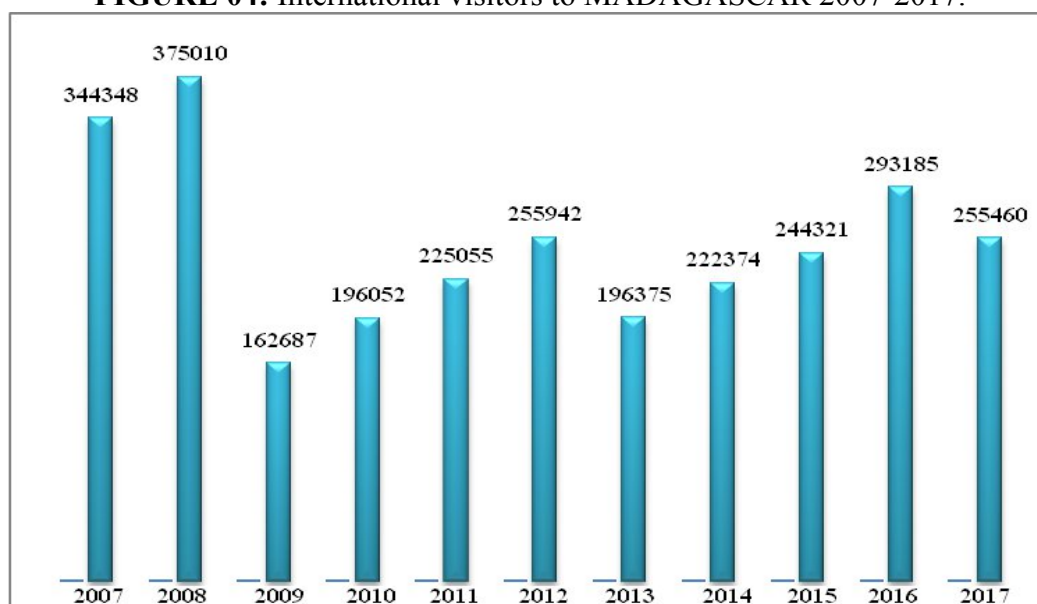
USD Millions	313	459.65	178.5	211.1	262.49	279.81
Euro Millions	228.82	313.58	128.29	158.99	188.84	217.68
Year	2013	2014	2015	2016	2017	
USD Millions	390.42	649.62	585.38	748.3	668.26	
Euro Millions	294.93	490.97	527.29	668.26	592.81	

SOURCE: The currency generated by tourism industry is forecasted to rise by 2.4% in 2018, and to rise by 4.1% per year, from 2018-2028, to MGA 3,429.4 bn (USD 1,036.7 mn), 5.7% of total GDP in 2028. The currency generated by tourism had been increased about more than USD 300 Millions more within ten years. MinTour, Central Bank of Madagascar - Department of Studies and International Relations (2025).

International tourism market in Nosy-Be

Nosy Be Island was appointed to be “the leading destination and reference” in Madagascar in 2017. The place attracts many tourists all year long and the most visited in the country with many important destinations. For this reason, the facts indicate that the tourism industry plays an important role in the economy in Madagascar. However, the Tourism sector has been suffered from political instability and economic crisis notably in 2001-2002, 2009 and 2020-2022. The number decreased to 162,687 in 2009, receiving a growth of 293185 arrivals in 2016 and a slightly decreased again 255,460 in 2017. Even though the tourism sector is still playing an important asset to the country’s economy of Madagascar, the number of arrivals has not exceeded ten years earlier. International tourist arrivals have been slow down after the booming in 2008, with the arrival of 375,010 visitors as shown in Figure 04.

FIGURE 04: International visitors to MADAGASCAR 2007-2017.



SOURCE: Ministry of Tourism-TOURISM STATISTICS (2017).

In 2014, 69,613 visitors selected Nosy Be as a destination while the number of arrivals increased to 107,469 in 2017.

Investigation Result on Nosy Be Island Economic Development

The SWOT analysis on the tourism development is discussed in the present section. The study will also state the international tourist satisfaction and its influence on:

- Providing applicable model for the Nosy Be Island local authorities and industries;
- On further understanding about the Nosy Be tourist marketing research status;
- And Nosy Be Island socio-economic impact.

Tourism marketing general description

For the Island as Nosy Be, the international tourist marketing impact play a major role on economic development. One reminds that the study of tourist marketing has received many attentions from the researcher, and it plays an important role in marketing tourism products and services. Malagasy government, tourism planners, and the general public have been actively developing and promoting Nosy Be Island as the first beach destination of the country. Thus, the strategies to increase competitiveness and identify target markets have been already adopted to make Nosy Be better choice for international tourist. Hence, a better understanding of international tourist marketing and economic impact analysis remains missing. Tourism industry in Nosy Be requires the implementation of strategic management research on competitive destinations, both from a territorial positioning perspective and tourism products. Thus, measuring tourist socio-economic impact is necessary. The international tourist marketing can be analyzed by using mouth to mouth communication based on the visitor positive experience and their willingness to return. In order to determine how a tourism marketing, affect the local economy, the findings would contribute to future practical suggestions for Nosy Be destination management. The study would answer three different questions about the challenges faced by tourists at the destination and the host community, how will Nosy Be develop its popularity and how to identify the sustainable impact of tourism in the future.

Main assets of Nosy Be Island international tourist satisfaction

This research study evaluates the Nosy Be Island tourist marketing analysis by using observation and self-determined questionnaire survey. The research will also find where they would be disappointed. Many determinants would be possibilities such as amenities, a natural attraction to the beach, relaxation facilities provided by the destination, with facilities such as health and emergency services, transportation

services, tour guides, information services, and nightlife. The study will classify tourist to their demographic and frequency of visit and intention to return characteristics and measured satisfaction level using five-point Likert-scales against seventeen selected variables. This will lead to the expectation analysis and satisfaction level based on the attributes. A more scientific approach using data and analysis will help to conclude whether those factors are correlated. The outcome of this empirical research will enable planners, investors, destination managers, and other interest groups to better understand tourist expectations and formulate improved strategies, regional policy and a balanced approach toward sustainable tourism development in Nosy Be Island.

The development of tourism has positive and negative economic, socio-cultural, and environmental impacts. Nowadays, the case of islands become more significant, since tourism is often more important for small islands than for mainland destinations. Most travelers choose international destinations to escape their daily routine. Tourists selecting Nosy Be Island as a destination are mostly looking for authenticity, nature, Blue space, sand, fresh air, relax, leisure, sports or adventure activities. However, some internal strengths and weaknesses of the destination can have a positive or effect on the attraction of the destination or threats as well. Satisfied tourists tend to communicate their positive experience to others, known as the effect of word-of-mouth. Hence, a negative or positive situation faced by tourist in Nosy Be Island can affect the travelers' holiday experience, influencing their level of satisfaction and their loyalty of the destination. Up to now, there are no relevant studies in tourism literature that have examined the structural relationships between tourist expectations, perceived quality, perceived value, costs and risks, and destination image as antecedents of satisfaction in Nosy. As a result, the research was designed to find the attributes that influence tourists' overall experience satisfaction and the dimensions of destination attributes would satisfy their expectations which results with return to the destination.

Nosy Be international tourism economic contribution

Among the most famous destinations of Madagascar for diving and sun vacations, Nosy Be has a significant impact on tourism contribution to the country. In 2014 Nosy Be was ranked Best islands around the world, amongst the top 10 islands destination based on user reviews and ratings, from Trip Advisor, a popular travel agency platform. The Travelers' Choice award winners were selected based on the reviews and opinions of millions of Trip Advisor travelers around the globe.

Nosy Be tourist attractions include its beaches and biodiversity. For instance, thanks to its natural environment, Nosy Be offers tourists a considerable diversity of activities: wildlife viewing, scuba diving, scenic hikes, beach tourism, adventure sports, and cultural encounters. The tourism industry in Nosy Be

generates significant economic activities in other sectors of production and services. The construction sector is concerned during the establishment of hotels and facilities related to tourism, including infrastructure. Hotels and other types of accommodation generate economic activity to agriculture, fishing, and industry. By the end of the 1990s, Nosy Be had 570 beds, divided into nine hotels. The average capacity of the establishments is therefore only 30 rooms per establishment, more often in bungalow villages than in apartment buildings. Today, Nosy Be had public and private enterprises addressed in Table 03.

TABLE 03: Touristic economic enterprises.

Enterprise	Quantity	Costs
Hotels	226	From 3 € à 280 € a night
Restaurants	117	From 1 € à 20 € (lunch)
Car rentals	5	From 17 € à 63 €
Travel agencies	8	Free
Tour operators	17	Free
Sea transport companies	75	From 4 € à 31 €
Airlines	15	From 200 € (national) and from 1200 € (international)

SOURCE: Research data (2025).

It is worth to underline about the tourist marketing economic impact with the following services:

- Six hundred seventy-five (675) regular tourist operators registered to the Tax and service center Direction Nosy-Be. Tourist services and the tourists themselves, through their expenses in and outside tourist accommodation, generate demand for transport, banking and insurance, telecommunications, medical services, security and retail trade, and special handicrafts and other souvenirs.
- Nosy Be continues to open up to the world. Fascene International Airport is located on the east coast of Nosy Be. It is served by scheduled flights by 15 international airlines companies has been registered in 2016 to link the island from Europe (Paris, Marseille, Istanbul), from Africa (Ethiopia, Johannesburg, Mozambique and Tanzania), Asia (China and Thailand), and the neighborhood island such as Mayotte, La Réunion, and Mauritius. July 2018, thanks to the collaboration with the Polish tour operators ITAKA, the Italian company Blue Panorama airlines, and Nosy Be, direct flight Nosy be-Warsaw is operational. More than 250 tourists on board, as well as about forty representatives of European tour operators. Itaka Travel Organizer offers tours and vacation packages in more than 100 destinations worldwide, including Nosy Be.

- Further, the number of marine and cruise tourists have increased over the last two years. The Crew-center, a Ship information center, has published a schedule of 18 cruises lines from January to December 2018. The port of Hell-City serves as traffic to the mainland from the port of Ankify are all day round-trip.
- The beach of Ambatoloaka is a harbor serving as a connection between the other archipelagos during the excursion. The number of marine and cruise tourists have increased over the last two years. According to the Crew-center, Nosy Be Hell-Ville scheduled from January to December 2018, 18 famous international cruise Lines such as Azamara Club Cruises, Celebrity Cruises, Royal Caribbean, Norwegian Cruise Lines, Holland America Line, Regent Seven Seas, Thomson, TUI, P&O, Aida Cruises, Costa Cruises, Princess Cruises, Cunard, Carnival Cruise Lines, Pullmantur, Crystal Cruises, Disney Cruise Line, and Fred Olsen Cruise Lines. There is no doubt that the island depends on the tourism sector. From 2013 to 2017, the inbound registered at the immigration office had been growing from 76,207 to 107,469 visiting the island as shown in Figure 05.

FIGURE 05: International tourist's arrival in Nosy Be.



SOURCE: Police of immigration-Nosy Be, annual report (2017).

- According to the tourism ministry, from March 2018 Tourism in Nosy Be has never been flourishing as hotel facilities are full. Not only foreign tourists choose to visit the island but also residents. In 2016, the island received around 4,500 domestic tourists. Since March, the number has reached 45,000 inbound tourists.

- Today, the Malagasy government, the tourism office, and the tourism operators in Nosy Be contribution has driven the island being the leading beach destination for Madagascar ahead Sainte-Marie. According to EDBM (The Economic Development Board of Madagascar), the overall government objective is to make tourism an effective and sustainable lever for economic, social, and environmental development for Madagascar.
- Today Nosy is among the four prior sector areas for tourism development (2017-2018) with Diégo, Majunga, Tamatave, Ste Marie, Foulpointe and Fénérive Est, Antananarivo, Tuléar and Morondava. The perfume island had been appointed to be “the leading destination and reference” in 2017.

Tourism visit purpose and destination attributes

Descriptive and factor analysis was carried out with the aims of explaining satisfaction of respondents with their trips. In tourism field, it is frequent that the variables under study, such as tourism quality, cannot be directly measured and need to be quantified based on other observable or manifest variables. Following the different approaches suggested, relevant literature is reviewed to discuss and analyses overall issues. Sources of data and information relating to Nosy Be tourism sector then should be used to examine the problems and issues identified. The descriptive statistics on the touristic satisfaction can be drawn from Table 04. The corresponding Pearson correlation is recapitulated by Table 05.

TABLE 04: Descriptive statistics.

	N	Mean	Std. Deviation
Intention to share the experience on Social Network	200	3.8500	0.95502
Intention to return	200	4.0450	0.74549
Recommendation of the place to friends	200	4.0600	0.79344

SOURCE: Research data (2025).

TABLE 05: Pearson correlation.

PEARSON Correlation	1	2	3	4
Intention to return	1	-	-	-
Recommendation of the place to friends	0.089	1	4	-
Intention to share the experience on social network	0.010	0.145*	1	-
Overall satisfaction	0.139*	0.294**	0.222**	1

SOURCE: Research data (2025).

Considering the perceived value and destination image, which affect international tourist satisfaction from visiting Nosy Be Island, and two consequences of tourist satisfaction, tourist loyalty and complaining behavior. Data should be collected using a questionnaire. And the overall methods used by scholars have been mostly indicated that perceived value and destination image related positively with tourist satisfaction which in turn, lead to tourist loyalty. Yet, it is necessary to evaluate tourist dissatisfaction if it did not lead to complaining behavior, and complaining behavior did not have any significant relationship with tourist loyalty.

SWOT analysis of Nosy Be international tourist economic impact

In the study of service quality evaluation in the tourism industry, it is suggested that the quality evaluation of the provided tourism services constitutes the main issue for the viability of this particular sector and the improvement of the total tourism product. Researchers in their study enlightened the SWOT analysis while studying island tourism. Today, travelers choose an international destination to break the routine of life. They are mostly looking for the scenic beauty of nature or leisure, sports, and adventure activities offered by the chosen destination. However, some internal strengths and weaknesses can affect the destination's capacity to attract international visitors or diminish it. The evaluation of Nosy Be SWOT analysis is addressed in Table 5. The statistic results highlight what stage is the image destination requires the quality improvement of the overall tourism product on the actual weak point to influence tourist satisfaction and positive perception in the island.

TABLE 05: Nosy Be SWOT analysis.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• High tourism product: Natural resources beauty, Lots of tourist spots such as waterfalls, white sand beaches, lake, biodiversity (fauna and flora), history and culture• First sea-side destination in Madagascar (Extensive sandy beaches and surrounded by small islands having their features)• Weather• Safety. Nosy Be is still considering as safe compare to the other touristic places of the country• Seaport and international airport• international cultural events such as Dona, Somaroho, Whales parade• Variety of accommodation accessible	<ul style="list-style-type: none">• Dependent on tourism• Limitation on the number of visitors and residents• Unstable power and water-supply• Poor health and school facilities• Poorly maintained roads especially the access to the touristic sites• Absence of convenient public transport, uncomfortable and without meters• Lack of professionalism• Lack of online promotion and information• Lack of arable land, food supply is mostly imported from the country's mainland or imported from abroad.• A high rate of prostitution and low

<ul style="list-style-type: none">to a different market segment• Development of various kinds of facilities (airline companies, resorts, tourism complex, golf...)• Famous for the Ylang-ylang, vanilla, pepper, and cocoa	<ul style="list-style-type: none">rate of education• Benefits to the investors
OPPORTUNITIES <ul style="list-style-type: none">• Nosy Be has the great potential to become a top tourist destination in the Indian Ocean• Tourists arrivals rank• Nosy Be has the accessibility for renewable energy for long- term solution power and water supply• Opportunities to be Special Economic Zone of Madagascar	THREATS <ul style="list-style-type: none">• Mass-tourism• A natural disaster like cyclone during the rainy season• Neighboring Indian Ocean destinations: Mauritius, Seychelles, La Reunion• Rise of sexual tourism• Demographic pressure, the increase in slash-and-burn cultivation (local name “Tavy”)• Loss of authenticity and cultural value

SOURCE: Research data (2025).

CONCLUSIONS

An innovative unique study enabling to understand the attributes that affect the overall Nosy Be Island tourist economy is investigated. The performed study enables to state challenges Nosy Be Island tourists face at their destination. The Nosy Be Island tourism economy is developed because of many factors as sun and sand product in addition to some attributes such as climate, beaches and landscape. The quality of the hotel, safety and destruction are also particularly important for the international tourist attraction. It can be report that the choice of Nosy Be Island as specific destination comes from intention and likelihood to recommend to others. The best experience relative to expectation is the main factor to lead tourist to re-visit and purchase intention. We should not have to ignore the fact that those assumption can vary through years and the development of marketing strategy.

The present study will help as well to develop relevant strategy to ensure the improvement the of tourism products quality, to develop better economic system according to the expectations of tourists; to develop services to meet the needs of tourists; to enhance their competitiveness in the global travel market. We expect to make in the future Nosy Be a top-class, sustainable international destination.

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