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## Assessing tourism potential in Tuy Hoa City, Phu Yen Province

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### ABSTRACT

*Tourism is one of the strengths of Phu Yen province. This study was conducted the method of assessing the potential and exploitation value of in a tourist and recreational context in Tuy Hoa City. This potential was explored throughout a range of criteria in terms of aesthetic, scientific, historical, economic values, degree and modality of exploitation. The results showed that the score of tourism potential value in Tuy Hoa City is quite average at 0.5 points. However, the score of tourism exploitation capacity in Tuy Hoa city is at a low level of only 0.36 points. That means Tuy Hoa City has not yet exploited the inherent tourism potentials to promote tourism development in the locality.*

**Keywords:** *Phu Yen, tourism potential, tourist, Tuy Hoa*

### Introduction

Tourism is one of the most promising driver and contributor of the world economy having significant role in sustainable development, economic upliftment and social benefits (Abdulla Al Mamun & Soumen Mitra, 2012). It has the potential to contribute towards environmental protection and poverty reduction. Tourism potential is an extensively used and acknowledged term in tourism field. Tourism potential mentions to the capability of a destination to interest and attract tourists with concerns about convenience, landscape quality, understanding of resources, and so on (Libo Yan, Bo Wendy Gao, & Meng Zhang, 2017). Several methodologies have been used to model tourism attractiveness such as Abel González-Ramiro, Gil Gonçalves, Alonso Sánchez-Ríos, and Jin Su Jeong (2016) used volunteered geographic information and gis-based multicriteria approach for

assessing the potential of rural tourism, A Ballis, John A Paravantis, and T Moschovou (2018) applied regression model aiming to assess the tourism potential of the Greek islands of South Aegean. The studies on tourism potential assessment of the world are the basis for assessing the tourism potential in Vietnam.

Many studies on tourism potential assessment in Vietnam have been carried out in recent years such as Sang (2014) assessed the potential of ecotourism in Bac Lieu, Phạm Thị Hồng Nhung, Nguyễn Thị Bích Hạnh, and Dương Kim Giao (2012) assessed tourism potentials in Van Don, Quang Ninh; Hậu and Tuyền (2017), Hoàn (2013). However, these studies on evaluating the tourism potential of these objects are only qualitative assessments based on data collected, group discussion and questionnaire survey. Therefore, a quantitative assessment of tourism potential will provide managers and researchers with a more objective view of tourism potential value.

Tuy Hoa is a coastal city and the political, economic, cultural and scientific center of Phu Yen province, Vietnam. Tuy Hoa City has an area of 107 km<sup>2</sup>, located within Tuy An district in the North, Phu Hoa district in the West, Dong Hoa district in the South and the sea in the East with an entire coast length of over 30 km, about 560 km north of Ho Chi Minh City. The topography of the city is mainly alluvial plain due to the downstream of Ba River (another name is Da Rang river). There are two peaks of Chop Chai and Nhan mountain in the central city. Besides, Da Rang Bridge - the longest bridge in the Central is located on Highway 1 connecting the city center with the southern provinces. Tuy Hoa Beach is a stretching, poetic beach with white sand, a famous tourist destination of the city. As a place close to the sea and adjacent to the delta, Tuy Hoa City's climate is generally located in the monsoon tropics, but it has its own characteristic with average climate, is lower than other places. However, there has not been any study to quantify the tourism potential of Tuy Hoa city. Therefore, the assessment of tourism potential is one of the necessary aspects to create the basis for the development of Tuy Hoa City. This study is aimed at finding out a workable methodology to quantify tourism potential through quantitative assessment method.

## Methods

### *Tourist value assessment method*

The tourist value assessment includes four values: scenic, scientific, cultural and economic as following equation (Pralong, 2005).

$$V_{tour} = (V_{sce} + V_{sci} + V_{cult} + V_{eco})/4 \quad (1)$$

Where:  $V_{tour}$  is the tourism value,  $V_{sce}$  is the scenic value,  $V_{sci}$  is the scientific value,  $V_{cult}$  the cultural value,  $V_{eco}$  is the economic value.

The values are unweighted because there is no objective reason for defining one less important than another when determining the local tourism potential.

**TABLE 1.** Precise criteria and specific scales for assessing tourist potential

<b>CRITERIA / SCORES</b>	<b>0</b>	<b>0.25</b>	<b>0.5</b>	<b>0.75</b>	<b>1</b>
1. Number of view points	0	1	2-3	4-6	> 6
Criteria 1 of scenic value considers the number of attractions that is easily accessible by a pedestrian walkway					
2. Average distance to view points (m)	0	< 50	50- 200	200 – 500	> 500
The link between criteria 1 and 2 corresponding to the total shortest distance between each attraction sites and the location is divided the number of points counted in scenic criterion 1					
3. Surface	0	Low	Medium	High	Very high
Scene criteria 3: the entire surface of the site is considered. For each site, a quantitative rate of area was determined relative to all the landscapes of the study area.					
4. Elevation	0	Low	Medium	High	Very high
Whole site elevation is considered.					
Contrast color with the surrounding landscape	Same color		Different color		Opposite color
A landscape is considered to contrast color between the landscape and its surrounding environment. Special colors include all shapes, dark gray and light gray are considered the same color.					

$$V_{sce} = (Sce\ 1 + Sce\ 2 + Sce\ 3 + Sce\ 4 + Sce\ 5)/5 \tag{2}$$

**TABLE 2.** Criteria and scale of scoring used to assess the scenic value

<b>CRITERIA/SCORES</b>	<b>0</b>	<b>0.25</b>	<b>0.5</b>	<b>0.75</b>	<b>1</b>
Sci 1. Ancient geographic attraction	0	Low	Medium	High	Very high
Scientific criteria 1 depends on the ancient geographic attraction of the site as evidence for reconstructing the structural development of a territory's climate. This criterion does not apply to relics, craft villages, and entertainment areas.					
Sci 2. Representativeness	None	Low	Medium	High	Very high
For natural landscapes, representativeness means that the degree to which a geomorphology can represent the processes of creation and the factors influencing in the formation of a soil morphology. The truth is how many main characteristics it represents for the soil type. For culture, craft village and entertainment in the area, representativeness is the distinctive feature of the attraction sites to other sites.					
Sci 3. Protection level	None	Local level	Province level	National level	International level
Sci 4. Scarcity	> 7	5-7	3-4	1-2	Unique
Ratios are evaluated by the number of similar locations in the study territory as determined in criterion 3.					
Sci 5. Integrity	Totally destroyed	Strongly destroyed	Medium destroyed	Little destroyed	Not destroyed
Criterion 5 depends on the existence of the natural hazard, the natural development and the human factors affecting the site and its conservation level. For entertainment tourist sites and craft villages, the integrity here is the level of maintaining operations, not affecting the environmental culture, rational and sustainable exploitation.					
6. Attractiveness	None	Low	Medium	High	Very high
Criterion 6 depends on attractiveness (endangered species), diversity (number of species) and natural dynamics (ability of the environment to develop naturally) or the attractiveness of the art of craft villages and entertainment.					

$$V_{sci} = (Sci\ 1 + Sci\ 2 + 0,5 \times Sci\ 3 + 0,5 \times Sci\ 4 + Sci\ 5 + Sci\ 6)/5 \quad (3)$$

**TABLE 3.** Criteria and scale of scoring used to assess the cultural value

<b>CRITERIA/SCORES</b>	<b>0</b>	<b>0.25</b>	<b>0.5</b>	<b>0.75</b>	<b>1</b>
Cult 1. Cultural and historical customs	None cohesive	Low cohesive	Medium cohesive	Strong cohesive	Origin of custom
Culture 1 depends on the heritage weights and the cohesive symbolism of the site for a community. This criterion is determined by cultural and historical customs that do not take into account architecture and monuments.					
Cult 2. Artistic importance	None	1-5	6-20	21-50	>50
It refers to the amount of recorded images and written literature, includes many different objects and texts. All historical paintings of the place are counted (paintings, pictures, engravings, photographs)					
Cult 3. Archaeological and architectural relevance	None relevance	Weak relevance	Medium relevance	High relevance	Very high relevance
Culture 3 is determined by the representativeness and relevance of history, architecture, archaeological relics of the site.					
Cult 4. Religion and metaphysics	None relevance	Weak relevance	Medium relevance	High relevance	Very high relevance
Culture 4 is determined by the religious and metaphysical relationship associated with the site					
Cult 5. Cultural and artistic events	None		Not regular		At least once a year
Cultural events related to the site are considered. An event can take place at a location or surrounding area. A short event may still be given an average score.					

The cultural value is assessed by the following formula:

$$V_{cult} = (Cult\ 1 + Cult\ 2 + Cult\ 3 + Cult\ 4 + 2 \times Cult\ 5)/6 \quad (4)$$

**TABLE 4.** Criteria and scale of scoring used to assess the economic value

<b>CRITERIA/SCORES</b>	<b>0</b>	<b>0.25</b>	<b>0.5</b>	<b>0.75</b>	<b>1</b>
Eco 1. Accessibility	> 1 km	< 1km	Near the ward road	Near the provincial road	Near the national road
Criteria of economic value 1 depends on the distance from place where vehicle can assessable to that site.					
Eco 2. Natural risk	Cannot controlled	Not controlled	Partially controlled	Much controlled	None risk
Criterion 2 depends on the level of risk of the site and the policy of its management (continuity, protection of infrastructure, ...)					
Eco 3. Number of annual visitors in the area	< 10.000	10.000-100.000	0,1-0,5 million	0,5-1 million	> 1 million
Eco 4. Connection	None	Low	Medium	High	Very high
There are connections between travel agencies, tourist sites, and the local community					
Eco 5. Attraction	-	Local	Regional	National	International
Economic criterion 5 balances with criterion 4 because the presence of protection may not be favorable to exploitation of the site to attract more tourists.					

$$V_{eco} = (Eco\ 1 + Eco\ 2 + Eco\ 3 + Eco\ 4 + Eco\ 5)/5 \quad (5)$$

**Exploitation value assessment**

Two components of exploitation value includes exploitation degree (x-axis) and exploitation

mode (y-axis)

$$V_{expl} = (V_{deg}; V_{mod}) \tag{6}$$

Where:  $V_{deg}$  is the exploitation degree,  $V_{mod}$  is the exploitation mode

The relationship between these two values is determined by three levels of exploitation: low, medium, and high.

$$V_{deg} = (Deg\ 1 + Deg\ 2 + Deg\ 3 + Deg\ 4)/4 \tag{7}$$

$$V_{mod} = (Mod\ 1 + Mod\ 2 + Mod\ 3 + Mod\ 4)/4 \tag{8}$$

TABLE 5. Criteria and scale of scoring used to assess the degree of exploitation

CRITERIA/SCORES	0	0,25	0,5	0,75	1
Deg 1. Using the surface (ha)	0	< 1	1-5	5-10	> 10
Degree 1 depends on the economic and tourist exploitation of the site.					
Deg 2. Number of infrastructure	0	1	2-5	6-10	> 10
Means of transport, information and accommodation at the site are listed					
Deg 3. Seasonal capacity (days)	0	1-90 (1 season)	91-180 (2 seasons)	181-270 (3 seasons)	271-360 (4 seasons)
Degree 3 depends on the number of days or seasons of using the site surface in the year. In the case of continuous use throughout the year, the score is the result of the annual average					
Deg 4. Daily capacity (hours)	0	< 3 hours	3-6 hours	6-9 hours	> 9 hours
Degree 4 depends on the number of hours per day using the place					

TABLE 6. Criteria and scale of scoring used to assess the modality of exploitation

CRITERIA/SCORES	0	0,25	0,5	0,75	1
Mod 1. Using scenic value	Do not optimize ads	supporting media and product	supporting media and multiple products	Multiple supporting media and 1 product	Multiple supporting media and products
Mode 1 depends on the use of the site's landscape characteristics assessed by optimizing the advertising through the supporting media (website, media, brochure, billboard ...) and different products.					
Mod 2. Using scientific values	Do not optimize the teachings	supporting media and product	supporting media and multiple products	Multiple supporting media and product	Multiple supporting media and products
Criterion 2 depends on the scientific attractive use of the site assessed by optimizing its training through supporting media (exhibitions, guides, educational posters) and products					
Mod 3. Using cultural value	Do not optimize the teachings	supporting media and 1 product	supporting media and multiple products	Multiple supporting media and 1 product	Multiple supporting media and products
Criterion 3 depends on the cultural attractive use of the landscape assessed by optimizing its training through supporting media (exhibition , guide, educational posters) and products (Pralong, 2005)					
Mod 4. Using 2economic Value	No tourist	< 5000	5000-20.000	20.000-100.000	> 100.000
Mode 4 depends on the economic potential of the site measured by the annual number of tourists (Mamun & Mitra, 2012; Sabzevari & Mirazizi, 2014).					

## Research Results



### *Evaluating Tuy Hoa City's potential for tourism development*

The city has a relatively good potential for tourism and abundance with many diverse factors, unique terrain, cultural identity, favorable for ecotourism development, conferences, resorts and medical treatment. ... Tuy Hoa City has the following tourist attractions: Nhan mountain, Chop Chai mountain, Thom mountain, Hon Than, Hon Chua, Hon Dua, Long Thuy Beach ...

**Figure 1.** Tourist attractions of Tuy Hoa City

**TABLE 7.** List of main tourist attractions of Tuy Hoa City

No	Location	Attraction	Highlights
1	Nhan mountain	Cham Tower, Cho Dinh stele, monument, rare plant, animals, Nguyen Tieu poetry night, Ham Long pagoda, caves, beautiful landscape	Nature, historic sites
2	Chop Chai mountain	Many pagodas: Bao Lam pagoda, Khanh Son pagoda, Ngoc Son pagoda, Doi cave, military zone, flora and fauna system, beautiful landscape	Nature, spiritual culture
3	Thom mountain	Resort, restaurant, swimming, mountain, beautiful landscape	Complex
4	Hon Than	Beach, beautiful landscape	Nature
5	Hon Chua	Beautiful beaches, diverse corals, rich seafood, beautiful landscapes, rocky rapids, many ancient pagodas, animals, fishing festival	Nature, historic sites
6	Hon Dua	Beach, beautiful landscape, seafood, many pineapple trees, birds and animals	Nature
7	Long Thuy Beach	Beautiful beach, seafood	Nature
8	April 1 Beach	Beautiful beach, seafood	Nature
9	Tuy Hoa Beach	Beautiful beach, seafood	Nature
10	Phu Lam Beach	Beautiful beach, seafood	Nature
11	Da Rang River	Beautiful landscape, the longest iron bridge in Central Vietnam	Nature, modern
12	Da Ban stream	Flat rocks, plants	Nature

13	Thuan Thao eco-tourism area	Amusement parks	Modern
15	Ho Son pagoda	Ancient architecture, many antiques	Spiritual culture
16	Bao Lam pagoda	Beautiful architecture	Spiritual culture
17	Catholic Church	Beautiful architecture	Spiritual culture
18	Flower village in Ngoc Lang	Ornamental plants	Modern
19	Bonsai village in Binh Kien	Ornamental plants	Modern
20	Knitting in Minh Duc - Ngoc Phong	Traditional knitting profession	Modern
21	Flower village in Binh Ngoc	Flowers, ornamental plants	Modern

### ***The potential for tourism development in Tuy Hoa city***

#### **❖ *Nhan mountain***

Nhan Mountain is a unique feature of the tourist landscape. On the top of Nhan mountain, there is Cham Tower built in the late 11th century, Cho Dinh stele from the 4th century which is a national-level monument. There is also a monument with a unique artistic image, with a botanical garden with nearly 500 species of trees, of which there are many rare species, many species of birds and permanent storks, which are places to enjoy and study of animals and plants, cultural activities, picnic, traditional Nguyen Tieu poetry night held annually. In the southeastern foot of Nhan mountain, there is Ham Long pagoda, later renamed Kim Long Tu and bestowed with four colors by King Bao Dai in the 5th year. At the foot of the cliff, next to the pagoda, there is a cave, about 3 meters in diameter, penetrating the mountain bed and connecting to the river bank. The old people thought it was a dragon's jaw, so the pagoda was named Ham Long. Standing on the top of Nhan mountain, one can see a panoramic view of Phu Yen with panoramic of Tuy Hoa city, Binh Ngoc flower village, Da Bia mountain, East sea and two railway bridges and road with 1100m length across Da Rang river.

#### **❖ *Chop Chai mountain***

Chop Chai mountain has an area of nearly 400ha, height 391m, in Hoa Kien commune, Binh Kien, ward 9. Chop Chai mountain has a rather square shape that looks like a giant pyramid. From the top of the mountain, you will have a sweeping view to the sea, the plains at the foot of the mountain forming a unique landscape, along with the surrounding pagoda system: Bao Lam Pagoda, Khanh Son Pagoda, Ngoc Son Pagoda, Hang Pagoda ... which has created an architectural complex, ecotourism strongly bearing religion and belief, it is possible to research and build a forest park for tourism (Figure 2-3). In addition, Chop Chai mountain has many species of butterflies and flora that contribute to the attraction for tourists.



**Figure 2.** Chop Chai mountain



**Figure 3.** Chop Chai mountain and Tuy Hoa City

❖ *Sea tourist*

Tuy Hoa city has a coastline of over 15km long. The coast with many clean and beautiful beaches with fine golden sand, clear blue sea water, and beautiful sunshine is also a tourist attraction. The romantic beaches such as Long Thuy, Tuy Hoa, April 1 beach, Phu Lam beach, tourism on Hon Dua island, Hon Than, Hon Chua ... are convenient for developing resort tourism, swimming and sport with fully meets the criteria of 3S (Sea, Sun, Sand) (Figure 4, 5).



**Figure 4.** Long Thuy beach



**Figure 5.** Tuy Hoa beach

❖ *River tours*

Da Rang River (Ba River) is a river running through three central provinces of Vietnam, namely Kon Tum, Gia Lai, and Phu Yen. The origin of the name Da Rang comes from the word "Ea Drang" from the Cham language. Da Rang in ancient Cham language is Ea Drang which means "reed river". The river is 374 km long, originating from the Ngoc Ro mountain range, northwest of Kon Tum province, from an altitude of 1,549 m. Along the Da Rang River, there are many scenic spots and historical relics. Da Rang Bridge crosses Ba river (Da Rang river), Tuy Hoa city, Phu Yen province. This is the longest bridge on National Highway 1A through the Central region. The bridge was built by the French in the early 20th century, has 60 spans, 77 meters wide, 1,105 meters long, bearing steel beam structure, reinforced concrete pillars, used since 1971. Previously, this bridge used to be the longest bridge in the Central region on National Highway 1A. Because the bridge runs parallel to the railway track with a zigzag protective steel frame along with



Nhan mountain, Ba river, it creates a unique landscape. The bridge is considered one of the symbols of Phu Yen, Tuy Hoa (Figure 6).



**Figure 6.** Rang Bridge crossing Ba River

❖ *Forest eco-tourism*

The forest area in Da Ban stream basin in Hoa Kien commune has many beautiful waterfalls and landscapes that can be built and developed for a long term to become a tourist site associated with forest ecology and sport and tourism activities in the forest.

***Potential for developing cultural and humanistic tourism types***

– *Historical relic*: Nhan Tower was built in the late 11th and early 12th centuries on a relatively flat land near the top of Nhan Mountain. Nhan Tower is an artistic architectural work of high historical value of the Cham people and this is also a typical landscape of Phu Yen province. On November 16, 1988, the Nhan Tower relic was recognized by the Ministry of Culture and Information as a national architectural - artistic relic.

– *Artistic architecture and religious works*: In the city area there are some ancient architectures and beautiful landscapes such as Ho Son Pagoda, Bao Lam Pagoda, Catholic Church, Protestant Church ..., ecotourism areas such as Sao Viet Resort, Thuan Thao eco-tourism resort ... and a system of 5-star, 4-star, 3-star hotels, many guesthouses ... that are well serving for tourists coming to the province for business, conference, sightseeing, relaxation....

– *Ho Son Co Tu Pagoda*: Ho Son pagoda is located on a high land of the central of Tuy Hoa city surrounded by villages, garden fields, shady trees. Ho Son pagoda was founded by Te Can Patriarch who is the 36th generation of Lam Te sect in the mid-eighteenth century, more than 300 years ago in Ninh Tinh 1 quarter, ward 9, Tuy Hoa city, Phu Yen province. In 1975, the pagoda was restored according to ancient architecture. The scale of the pagoda is superficial in the land with charming scenery, with Guan Yin, Maitreya Buddha station, shining lotus lake, tower garden with many ancient trees so the scene is both peaceful, profound and quiet. Ho Son Co Tu pagoda is classified as a famous place in Phu Yen and the whole country. In particular, when visiting Ho Son

Pagoda, in addition to admiring the Buddha, retreats, contemplate life, also admire the precious bird garden and many exotic fruits such as plantain, musa acuminata, lous banana...This is also the place where the burnt clay Buddha statue was found, which according to Professor Tran Quoc Vuong dates back to the 6th - 7th centuries and is very valuable for archeology.

– *Bao Lam Pagoda*: located in Lien Tri village, Binh Kien commune, Tuy Hoa city, Phu Yen province. The pagoda is about 3km from the city center. This is an ancient temple founded by Zen master Dao Trung in the nineteenth century. In 1974, Venerable Thich Nguyen Tu built a quiet pagoda. In front of the main hall is the open-air Bodhisattva statue standing on the lotus throne. In the middle of the Buddha hall, the statue of Shakyamuni Buddha meditated. In particular, after the main hall, on the mountain slopes, the pagoda has a statue of Shakyamuni Buddha meditating on a lotus throne with 18m high, located in 1998. The pagoda has a beautiful natural landscape with harmonious architecture and chastity space.

– *Festivals*: There are annual festivals such as Nguyen Tieu Poetry Night on Nhan Mountain, fishing festival, boat racing festival on Song Chua.

- *Traditional craft villages*: Flower village in Ngoc Lang, bonsai village in Binh Kien, knitting in Minh Duc – Ngoc Phong, flower village in Binh Ngoc.

– *About cuisine*: There are many typical seafood specialties: cockles (O Loan lagoon), fish salad, crab (Cau River also known as Tam Giang River), tuna, mackerel sauce, Mi Quang...

Based on the tourist destination information and the tourism potential assessment criteria system, the research team assesses the tourism potential value of tourist attractions in Tuy Hoa City as follows:

TABLE 8. Score of tourism potential assessment of Tuy Hoa City

No .	Locations	Scene value	Scientific value	Cultural value	Economic value	Tourist value
1	Nhan Mountain	0.85	<b>0.60</b>	0.92	<b>0.75</b>	<b>0,8</b>
2	Chop Chai Mountain	0.95	<b>0.65</b>	0.63	0.60	<b>0,7</b>
3	Thom mountain	0.85	0.50	0.42	<b>0.65</b>	<b>0,6</b>
4	Hon Than	0.65	<b>0.60</b>	0.38	0.35	0,5
5	Hon Chua	0.90	<b>0.73</b>	0.79	0.60	<b>0,8</b>
6	Hon Dua	0.85	<b>0.65</b>	0.38	0.40	<b>0,6</b>
7	Long Thuy beach	0.65	0.58	0.21	<b>0.85</b>	<b>0,6</b>
8	April 1 Beach	0.60	0.50	0.21	0.60	0,5
9	Tuy Hoa Beach	0.60	0.50	0.21	0.60	0,5
10	Phu Lam Beach	0.60	0.50	0.21	0.60	0,5
11	Da Rang River	0.60	0.50	0.38	0.50	0,5
12	Da Ban Stream	0.50	<b>0.75</b>	0.21	0.45	0,5

13	Thuan Thao eco-tourism area	0.55	0.69	0.33	0.55	0,5
15	Ho Son Pagoda	0.50	<b>0.88</b>	0.79	0.65	<b>0,7</b>
16	Bao Lam Pagoda	0.60	0.66	0.67	0.50	<b>0,6</b>
17	Catholic Church	0.50	0.69	0.54	0.50	<b>0,6</b>
18	Flower village in Ngoc Lang	0.60	0.56	0.17	0.45	0,4
19	Bonsai village in Binh Kien	0.40	0.56	0.17	0.45	0,4
20	Knitting in Minh Đuc – Ngoc Phong	0.40	0.56	0.17	0.45	0,4
21	Flower village in Binh Ngoc	0.60	0.56	0.17	0.45	0,4
	<b>Average</b>	<b>0,64</b>	<b>0,61</b>	<b>0,40</b>	<b>0,55</b>	<b>0,5</b>

Tuy Hoa City has a great tourism potential and has all the necessary and sufficient factors to develop tourism. The results of the tourism potential assessment show that, Tuy Hoa has many landscapes with tourism potential of over 0.5 points (average high). The landscape potential of Tuy Hoa is the greatest, the next is the scientific and economic potential. This shows that Tuy Hoa has a great potential for tourism development.

In terms of scene, the sites with high scenic value ( $> 0.8$ ) are Nhan mountain (0.85), Chop Chai mountain (0.95), Thom mountain (0.85), Hon Chua (0.90) and Hon Dua (0.85).

In terms of science, many tourist attractions in Tuy Hoa have very high potential ( $> 0.6$ ) such as: Nhan Mountain (0.6), Chop Chai mountain (0.65), Hon Chua (0.73), Hon Dua (0.65), Da Ban Stream (0.75), Ho Son Pagoda (0.88) ... This is the strength of the Tuy Hoa City.

In terms of culture, Tuy Hoa still possesses many cultural and spiritual valuable sites such as Nhan Mountain (0.92), Hon Chua (0.79), Ho Son Pagoda (0.79) ...

In economic terms, the potential for tourism benefits of tourism attractions in Tuy Hoa city is high such as Nhan mountain (0.75), Thom mountain (0.65), Ho Son Pagoda (0.65), Long Thuy Beach (0.65).

Tourist destinations with high natural tourism potential include: Nhan mountain (0.8), Chop Chai Mountain (0.7), Thom mountain (0.6), Hon Chua (0.8), Hon Dua (0.6), Long Thuy Beach. Tourist destinations with high potential for cultural tourism such as: Ho Son Pagoda (0.8), Bao Lam Pagoda (0.6), Catholic Church (0.6).

The city is full of features with potential for tourism development such as: beautiful mountains, traditional culture, artistic architecture, rivers and marine tourism. Types of tourism can be developed in Tuy Hoa city such as resort tourism, cultural spiritual tourism, ecotourism, adventure tourism.

### ***The state of tourism exploitation and development***

To be able to evaluate tourism potential exploitation activities of tourist sites in Tuy Hoa City, the author assessed the value of tourism exploitation based on the criteria of the degree of and the modality of exploitation. The results of study were displayed in table 9.

TABLE 9. The scores of tourism exploitation value in Tuy Hoa City

No.	Locations	Exploitation degree	Modality of exploitation
1	Nhan Mountain	<b>0.56</b>	<b>0.56</b>
2	Chop Chai Mountain	0.31	0.25
3	Thom mountain	<b>1.00</b>	<b>0.56</b>
4	Hon Than	0.19	0.25
5	Hon Chua	<b>0.50</b>	<b>0.63</b>
6	Hon Dua	0.19	0.25
7	Long Thuy beach	<b>0.81</b>	<b>0.63</b>
8	April 1 Beach	<b>0.69</b>	0.31
9	Tuy Hoa Beach	<b>0.69</b>	0.44
10	Phu Lam Beach	<b>0.69</b>	0.31
11	Da Rang River	0.06	0.25
12	Da Ban Stream	0.38	0.25
13	Thuan Thao eco-tourism area	<b>0.94</b>	0.56
15	Ho Son Pagoda	<b>0.56</b>	0.38
16	Bao Lam Pagoda	<b>0.56</b>	0.31
17	Catholic Church	<b>0.50</b>	0.31
18	Flower village in Ngoc Lang	0.38	0.25
19	Bonsai village in Binh Kien	0.38	0.25
20	Knitting in Minh Đuc – Ngoc Phong	0.38	0.25
21	Flower village in Binh Ngoc	0.38	0.25
Average		0.51	0.36

Table 9 shows that the tourism potential of Tuy Hoa City is exploited at an average level (0.51 points). Exploitation methods of Tuy Hoa City is still low (0.36 points).

Regarding the exploitation degree:

+ Tourism sites with very high exploitation degree includes: Thom mountain, Long Thuy beach, Thuan Thao eco-tourism area

+ Tourism sites of high exploitation degree: April 1 Beach, Tuy Hoa Beach, Phu Lam Beach.

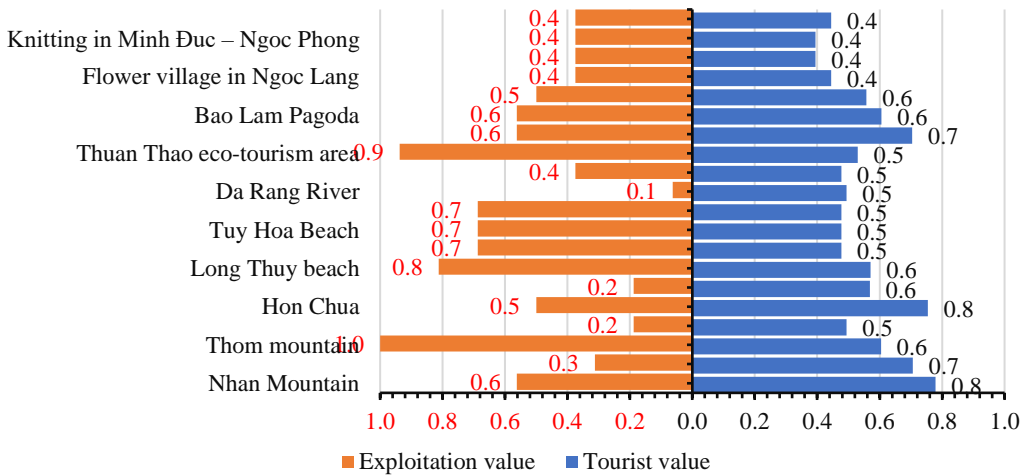
+ Tourism sites of average exploitation degree: Nhan Mountain, Hon Chua, Ho Son Pagoda, Bao Lam Pagoda, Catholic Church

+ Tourism sites with low exploitation degree: Chop Chai mountain, Hon Than, Hon Dua, Da Rang River, Da Ban Stream and craft villages.

About the mode of exploitation: Most of the attractions in the Tuy Hoa City has not been exploited properly.

+ Tourism sites of medium to high exploitation mode: Nhan mountain, Thom mountain, Hon Chua, Long Thuy beach

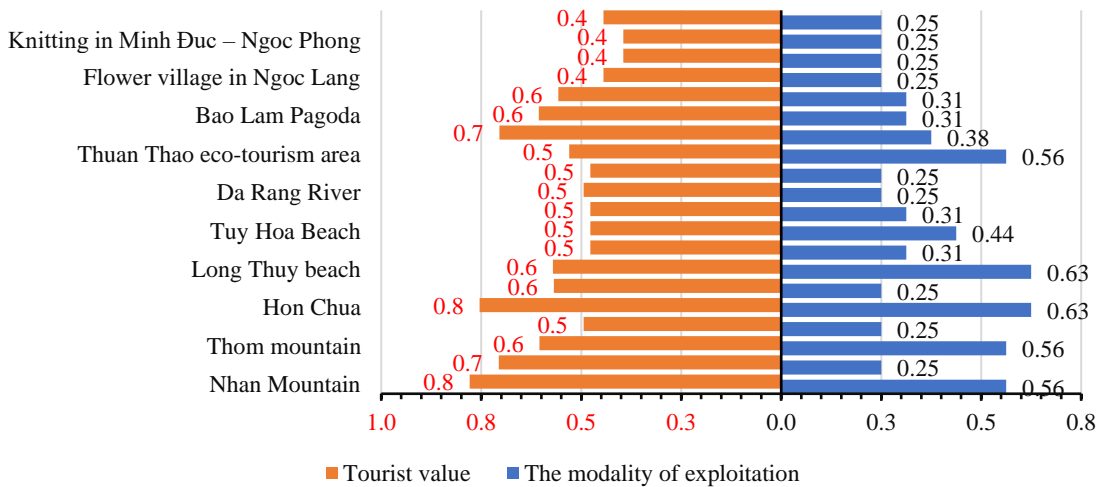
+ The remaining tourism sites have low exploitation mode.



**Figure 7.** Tourism potential value and exploitation degree

Figure 7 shows that the tourism potential value and the degree of tourism exploitation of destinations in Tuy Hoa City is not proportional.

Many tourist attractions with high tourism potential but the exploitation level is still very low such as: Chop Chai Mountain, Hon Dua.



**Figure 8.** Tourism potential value and exploitation mode

Figure 8 shows that the value of tourism potentials and the mode of tourism exploitation of tourism locations in Tuy Hoa City has a clear difference. Most of the locations have a way of tourism exploiting that is not commensurate with the inherent tourism potential.

Some tourism sites have a fairly average exploitation mode such as: Long Thuy Beach, Hon Chua, Nhan mountain, Thom mountain, Thuan Thao eco-tourism area.

The above analysis shows that Tuy Hoa City has a great tourism potential, however, the current degree and mode of tourism exploitation in tourist locations has not fully

brought into play the inherent potential of the tourist sites. Therefore, Tuy Hoa City needs development strategies and solutions to effectively exploit the potentials of tourism in the area, contributing to economic development, consolidation and improvement of social life.

## Conclusion

Tuy Hoa City has great potentials for tourism development (more than 21 tourist attractions). The values of tourism resources of the city are diverse and unique with many types of tourism resources such as marine tourism, mountain river nature tourism, cultural and spiritual tourism with many unique architectures, ecology tourism and craft village. In which, it can be seen that the potential for marine tourism of the city is huge such as: Long Thuy Beach, Tuy Hoa Beach, Hon Chua, Hon Dua ... The tourism potential value of Tuy Hoa reaches 0.5 points (the high average level). This shows that the potential for tourism development here is huge.

Reality of tourism exploitation in Tuy Hoa City in recent years has been is going in a favorable direction: Tourism revenue has increased continuously, many investment and marketing policies in tourism have been promoted and paid more attention. However, the current status of exploiting the capital potential of the city has not been fully exploited. The degree and mode of tourism exploitation is not commensurate with the inherent potential of Tuy Hoa City with the tourism exploitation value score of only 0.36.

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