
HERITAGE ECONOMICS AND HERITAGE BENEFIT OPTIMAZATION

Bui Dai Dung, Nguyen Thi Vinh Ha, Nguyen Thi Hoa Hanh

VNU University of Economics and Business, Vietnam National University, Hanoi
144 Xuan Thuy Road, Hanoi 100000, Vietnam

Abstract

Heritage is a valuable resource that can bring great and lasting benefits not only to a locality but also to the nation and even to the world as well. However, in many cases, the important role of the heritage is overlooked, not properly preserved or exploited in an abusive manner, leading to unfortunate losses. Preserving and promoting the value of the heritage should be based on the correlation of the regional costs and benefits that the heritage could bring to the economy in the long term. This is the nature of the heritage economics.

This article introduces basic theory of heritage economics, including: the important position of heritage in the socio-economy; methods of measuring values, mechanisms and principles to promote the optimal benefits of the heritage. How to value, analyse the optimum cost for preservation, and to calculate the carrying capacity of a heritage site would be key issues of policies for preserving and promoting the sustainable value of the heritage.

Keywords: Heritage benefit; Heritage economics; Evaluation; Carrying capacity

1. Introduction

Cultural heritage is the tangible artifacts or valuable intangible attributes that a community or society inherits from previous generations, is maintained in the present and benefits the future generation. Thus, heritage is a valuable resource not only in terms of spiritual significance but also a great economic resource with irreplaceable characteristics.

For heritage resources to maximize their benefits in the long term, social and policy makers should have accurate information about the value of the heritage, to understand the risk of threatening the existence of the heritage, to propose the appropriate exploitation solutions and adequate cost of conservation. Accurate decisions about when and how much the intervention level is from the state management aspect for the heritage can help control cost savings, avoiding the risk of future losses, which is the economic feature of this activity.

Heritage Economics is a science major, based on the basis of economic theory to clarify the importance of heritage in the economy; mechanisms and principles to protect and promote the optimal benefits of heritages. Given the peculiarities of the benefits to the society from the heritages, it can be seen that heritage is a special form of public goods with quite high public purity. The functions of managing, protecting and promoting heritage values is a true task of the public sector. Making policies and managing heritages should be based on unified, scientific, and credible evidence.

2. The importance of heritage in the economy

2.1. Some concepts of heritage and heritage classification

Heritage in general are valuable things to be maintained and inherited to future generations. Thus, things that have no value or are no longer exist do not belong to the heritage. Heritage includes both man-made items or natural items. A tangible cultural heritage is a material product of historical, cultural and scientific values, including historical-cultural relics, beauty spots, relics, antiques and national treasures. In which: Historical-cultural relics are construction works, places and relics, antiques and national treasures of such works and places that have historical, cultural and scientific values; Attractions are natural landscapes or places that combine natural landscapes with architectural works of historical, aesthetic or scientific value; Relics are artifacts handed down, of historical, cultural and scientific value; Antiques are artifacts handed down, of typical historical, cultural and scientific values, of at least one hundred years of age; National treasures are artifacts handed down and have particularly valuable and rare values of the country in terms of history, culture and science.

According to UNESCO, “Cultural heritage is the inherited values of physical objects and intangible attributes that a community or society inherited from previous generations, maintained in the present and bestow benefits to future generations. According to the World Heritage Convention, heritages are classified into three (03) groups as follows:

(i) Cultural heritage, including:

- Monuments are architectural works, sculptures and paintings, elements or structures of archaeological character, characters, cave houses and structures combining separately constructed works or interconnected constructed works but due to their architecture, due to their homogeneity or location in the landscape with the global prominence values from a historical, artistic and scientific standpoint.

- Sites are man-made works or works that combine natural and man-made items and areas including archaeological sites of outstanding global importance from historical, aesthetic, ethnographic or anthropologic viewpoints.

(ii) Natural heritage, including:

- Natural features include physical or biological creation activities or groups of globally prominent tectonic activities from an aesthetic or scientific standpoint.

- Geological or natural geographic tectonic activities and areas with well defined boundaries constitute a habitat of globally threatened plant and animal species in view of Scientific or conservation perspective.

- Natural places or natural areas that are clearly delineated, globally outstanding in scientific, conservation or aesthetic terms.

(iii) Mixed heritage, including:

The area must satisfy at least one criterion of cultural heritage and one criterion of natural heritage. The mixed heritage, also known as the dual heritage, contains the striking interrelationships between culture and nature in these areas.

Heritage is also classified by tangible and intangible cultural criteria

In order to evaluate the tangible cultural heritage of Hoi An Ancient Town, it is necessary to define the concept of tangible cultural heritage as the basis for identifying the right object to be assessed.

According to Article 4 of Vietnam's Law on Cultural Heritage No.28/2001/QH10, promulgated by the National Assembly on June 29, 2001, some basic concepts are construed as follows:

“1. Intangible cultural heritage is a spiritual product of historical, cultural and scientific value, which is preserved by memory and writing, transmitted by oral, vocational, performance and other forms. other archives and transmissions, including speech, writing, literary, artistic, scientific, oral and oral literature, folk performances, lifestyle, festivals, know-how on craft traditional works, knowledge of traditional medicine, traditional medicine, culinary culture, traditional costume and other folk knowledge.

Tangible heritage including buildings and historical sites, monuments, artifacts, etc., is considered worthy to preserve for the future. They include objects that are significant to the archeology, architecture, science or technology of a particular culture.”

Thus, the system of legal and administrative documents has clearly classified two groups of intangible heritage and tangible heritage. However, in terms of evaluation, the question arises as to whether tangible cultural asset value includes cultural or intangible values?

Reality shows that physical heritage is the material manifestation of cultural heritage. Therefore, the price of cultural heritage includes specific objects and also implies the intrinsic non-material values. The tangible cultural heritage is clearly distinguished from the intangible cultural heritage values according to current legal documents.

2.2. The role of heritage in the economy

2.2.1. The role of tourism in the national economy

The following table is calculated from the original WDI 2019 data on tourism income of 263 countries, groups of countries and economic regions around the world, a 5-year average from 2013-2017. It can be seen that a series of small countries with favorable climates have brought into play the extremely important role of tourism in the economy. Sint Maarten (Netherlands) has tourism revenue accounting for over 84% of GDP. Tourism also contributes to the island nation's GDP of 67%.

Some countries right adjacent to Vietnam also have admirable tourism revenues. This figure for Cambodia, Thailand and Laos is 16.06%; 11.94%, and 5.75% compared to Vietnam is 4.06%.

Table 1: 80 Countries and territories with high income from tourism

No.	Country/Territory	Tourism Revenue, % of GDP	No.	Country/Territory	Tourism Revenue, % of GDP
1	Sint Maarten	84.40	41	Armenia	9.04
2	Macao SAR, China	74.21	42	Bahrain	8.99
3	Maldives	66.90	43	Dominican Rep.	8.79
4	Aruba	48.50	44	Other small states	8.67
5	Palau	46.26	45	Morocco	8.37
6	Timor-Leste	39.14	46	Greece	8.25
7	Grenada	38.95	47	Estonia	8.20
8	Vanuatu	37.07	48	Portugal	7.99
9	Antigua and Barbuda	31.99	49	Gambia, The	7.96
10	Seychelles	31.03	50	Bulgaria	7.78
11	St. Lucia	29.87	51	Qatar	7.40
12	St. Kitts and Nevis	29.46	52	Madagascar	7.28
13	Dominica	27.71	53	Kyrgyz Republic	6.50
14	Bahamas, The	26.06	54	Haiti	6.40
15	Curacao	24.97	55	Costa Rica	6.30
16	Cabo Verde	24.01	56	Malaysia	6.24
17	St. Vincent	23.65	57	Solomon Islands	6.04
18	Montenegro	21.94	58	Micronesia, Fed. Sts.	6.02
19	Belize	21.46	59	Singapore	5.99
20	Croatia	17.90	60	Slovenia	5.94
21	Samoa	17.75	61	Bhutan	5.90

22	Jamaica	16.97	62	Lao PDR	5.75
23	Barbados	16.41	63	Hungary	5.57
24	Cambodia	16.06	64	Azerbaijan	5.45
25	Bermuda	15.44	65	Togo	5.37
26	Georgia	14.94	66	Austria	5.10
27	Mauritius	14.86	67	El Salvador	5.08
28	Albania	14.44	68	Tunisia	5.01
29	Jordan	14.01	69	New Zealand	4.85
30	Hong Kong	13.49	70	Spain	4.82
31	Malta	13.32	71	Sri Lanka	4.74
32	Cyprus	13.03	72	Nicaragua	4.57
33	Thailand	11.94	73	Honduras	4.53
34	Panama	11.21	74	Rwanda	4.50
35	Lebanon	10.32	75	Bosnia and Herzegovina	4.40
36	Iceland	9.68	76	Latvia	4.22
37	Small states	9.67	77	Ireland	4.13
38	Tonga	9.60	78	Botswana	4.12
39	Marshall Islands	9.43	79	Namibia	4.07
40	Luxembourg	9.26	80	Vietnam	4.06

Source: Calculated based on the raw WDI data (2018)

2.2.2. The role of heritage in tourism

World statistics and statistics of many countries do not have an aggregate number of benefits directly generated for the economy from each country's heritage system. However, there have been many studies to determine the role of heritage and its specific contribution to the economy.

A research by McGrath et al. (2016) showed that Global tourism generated an income of \$ 8.8 billion and 319 million jobs for the world economy, reaching growth of 3.9%, much higher than the global economic growth rate in general.

Logan and Saxon (2016) stated that in 2015 alone, 192 million visitors came to the British heritages and its heritage tourism activities have gained 20.2 billion Pounds and created an additional 386 thousand jobs for the UK, equivalent to 2% of the total value of goods and services in the year.

Another study by the UK Center for Economic and Business Research (CEBR) published in 2018 showed that in 2015, activities related to heritage made the third largest contribution to Gross Value Added - GVA for the economy. Anh, second only to automobile and fishery, but higher than a range of other industries in the economy.

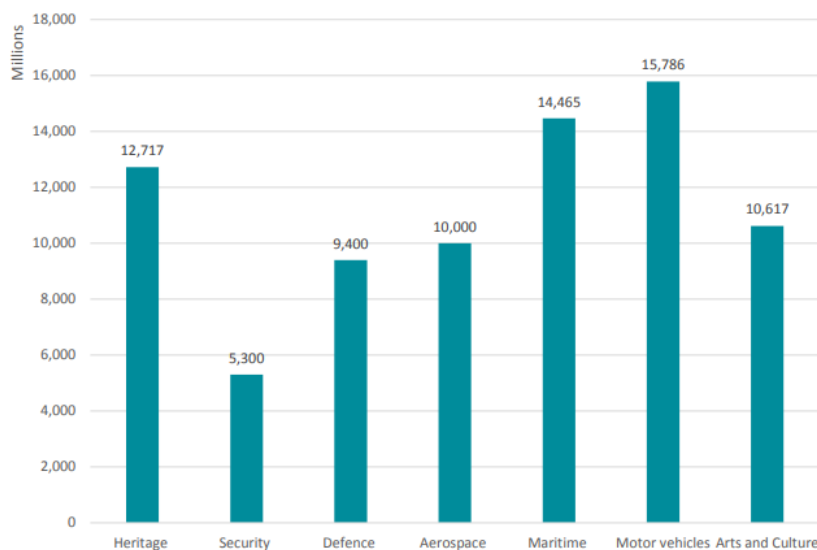


Figure 1: Heritage ranked the third for the contribution of Net Value to the UK economy

Source: CEBR (2018)

In Vietnam, tangible cultural heritage is estimated to have more than 3,000 national heritages and about 7,500 provincial heritages. Many other monuments are still in the process of gathering information, preparing records to evaluate historical, cultural and artistic values. The system of intangible cultural heritage, such as festivals and traditional trade villages; culinary culture of regions and peoples; the folk art and cultural heritages ... of 54 ethnic groups create a huge, extremely rich, diverse and unique volume of cultural heritages.

Vietnam's economic development process, especially from the beginning of its renovation, shows that Vietnam's cultural heritage creates a strong attraction to tourism. Cultural heritage is the engine, the source of the trip, the interactive environment and valuable experiences for visitors. Thus, heritage is a natural resource and a strategic resource for tourism development.

3. The value of heritage

3.1. The elements in the total value of the heritage

Is heritage of economic value? Surely heritage must have economic value. John Maynard Keynes made this assertion and he said that heritage is not only of spiritual value, but also of use. Keynes once suggested that if art resources were not fully utilized, it was worth demolishing most of the buildings in South London by the River Thames and replacing them with modern buildings and parks. But why not do it? Because the overall benefits from these old houses are bigger than those modern buildings.

The total economic value of a heritage is often analyzed into several types of values, including:

- **Exploitable use value (consumption value).** Exploitable use value derived from goods can be extracted from the tourist destination. In historic cities, there are direct buildings created from buildings, to live, trade and rent or sell space. Unlike a forest, the use of a historic city does not deplete it unless its use is inappropriate or excessive, depriving the beauty of the tourist site or its character. To some extent, existing in tandem with the use of forest harvesting is kept at a sustainable level.

- **Non-exploitable use value.** Non-exploitable use value comes from the services provided by the tourist destination. The accompanying for historic cities is clear: some people just pass through the city and enjoy the scenery without spending money there, and their use of location is not captured by an economic transaction. or financial. Measuring non-exploitable use value is significantly more difficult than measuring use value. The most relevant factors for valuing cultural heritage are aesthetics and recreational value.

- **Non-use value.** Non-use value is the most difficult value to estimate. In many cases, this benefit is called the value of existence (the value that people draw from the knowledge that a tourist destination exists, even if they never plan to access it). Other aspects of the Non-use value include the option value, which is the value of retaining the need or desire to visit a destination next time.

3.2. The method of evaluating heritage values

The researchers divided economic evaluation methods into two basic groups, namely: RPM - Revealed preference method, SPM - Stated Preference method. The methods of preference are disclosed based on the actual market behavior of users of ecosystem goods and services. This disclosure may be observed or measured based on specific behaviors or decisions. However, their applicability is limited to certain ecosystem goods and services when those goods and services meet users' needs, and users disclose their likes through existing behaviors.

The declared preference method can be applied to all types of ecosystem goods and services. However, their main drawback is that they have to rely on hypothetical situations, and the application is very complicated and expensive.

This is different from the declared preference because the use of language to express one's preference is not considered to be the actual display of preference. The disclosed preference is considered to be more accurate than the declared preference.

Table 2: Summary of economic evaluation methods

Method group	Method of evaluation	Forest goods or services evaluated	Value type	Population affected	Benefits of the method	Limitations of the method
Method of expressing preference	Market price	Goods or services traded on the market, mainly resources (eg timber, firewood, cork, non-timber forest products)	Direct and indirect use value	Users	Market data is available and strong	Applied only to market goods and services
	Based on cost	Mainly ecological services: soil protection, water protection, climate regulation	Direct and indirect use value	Users	Market data is available and strong	Possibly estimating too high compared to the actual value
	Valuation of enjoyment	Services that contribute to the quality attributes of a particular market goods, for example air quality, beauty of scenery, noise reduction	Direct and indirect use value	Users	Based on market data	Needs a lot of data and mostly applies only to data related to properties
	Travel expenses	All ecological services contribute to leisure activities	Direct and indirect use value	Users	Based on observing behavior	Only applicable for entertainment value and having trouble visiting multiple locations on the same trip
Method of expressing preference	Random assessment	All goods and services	Use and non-use values	Users and non-users	Possibly evaluating all types of use and	The answer may be biased, the market is presumptive (behavior is not observed), resources

ence					non-use values	are expensive
	Mode l of selecti on	All goods and services	Use and non-use values	Users and non-users	Possibly evaluating all types of use and non-use values	The answer may be biased, the market is presumptive (behavior is not observed), resources are expensive

Source: https://planbleu.org/sites/default/files/upload/files/FactSheets_methods_EN.pdf

The most common method to estimate the economic value of a heritage is the backup pricing method. However, in the opinion of David Throsby, another approach is very suitable to estimate, because in the beginning, heritage is basically an economic factor, then one can consider heritage as a economic goods and try to analyze its economic role and profitability. Within this framework, heritage becomes an economic “asset”, because its protection and management represent “future economic interests”.

Contingency valuation: This technique is a direct product of welfare economics, a special field of therapeutic economics that provides public services and community well-being. Random pricing based on a survey conducted among representatives of the target population is likely to be of interest to an element of heritage. This form is asked about its Maximum Payment Readiness (MWP) to secure a public service or avoid loss or decline.

When applying an evaluation to an estate, this technique allows decision makers to estimate the economic value that society brings to a given heritage, thus providing basic information for the cultural heritage policy to apply.

Originally from the sixties, random pricing was a theoretical tool and its first applications were geared towards the valuation of protecting natural and recreational areas. Today it is used frequently by many actors - from national decision makers to international organizations - and is used for all sorts of cultural goods, from museum collections to historic places and cities.

3.3. Overview of some typical heritage evaluation projects

3.3.1. Some domestic projects on evaluating heritages

In Vietnam, there have been several studies on the application of travel cost method to assess the value of heritage, mainly related to natural heritage.

Tran Vo Hung Son and Pham Khanh Nam (2001) used the travel cost method to analyze the recreational value of Hon Mun Coral Island, Khanh Hoa Province. This is a marine reserve regulated by the Heritage Law. Research shows that the entertainment value of Hon Mun in 2000 was about 260 billion VND, consumer surplus was estimated at 45.4 billion VND.

Vo Thi Minh Hoang and Nguyen Thi Tu Thanh (2015) assess the tourism-entertainment value of Can Gio biosphere reserve using the travel cost method. UNESCO recognized this as a

world biosphere reserve on January 21, 2000 with a unique diversity of flora and fauna typical of the mangrove. The results of the study only for domestic visitors showed that the entertainment value in the monetary form of the Can Gio biosphere reserve is about 6,542.3 billion VND in a year, which is the value that Can Gio biosphere reserve generates to the economy of Vietnam. The research results also show an average visitor willingness to pay 107,000 VND and 85% of tourists desire to improve and improve the quality of services and infrastructure.

Pham Trung Hieu and Luu Tien Thuan (2017) applied the travel cost method to determine the landscape value of Cai Rang floating market, Can Tho City, a national intangible cultural heritage. The authors have identified that the companies that provide travel services to Cai Rang floating market each year gain a benefit from the floating market equivalent to 257,743.71 million VND from serving tourists. Meanwhile, the surplus of visitors gained from visiting and visiting Cai Rang floating market is 116,003.68 million VND.

Currently, the research team has not been able to access the documents using TCM to evaluate the value of cultural heritage in Vietnam.

Random assessment methods are used in many studies in Vietnam. However, with respect to heritage assessment, the research team was only able to access a study using CVM to determine community willingness to pay to conserve the cultural space of Mong Phu village gate, Duong Lam, Son Tay, Hanoi (2013).

HPM and CM methods are rarely used in studies in Vietnam and the research team has not been able to access any documents using HPM and CM to evaluate the value of cultural heritage in Vietnam.

3.3.2. Some foreign projects on evaluating heritages

Overseas heritage evaluation studies often use demand-based assessment techniques that are often used to evaluate the value of goods and services that are not marketed and purchased, especially especially public goods and services. These techniques can be used to understand people's preferences and thereby measure the value of cultural and natural heritage (Bennett, 2000). There are two commonly used techniques: Revealed Preference - RP and Stated Preference - SP (Navrud and Ready, 2002).

- Revealed Preference - RP: This is a market-based technique. Revealed Preference focuses on how environmental goods affect the markets for a particular good. The economic value of environmental goods/services is expressed through the representative market (Bennett, 2000). Methods of expressing interest include: Travel Cost Method - TCM, Hedonic Price Method - HPM.

The TCM method can be used to estimate the demand curve for recreation places and thereby evaluate the value of these landscapes (Brown and Mendelsohn, 1984). The basic assumption of TCM is simple, that the cost of visiting a place partly reflects the entertainment value of that place. This method has been used for many studies of the tourism value of cultural heritage, for example: Poor and Smith (2004) evaluating the Old Quarter. Mary of Maryland (USA); Bedate et al. (2004) assessed 4 cultural heritage of Spain, including the Burgos Museum, Iberian Organ Festival, Urueña Walling Complex, and Palencia Cathedral.

The Hedonic Price Method - HPM is used to measure the economic value of ecological or environmental services that are directly reflected in market prices (Goodman, 1998). For example, noise affects housing prices. Changes in housing prices due to noise can be considered as noise prices. Ruijgrok (2006) uses the HPM method to evaluate the value of cultural heritage in the Netherlands. Lazrak et al. (2014) also used this method for cultural heritages in the Dutch Zaanstad urban area. Deodhar (2004) examines the impact of cultural heritage on housing prices on the northern coast of Sidney.

RP technique uses data about the actual selection of individuals in real life. Therefore, the RP is only applicable to assessing the values used.

- Stated Preference - SP: Stated Preference method is based on hypothetical markets. Preferred speech methods include: Contingent Valuation, Choice Modeling. Because these methods are not market-based, they are suitable for evaluating unused values (so there is no market).

The Contingent Valuation Method (CVM) is most commonly used in the assessment of environmental quality goods, especially the non-use value ... By building a virtual market, it is determined demand function of environmental goods through people's willingness to pay (WTP) or willingness to accept when they lose that goods (WTA), put in a hypothetical situation. Once the hypothetical situation presents enough objectivity, the respondent is true to their actual action, the result of the method is quite accurate. Analysts can then calculate the average willingness to pay of the respondents, multiplied by the total number of beneficiaries of value or assets, yielding an estimate of the value the population pays for produce that. CVM is the most commonly used method in the valuation of cultural heritage values. Some studies using CVM can be cited as an example: the value of preserving cultural heritage are the monasteries of Bulgaria (Mourato et al., 2002); evaluate the value of the Colosseum heritage of Rome (Lvova, 2013); evaluate road upgrade options for Stonehenge in the UK (Maddison and Mourato, 2002); assess the impact of air pollution at Lincoln Church (Pollicino and Maddison, 2002), and evaluate the recreational value of the Hartley historic site in the Blue Mountains, west of Sydney, Australia (Christiansen, 1997), ...

Alberini and Longo (2006) used a combination of TCM and CVM methods to evaluate 4 cultural heritage in Armenia. In this study, the authors combine the data of field trips and hypothetical tours with scenarios to enhance site conservation and improve (i) site-based cultural experience, (ii) quality of infrastructure, or (iii) quality of service. Research results show that (i) important use values are associated with the four research sites, and (ii) conservation programs and initiatives that improve cultural experience, or simply help people respond to outreach and spend time at the memorial and will encourage higher visit rates.

Carson et al. (2001) combined Delphi and CVM expert methods to evaluate the restoration of UNESCO Fes Medina heritage in Morocco for foreigners, including surveys of 30 environmental economists. EU school.

The Choice Modeling method (CM) is also a non-market valuation technique, capable of analyzing the component values of the heritage, including use and non-use values. The CM allows market data to be extrapolated more accurately to include cases where data are not

available - such as the proposed case of heritage protection by creating entirely new market conditions (Bennett, 2000). Some studies that use the selection model to evaluate heritage include: Maddison and Foster (2001) the value lost due to congestion at the British Museum; Rivera (1998) evaluates the value of restoration of the Colon Theater in Buenos Aires, Argentina.

Alternatively, another way is to rely on the available research to evaluate the value of the study site: using the Benefit Transfer - BT method.

4. Optimizing the benefits of heritages

4.1. Analyzing Cost-Benefit of heritages

Heritage as a commodity from an economic perspective because it benefits the social needs and needs certain costs for management, maintenance and maintenance. The level of development of the economy and the preservation and promotion of heritage have complicated reciprocal relationships.

4.1.1. Positive effects from development to heritage

A growing economy always goes hand in hand with more personal and budgetary resources. On the one hand, an increase in budget could increase spending on conservation, long-term heritage development and more secure programs. On the other hand, abundant income for individuals also promotes tourism development, while promoting the should visit and learn about the heritage. In general, a developed economy has a positive impact on the preservation and promotion of heritage values. Hoi An's heritage can provide a visual example of this relationship. Economic development in Hoi An has added beauty to the city, thanks to the development of projects to increase gardens, parks, and landscape remodeling with the preservation and conservation of the old quarter. Tourism contributes to affirming and preserving important natural areas, developing ecotourism types and ecotourism sites in Hoi An, which are invested in construction such as Cam Thanh ecological village. - Hoi An. The material and spiritual life of the people is improved; Craft villages are promoted and preserved.

4.1.2. Negative impacts from development to heritage

The development also creates many risks of negative impacts on the landscape environment in general, and heritage in particular. First of all, development impacts the urban environment due to urbanization, pollution of liquid and solid wastes, losing a large area of land previously devoted to the natural landscape. Tourism activities with the increasing discharge of solid waste, organic waste from the leftovers of restaurants, hotels, garbage from travelers indiscriminately expose polluted soil environment.

The development process inevitably causes negative impacts on the air environment. The increasing number of vehicles participating in tourism activities such as boats, cars, motorbikes is a significant cause of dust and environmental pollution. Impact on biological resources. Scuba diving shows signs of negatively affecting the coral and biodiversity of the coastal areas. Pollution from tourism and industrial production, Agriculture is also a cause for concern for habitat degradation and coastal mangrove biodiversity.

The development process has a very clear negative impact on the water environment. Evidence in many countries shows that the impact on the water environment is likely to increase in proportion to tourism development. Particularly in Cu Lao Cham beach, Cua Dai beach, An Bang beach, seawater samples taken in 2012 showed that the Fe indicator has exceeded many times compared to Vietnam National Technical Regulations (QCVN). The cause of pollution is due to tourism activities along with the movement of boats and the issue of tourists' littering, which increases the concentration of iron and suspended solids in seawater. Internal water also shows a worrying level of pollution. The survey results in 2012 at Minh An Lake showed that indicators of dissolved oxygen, COD, BOD5, NH4-N all exceeded QCVN many times.

4.1.3. Model of analyzing the benefits from heritage

The total economic value of a tourist destination can be considered to be at least equal to the total revenue generated by its various uses over time, its most intangible values being impossible to calculate. Therefore, to maximize the value as well as payback for the economy, the survival time of a cultural tourism site must be as long as possible. On the other hand, in contrast to other common goods, a heritage cultural tourism site is unique and irreplaceable. Therefore, any heritage is unique and contains a special economic value.

The second limit to this economic view of heritage comes from that particular awareness and the personal relationship we have with cultural heritage. It is this awareness and this relationship that tells us how much, in almost monetary terms, is the value of our heritage. This imposes on the supervisor of the tourist site an obligation to ensure its complete protection, to allow it to survive for as long as possible. Tourist destinations are not quickly consumed; Better yet, it should not be consumed at all.

This extended protection has an economic benefit called the “reward of waiting” or “the reward of abstinence”. Instead of spending, consuming or simply destroying a heritage tourism site, its owner - the State, local community, private owner - decides to keep it. This decision may have been made against the possibility of high profits from tourism or construction activities. Because the heritage is not plentiful and will never meet growing and growing demand - to cite Ms. Robinson - there are assets in them so they can be used effectively. It is the scarcity of these capital goods that makes their asset income possible. How to apply this?

If it can be agreed that heritage is a commodity, then it is an instrument - or element - of production. Here, Piero Sraffa, an Italian economist who teaches at Trinity College and at Cambridge University provides an important contribution to the estimation of the value of an item as a heritage. In his main work, Sraffa writes of Fixed Capital, a persistent production tool, which goes into the production process every year in the same way as the raw materials commonly consumed in production. In this view, a heritage or cultural relic will be considered (a) fixed capital and, (b) a good that contributes to the production process. For the purpose of this presentation, Sraffa's text will be used as a guide and tourist attraction or monument will be called “heritage”.

Heritage is therefore a persistent production tool, as part of an annual means of entry into a production process like any other means of production consumed in the process. At the end of the period (say, one year), the remainder of the heritage used in the process will be treated as part

of the branch's annual product, the main product being a negative majority. represents the main subject of the process. In the field of our heritage economy and to simplify the explanation, we can assume that the theme of the manufacturing industry is profit from tourism.

For example, let's consider a knitting machine along with yarn, energy, etc. that contributes to the manufacturing process. At the end of the production period under review - any year, the machine has a life of a year; it was used, it became a year older and then it would appear at the end of the production period as a new commodity with the socks it had manufactured. This implies that the same device, at different ages, is considered to be different products, each with its own price and value.

Therefore, a branch that uses a persistent production tool must be considered broken down into separate processes as there are years in the tool's total lifecycle. Each of these processes uses a tool at a different age and each production tool, along with other goods, is one year older than the previous tool used in the process. submit.

In case of heritage, places and monuments can be considered as a commodity. As such, these goods generate revenue and incur costs. The application of the Cost-Benefit Analysis method based on heritage value information provided by evaluation techniques helps managers or policy makers see a solid basis for making appropriate decisions. . The aforementioned benefits and costs should be analyzed, collected fully and carefully to be included in the cost-benefit analysis.

Cost-benefit analysis (CBA) is the identification and comparison of costs with the benefits of a project, program, or policy ... to assess their economic efficiency. The initial benefit cost analysis is applied to production-business investment projects to answer the question: How beneficial is the activity to investors. Currently, the expansion of cost benefit analysis must take into account the costs and benefits from the social side. CBA can be conducted before the project is implemented (Ex-ante CBA), after the project is implemented (Ex-post CBA), in parallel with the implementation process (In medias res CBA), and conclude and before and after project implementation period (Comparative CBA).

The CBA is conducted through eight basic steps, including: (i) Identifying the problem and identifying options, (ii) Identifying the benefits and social costs of each alternative, (iii) Determining benefits benefits and social costs of each alternative, (iv) Express the flow of benefits-costs over time, (v) Identify project selection criteria, (vi) Sensitivity analysis, (vii)) Examining hypotheses, (viii) Making recommendations. Key indicators to evaluate the effectiveness of a project include:

(i) NPV – Net Present Value: is the total value of cash flows of a project to the present time. $NPV > 0$ means the project is effective, and $NPV \leq 0$ means the project is not effective.

(ii) BCR – Benefit Cost Rate: is the performance benefit per unit of money invested. $BCR > 1$ project is effective $BCR \leq 1$ project is not effective.

(iii) IRR – Internal Return Rate: is the value of the discount rate to $NPV = 0$. This rate needs to be compared with the bank's base rate (r). If $IRR > r$, the project is effective, and $IRR \leq r$ then the project is not effective.

The basic difference between an ordinary good and a heritage is an optional value array. The concept of "optional value" is a very vulnerable aspect of the conflict between the trend of optimizing short-term benefits and the orientation of promoting sustainable heritage values. The expansion of tourist attractions to increase revenue causes damage to the age of the monument, leading to greater economic losses in the long run. To minimize this risk, it is necessary to take into account the optimal scale of exploitation for specific sites, places of interest or heritage..

4.2. Optimal exploitation level for the heritage

4.2.1. Model of load bearing capacity of heritage zone

The optimum exploitation level of a heritage or a tourist destination depends on the load capacity of that object. The load capacity of a tourist destination is the maximum number of visitors that can be visited at a time without harming the physical, economic, social, or cultural environment in that area. time does not reduce (to the point of being difficult to accept) the level that satisfies the needs of travelers for the quality of this tourist destination (Mexa and Coccosis, 2004).

To be able to protect and promote the value of sustainable heritage, an heritage area needs to be assessed its load capacity to serve the purpose of State management of heritage. A number of studies have built the theoretical basis of the load capacity of a tourist destination as follows:

If the load capacity of a place or tourist area is considered to change over time and the level of change is influenced by the stress (factors and intensity) causing the change, then it can be sketched. Graph the interaction according to the following model (Refer to the Figure 2).

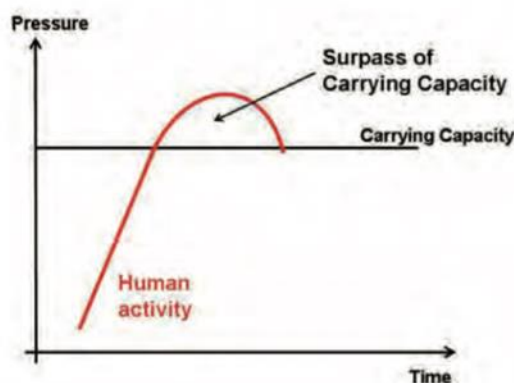


Figure 2: Modeling the variation of load capacity over time and impact pressure

Source: <https://knepublishing.com/index.php/Kne-Social/article/view/2827>

This model assumes the load capacity of a tourist destination is a fixed level, represented by the capacity line parallel to the horizontal axis on the chart. The impact (of human) to a certain extent will exceed the load capacity of the object. At that time, the quality of service was reduced, leading to a decrease in the number of people visiting, and at the same time reducing the pressure on that tourist destination. This is a true assumption but not enough.

For tangible heritage, including those not affected by human (prohibited or not yet having tourism activities), they are still affected by external natural factors and internal intrinsic factors. to harm. As such, this model needs two additional impact factors, namely the influence of the natural environment, and the natural resilience of the heritage.

For intangible heritage, human interaction is the opposite effect. A positive dimension because without inheritance between generations, the heritage ceases to exist. Thus, human interaction in this case is not only positive but also a prerequisite. Another dimension is that human interaction can distort and mislead the core values of intangible heritage. It is difficult to conclude whether the distortion is positive or negative from a single standpoint. However, if distortion is considered negative, it is a detrimental effect on the heritage.

This is a deep and complex interdisciplinary issue, and is the content of evaluation of other sciences, especially geology, biology, chemistry, culture, history, archeology, architecture. , hydrology, climate change ... Economic sectors should coordinate and inherit the results of research of other majors to assess the load capacity of a heritage area.

The following content only refers to the determination of the capacity of a tourist destination with a narrow approach to the tourism space as a premise for further research for determining the load bearing capacity of a heritage.

4.2.2. Framework of assessing the load carrying capacity of a heritage site

(1). Determining load capacity to be set up for the study area:

Factors to be considered: travel bearing capacity, leisure bearing capacity, other issues. The consideration should be based on one or more points of view, for example, physical, ecological and social load. Actual capacity of tourism services is affected by: ability to visit, commercial capacity, construction capacity, service capacity, transport capacity.

(2). Studying tourism types currently or being planned under conditions such as: material, social, cultural, infrastructure aspects, economic benefits, tourism image, local environment.

(3). Listing the region's goals, including: preserving natural resources, preserving areas of unique scientific, historical and cultural value, preserving heritage, tourism and recreation, job opportunities ...

(4). Establishing criteria affecting load capacity, in which it should pay attention to:

(a) Physical factors such as: area size, accessible space, visual impact, climate, aesthetics, quality of accommodation, available facilities, transportation. .

(b) Ecological factors: urgency of conservation requirements; vulnerability of the environment, wildlife resources, topography, vegetation, species behavioral sensitivity, diversity, species uniqueness, resilience of ecosystems / species ... For coral reefs, it is necessary to take into account: the size and shape of the coral reef, the composition of the coral community, the forms of underwater activities, the experience of divers.

(c) Economic factors: investment level, number of tourists, holiday expenses, residents' living standards, spending and entertainment habits ...

(d) Cultural factors: cultural attractions, crafts and food quality, local community involvement ...

(e) Social factors: visitor's preference, visitor's opinion, visitor's attitude and behavior, expectations and preferences, visitor's satisfaction, degree of acceptance OK.

(f) Existing infrastructure elements: banks, money changers, public utilities, transportation, essential medical facilities, water supplies, and waste treatment. solid and liquid.

(g) Administrative and political factors: management level, legal restrictions, and policy incentives.

(5). Establishing the acceptable thresholds or levels of use as management oriented criteria: These thresholds should be evaluated and formulated according to the system of factors listed above. It should be noted that these factors are variable over time.

(6). Assessing the load capacity of the area:

The bearing capacity of a heritage site should be based on (i) the physical load capacity of the area, (ii) the social load bearing capacity, (iii) the ecological load capacity, (iv) Capacity of recreational load. Depending on the conditions allowed to collect and use data to assess the load capacity of each heritage site appropriately.

The formula for bearing capacity of the heritage site is as follows (Boullon, 1985):

Load capacity (tourist destination) = The area that the tourist uses divided by the average standard of a traveler

Formula of turnover ration:

The turnover ration is determined = The number of daily opening hours for visitors divided by average time per visit

Formula to calculate the maximum number of visitors/day:

Total visits/day at the tourism site = Load capacity multiplied by the turnover ration

5. Conclusion

The total economic value of a tourist destination / a heritage site can be considered at least equal to the total revenue generated by its various uses over time within the use values (excluding unused values). In order to maximize the value to the economy, the longer the shelf life of a cultural / heritage site must be more beneficial. Moreover, the special economic value of the heritage stems from the fact that any heritage is unique and irreplaceable. The role of heritage conservation is therefore particularly important. This poses a great responsibility for the State management agency of heritage to ensure the existence of the heritage and the crystalline values in it from being harmed to such abusive activities to the extent that Negative influences reduce

their natural lifespan, as well as intentional or unintentional impacts that undermine the value of the heritage.

This protection should require far-sighted scientific decisions rather than just short-term economic gains. Because the number and spatial extent of the heritage is limited and cannot be expanded to meet the growing demand, decisions about the protection and promotion of heritage values should be based on Scientific basis with reliable evidence. Heritage Economics is a highly interdisciplinary and interdisciplinary discipline that needs attention to build a team of experts and researchers strong enough to carry out this task.

Heritage Economics is the last step in the research information chain to make policy recommendations, the key issues are: how much is the heritage worth? How should we spend on conservation? and should limit the scope of exploitation to what extent? The aforementioned research and analysis tools, including heritage value assessments, capacity assessment of tourism areas, will be useful tools to arrive at reliable answers.

The heritage management policy in Vietnam has made great strides to create a framework for the discovery, nomination for recognition, management and promotion of the role of Vietnam's great heritage system in recent years. However, the implementation organization system, the rules on financial principles, the system of researchers and tools for performing the task of evaluating, assessing load bearing capacity... have not been developed commensurate with social demands. Many intangible heritages are in danger of disappearing, many tangible heritages have been deformed through inappropriate restoration, many uncontrolled tourism activities have contributed to the destruction of prices. heritage treatment.

In the coming time, Vietnam needs to develop specialization in assessing and evaluating heritage in universities and research institutes; Strengthen the coordination of heritage policy formulation on the basis of proof of evaluation, load capacity assessment, and at the same time respect the application of these scientific evidences in the management process; Overall and transparent management of heritage visit fees for the country's overall benefit (avoiding maximum exploitation without optimal exploitation); Clarify bases and carry out decentralization of heritage management harmoniously between central and local levels; fully promoting the participation of the community of people in protecting and adjusting harmful acts on the heritage.

Acknowledgements

This research is funded by “Korea Foundation for Advanced Studies (KFAS) and the Asia Research Center, Vietnam National University, Hanoi (ARC-VNU)” under project number CA.18.1A.

References

- Cebr (2018). The heritage sector in England and its impact on the economy A report for Historic England October 2018. Centre for Economics and Business Research. Website: <https://historicengland.org.uk/content/docs/research/heritage-sector-england-impact-on-economy-2018/>
- John M. McGrath, David Primm Primm, William Lafe Lafe (2016). Heritage tourism's economic contribution: A Pennsylvania case study. *Tourism Economics* 1-7.
- Andy Logan, Ian Saxon (2016). The impact of heritage tourism for the UK economy. *Oxford Economics*, 40 pages.
- Mexa, A. & Coccossis, H. (2004), *Tourism carrying capacity assessment*, Ashgate.