A REVIEW OF THE BENEFITS AND THE HINDRANCES TO THE SUSTAINABLE CONSERVATION OF HERITAGE BUILDINGS IN MALAYSIA

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ABSTRACT

Malaysia has an array of Heritage Building's (HB's) most of which have been standing for centuries that are exceptionally valued from the point of view of Architecture and History. Valuable as they are, these HB's are thus assets legally declared to be strictly protected (otherwise termed conservation) according to statutory guidelines. The National Heritage Act among others is a statutory document guiding conservation of HB's in Malaysia superintended by The Ministry of Culture, Arts and Heritage. This study reviewed the benefits and hindrances to the sustainable conservation of HB's in Malaysia. This study shows that while there are enormous benefits reaped from conservation of HB's, there also exist hindrances to the conservation process that could be attributed to planning and implementation at a policy, program and project level. These hindrances ultimately poses challenges to conservation of HB's thereby making conservation of HB's in Malaysia unsustainable. A way forward lies in the need for immediate action to addressing such challenges through sustainable processes, principles and policies. One that strives to strike a balance between environmental, economic, social cultural benefits for all generations. One that is sustainable. As such, a prompt need for Malaysia to benchmark world's best practices in the conservation of HB's that will address notable challenges was recommended. Furthermore, owners of HB's (public and private) must make continuous implementation of the results on such best practices a core priority thus making the conservation process sustainable.

Keywords: Heritage Buildings; Malaysia; Sustainable Conservation.

1. INTRODUCTION

Idrus *et al.* (2010) define a Heritage Building (HB) as a building built in the past which has high historical and architectural value and require continuous care and protection to preserve its aesthetic, archaeological, spiritual, social, political, and economic values. These values signify a unique identity specific to a society. In another definition given by Section 2(1) of The National Heritage Act (NHA) of Malaysia (2005), a HB is a building or group of separate or connected buildings which because of their architecture, their homogeneity or their place in the landscape possess outstanding universal value that are striking from the point of view of history, art or science. These definitions describe a HB to being unique, distinctive and exceptional which makes it an asset immensely valued. To pass for a HB however, two criteria must be fulfilled. First, a building must be legally declared to be protected under the approval of a government and secondly, it (the building) must be published in a government gazette.

There exists an array of HB's across Malaysia showcasing Malaysia's unique history that is attributed to its almost five centuries (1511-1957) of colonial rule by the Portuguese, Dutch and British. A feat to this uniqueness in HB's is notable in historic sites and cities across the country. For instance, Melaka and George Town are historic cities in Malaysia having in stock iconic HB's among other outstanding

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features that propelled their being enlisted as World Heritage Sites by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 2008 (Ahmad, 2009; Idrus *et al.*, 2010).

The International Council on Monuments and Sites (ICOMOS, 1999) which is a comprehensive global guideline on HB conservation defines conservation as all processes of looking after a place (buildings and monuments among others) aimed at retaining its cultural heritage. Conservation of HB's may according to circumstances be in either of the following forms: maintenance; restoration; reconstruction; adaptation; and stabilization (Article 14 of France, 1999; Part I; Section 2 of Malaysia, 2005). A commonly accepted definition of sustainable conservation is still evolving among practitioners of HB conservation (Abungu, 2012). Irrespective of this, sustainable conservation seeks to address the harmonious integration of all three indices of sustainable development (which are environmental, economic and social) into conservation (Jackson *et al.*, 2011; Knih, 2012; Wara, 2012; Ramachandra and Abu, 2014). From another source, sustainable conservation is driven by four major indices which are: social; economic; environmental; and cultural (Spangenberg*et al.*, 2002). Although some authors consider the cultural dimension of sustainability to being a sub-item of the social dimension, other authors (Kenny, 2006; Abu, 2014) have argued that the social construct does not fully regard culture to being important however, in fields of study on cultural heritage, scholars feel that only upon considering culture as a full-fledged construct will it be given due regard.

The environmental index to sustainability usually addresses factors which concerns matters such as air quality, water quality, sanitation, drainage, energy consumption, embodied energy, use of environmentally friendly materials, among others. The economic index usually addresses optimising resource consumption, quality of life, economic development, property value. The social construct addresses social equity, health equity, community development, social capital, social support, human rights, labour rights, social responsibility, social justice, cultural competence, community resilience, and human adaptation. The cultural index addresses the complexity of contemporary society, issues related to norms and values among others.

Kamal *et al.* (2007) are of the opinion that conservation is relatively new in Malaysia as compared to countries like United Kingdom, China and other countries. Works of Amir and Robiah (2007) concluded that there are weaknesses in the approach of conservation adopted for HB's in Malaysia. Furthermore, Mohd-Isa *et al.* (2011) further reported that most problems emanating from conservation of HB's in Malaysia is because conservation is not being deemed as holistic. All these assertions clearly show that conservation relative to the sustainability indexes earlier presented. As such, this forms the underpinning basis for this research. Hence, this study aims at reviewing the benefits accrued from the conservation of HB's in Malaysia on another hand with a view to suggesting ways forward.

2. HERITAGE BUILDINGS IN MALAYSIA AND THE REGULATIONS FOR THEIR CONSERVATION

The architectural ensemble of buildings in Malaysia represents an outstanding example which illustrates significant stages in human history. Malaysia has a number of HB's that are publicly and privately owned that have outstanding architectural and heritage interest. All declared HB's in Malaysia must however fulfil Criteria 67 (2) of NHA (2005) which according to the Malaysia (2007) are:

- 1. Historic interest: buildings that have illustrated important aspects of Malaysia's social, economic cultural and religious history,
- 2. Architectural interest: buildings that are important for styles in their architectural design, decoration and craftsmanship,
- 3. Close historical association: buildings associated with the life or work of a nationally important person or organisation,
- 4. Townscape value: buildings that have contributed to the scenery of the townscape or landscape,

- 5. Group value: An ensemble of buildings denoting a particular architectural style of a certain era,
- 6. Age and rarity: buildings that are old and rare compared to its historical equals,
- 7. Physical features: buildings layout, material or location reflecting its original design,

Malaysia has an array of HB's ranging from administrative buildings, royal palaces, religious buildings (mosques, churches and temples), fortresses and residential buildings that have been around for centuries and showcase its diverse history. Table 1 depicts some among other HB's in Malaysia that are still standing.

Type of Building	Building	Year Built
Administrative	Stadthuys Building	1650s
	Melaka Waterworks Department Building	1750s
	Sultan Abdul Samad Building	1897
	High Court Building Penang	1905
Religious	St. Pauls Church	1512
	Cheng HooonTeng Chinese Temple	1645
	Sri Poyyatha Indian Temple	1710
	Kampong Hulu Mosque	1726
	Christ Church	1741
	Godess of Mercy Temple	1800
	Nagore Shrine	1800
	Kapitan Keling Mosque	1802
	Acheen Street Malay Mosque	1808
	St. George Church	1818
Institutional	Penang Free School	1821
	Yin Oi Medical Hall	1886
Residential	Dutch Style Terraced Houses	1700's
	Early Shop-Houses	1800's
	Munsyi Abdullah Residence	1850's
	Goh Chan Lau Residence	1880
	Transitional Styled Shop-Houses	1890's
Others	Porta De Santiago	1511
	Dutch Cemetery	1750's
	Fort Cornwallis	1787
	Town Hall and City Hall	1850
	Victoria Memorial Clock Tower	1897

Table 1: Category of Heritage Buildings in Malaysia

All matters related to HB's and their conservation in Malaysia are backed by the National Heritage Act (Act 645) of Malaysia enacted in 2005. Other legislations that have a direct link to the conservation of HB's in Malaysia according to Idrus*et al.* (2010) are:

- 1. Antiquities Acts (1976), Act 168;
- 2. Town & Country Planning Act 1976 (Act 172);
- 3. Uniform Building By-Laws 1984;
- 4. Street, Building & Drainage Act (Act 133) 1974;
- 5. Local Government Act (Act 171)1976;
- 6. Urban Development Corporation Act 1971 (Act 46);
- 7. Federal Territory Planning Act 1982 (Act 267);
- 8. Town and Country Planning Act 1995 (Revised) (Act A933);
- 9. Melaka Enactment No.6 1988; and
- 10. Johore Enactment No.7 1988.

The Department of National Heritage and The Department of Museums and Antiquities are units under the Ministry of Culture, Arts and Heritage in Malaysia. They are the custodians of HB's in Malaysia and are responsible for preserving and maintaining them through implementing and enforcing the provisions stipulated in the National Heritage Act 2005 (Act 625). A core objective of both departments is to conserve, preserve, and protect Malaysia's HB's through research, documentation, and enforcement, and encourage awareness. The aforementioned regulatory bodies use aforementioned legislations to designate, gazette and protect all HB's in Malaysia. Furthermore, they equally use these regulations for planning, implementing and controlling all conservation practices.

3. CONSERVATION OF HERITAGE BUILDINGS AND IT'S IMPACT IN MALAYSIA

Malaysia has a lot of HB's all over the country. Conservation of HB'sin Malaysia began in the 70's (UNESCO, 2009; Mohd-Isa *et al.*, 2011). It gained prominence and witnessed its acceptance in the 80's when Malaysia became a member of UNESCO's Convention (1988) concerning the protection of the world cultural and natural heritage (Harun, 2005; Ahmad, 2010). This led to a great demand in the practice of conserving HB's in Malaysia in the 90's and during that time as (Ahmad, 2009) posits, conservation of HB's became an important National Agenda. According to Mohd-Isa *et al.* (2011), conservation of HB'sin Malaysia flourished in the 21st century especially when Melaka and GeorgeTown historical cities were enlisted as UNESCO's World Heritage Site in 2008. Such enlisting was a tremendous achievement to Malaysia's natural and cultural heritages because it led Malaysia to becoming a hub that promoted heritage tourism. From these strides, the conservation of HB's in Malaysia was given high priority. Mohd-Isa *et al.* (2011) reported that in total, RM100 million was spent for the purpose of conservation of HB's across Malaysia. All these feats to the conservation of HB's have accrued several benefits to Malaysia. The subsequent sub-sections discuss these benefits.

3.1. EMPLOYMENT BENEFIT

The technologies of conservation of HB's are still low thus it is deemed to be more labour intensive compared with development of new buildings (Avakyan, 2013). In another study, Tully (1993) and Langston *et al.* (2008) report that conservation generates 25% more employment than new building construction. These studies show that conservation relies more on labour than it does on materials. This means that effectively conserved HB's will eventually harbours employment of the local community. In Malaysia, Said *et al.* (2013) posited that conservation of HB's have yielded employment opportunities to the youth. It is thus obvious that conservation of HB's brings in it employment benefits that ultimately have a positive impact on the socio-economy of a society and nation at large.

3.2 SOCIO-ECONOMIC BENEFIT

Elahi (2008) posits that just as individuals amass economic capital, they also strive to obtain cultural capital accumulated through possession of HB's among other heritage items or objects. Heritage Buildings thus serve as a capital to communities, neighbourhoods, regions and a country at large. In Malaysia, HB's have generated revenue in tens of billions of Malaysian Ringgit (Bhuiyan*et al.*, 2013). Figure 1 shows the revenue generated from tourism in Malaysia.

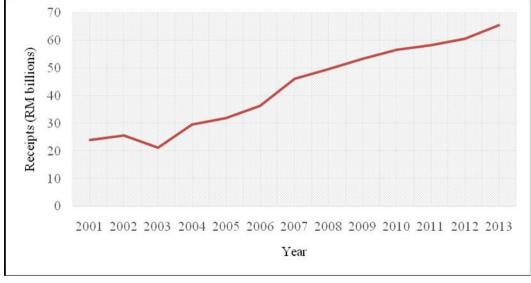


Figure 1: Revenue Generated from Tourism in Malaysia Source: Adapted from Bhuiyan *et al.* (2013)

In all the 13 years captured in the diagram, the trend in revenue generation only witnessed a decline in the period 2002-2003. All other years recorded an increase in revenue generated by tourists in Malaysia with HB tourism significantly contributing to such revenue stream. These generated revenues have played significant roles towards enhancing the socio-economic conditions of the societies these HB's are located. For instance, conservation in itself results to job creation. Similarly, effective conservation also results to tourist attraction which subsequently results to revenues (through taxes and other spendings). According to Bhuiyan *et al.* (2013), Malaysia Tourism Transformation Plan under the Economic Transformation Program (ETP) intends to achieve the target of RM168 billion in revenue by 2020. This will indeed have a positive impact on the socio-economic development to the cities harbouring HB's and Malaysia at large.

3.3. HERITAGE TOURISM BENEFIT

A study by Rypkema (2008) showed that heritage tourists stay longer, visit twice as many places and spend 2.5 times more than other visitors. Avakyan (2013) makes the assertion that the more a HB is conserved, the more a new tourism product emerges for both domestic and international visitors. Thus, conservation of HB's aids in boosting tourism. In Malaysia, conservation of HB's has made Malaysia to become a tourist hub which according to Ahmad (2009) has made tourism to become the second most important sector in Malaysia's economy. Figure 2 shows the tourist arrival to Malaysia.

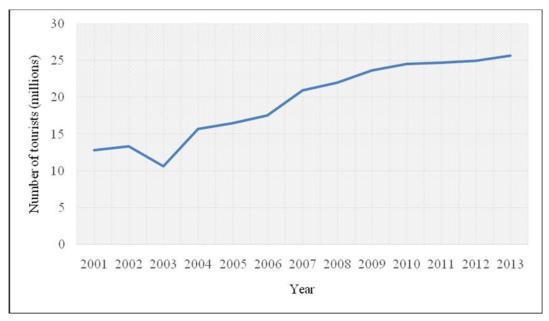


Figure 2: Tourist Arrivals in Malaysia Source: Adapted from Bhuiyan *et al.* (2013)

As is shown in Figure 2.13, in all the 13 years captured in the diagram, the trend in tourist arrival in Malaysia only witnessed a decline in the period 2002-2003. All other years recorded an increase in tourist arrival in Malaysia with HB tourism significantly contributing to such revenue stream. According to Bhuiyan*et al.* (2013), Malaysia Tourism Transformation Plan under the Economic Transformation Program (ETP) intends to achieve the target of 36 million tourists by 2020. If this forecast is met, it will indeed have a positive impact to Malaysia.

3.4. **PROPERTY VALUE BENEFIT**

Studies have shown that property values within conserved HB districts appreciate in value at faster rates than the overall real property local market. For example, a study in Canada found that HB's performed better in the marketplace over the last 30 years due to conservation efforts (Rypkema, 2008). In another study, Forsyth (2007) reports that pre-World War buildings in the UK are worth on average 20% more than equivalent in value to more recent houses. In a cultural value specific context, Hareven and Langenbach (1981) are of the opinion that HB's have taken on increasing value as it acts like a bridge between the past and the present, providing elements of collective memory and connection to urban settings. In Malaysia, Ch'ng *et al.* (2013) posits that benefits in conserving HB's may be reflected in the lease or resale value of adjoining property which ultimately provides good income incentive for the property owner. This results from the fact that HB's and buildings in their surrounding usually carry a premium which makes them more desirable than their equivalents in non-HB present premises. Conservation of HB's as such has significant positive effects on property values (residential and businesses alike) around the area a HB is located.

3.5. SMALL BUSINESSES INCUBATION

Rypkema (2008) claims that the presence of effectively conserved HB's in districts as opposed to other non-HB presence districts encourage the natural incubation of small businesses. The work of Listokin *et al.* (1998) elaborates on this by discussing various examples of conservation of HB's as a vehicle for Small and Medium Enterprise (SME) development. An effect to business incubation can be witnessed in the springing up of industries that produce goods and services used for the conservation and running of the HB's. The induced effects here are the expenditures made by the residents, workers and visitors among others either involved with the conservation or running of the HB's. In Malaysia, incubated businesses (that can be seen upon visit) resulting from conservation includes: small-scale independent retailers, artisan-type workshops, and other traditional and localised activities.

3.6. SOCIO-CULTURAL BENEFIT

Conserving HB illuminates the identity, memory, event, and also inspiration of a local community. According to Hasbollah and Baldry (2014), through conservation, the cultural values of heritage buildings (CVHB) are expected to have a prolonged effect on the socio-culture of a society. In another study, Avakyan (2013) points out the importance of conservation within the context of increasing globalization, where there is a growing need to conserve the past for the continual strengthening of national cultural identity. In other studies, Ashworth *et al.* (2007) found that HB's serves to fill the voids of socio-cultural functions. Forrest and Kearns (2001) and Elahi (2008) also noted that HB's can lead to the creation of a strong sense of belonging. Malaysia enjoys distinctive multicultural architectural heritage with strong Islamic, Chinese and Western influences all of which are portrayed in the HB's (Sodangi *et al.*, 2014). HB's in Malaysia thus serve as the cultural identity of the country and its people. Socio-cultural benefits derived from conservation of HB's as such include improving the kinship bond between its heterogeneous society through learning and appreciating the numerous multi-cultures. Other social benefits derived from the conservation of HB's include: safeguarding authenticity, enjoyment of the building's aesthetic values, improving the sense of place factor, and crime reduction.

3.7. Environmental Benefit

The environmental benefits of HB's as such cannot be overemphasised. Elsorady (2014) claims that one quarter of all the things dumped in landfills are construction debris. In another study, Forsyth (2007) found that demolition of buildings in the UK accounts for 24% of the total annual waste produced. It can thus be right to say that the continuous usage of existing buildings when compared to constructing new buildings saves waste and reduces the need for new building materials. In Malaysia, Sodangi *et al.* (2014) asserts that conservation of HB's promotes sustainable development. This can be affiliated to the fact that HB's reduces energy usage associated with demolition, reduction of material waste and disposal thereby preserving embodied energy. Furthermore, many HB's employ massive construction in their external envelope, which can reduce energy consumption in heating and cooling. In Malaysia, almost all HB's are constructed using a range of eco-friendly materials that typically display a useful life well in excess of their more modern counterparts (e.g. use of solid stone walls, timber floors among other eco-friendly materials). Conservation of HB's thus has enormous environmental benefits.

3.8. NON-PRICED BENEFIT

Some benefits reaped from conservation of HBs cannot be quantified nor priced. For instance, compared to recent buildings, most HB's have superior build quality with craftsmanship that can hardly be duplicated. Randle (2012) posited that HB's offer character, life and vibrancy, or indicate the decline and abandonment of an area. Due to such distinctiveness, HB's are highly valued for their own sake. Furthermore, conservation of HB's enhances the landscape scenery and most times makes HB surroundings pass for entertainment hubs (Ley and Olds, 1988; Elsorady, 2014). Conserving HB's equally contributes to a society's wellbeing by protecting its cultural resources. To cap this up, conservation of HB's in Malaysia has accorded mutually beneficial relationship between stakeholders and the local community by increasing the bond of kinship among its diverse multi-cultural nationals.

4. HINDRANCES TO SUSTAINABLE CONSERVATION OF HB'S IN MALAYSIA

A review of literature shows that several researches have reported numerous challenges to conservation of HB's in Malaysia. These studies indeed qualify the assertions that 'despite all the positive efforts, there are still major challenges and issues in dealing with the conservation of HB's in Malaysia' (Zakiyudin, 2001; Amir, 2002; Amir and Robiah, 2007; Mohd-Isa *et al.*, 2011). For instance, in a study by Woon and Lim (2010), they found the following challenges to the conservation of HB's in Malaysia:

- 1. The lack of information on the cost of items;
- 2. Complexity of the method of conservation;
- 3. Difficulty in sourcing the required material;

- 4. Lack of standardised documents pertaining to conservation work to ease costing;
- 5. Lack of understanding in conservation works on the part of Quantity Surveyors which ultimately leads to difficulty in preparing a cost budget;
- 6. Modification or adaption of information or standards from new construction works to be used for conservation works;
- 7. Inadequate knowledge on special works to be considered when preparing a cost budget for conservation works such as archaeological excavation, scientific testing and analysis and other preliminary works; and
- 8. The existing cost analysis format and tools are not suitable for conservation projects because of the differences in part of the scope of work between conservation and new building works.

In another study by Harun (2011) titled "Heritage Building Conservation in Malaysia: Experiences and Challenges", she reports several issues that pose as challenges to conservation in Malaysia which are:

- 1. Non-standardised conservation plan and conservation process: The decision on conservation is sometimes made based on assumptions which results to non-standard practice;
- 2. Lack of skill workers and conservator challenges: There is lack of labour and technical expertise in conservation methods and techniques. This is a major problem because almost all conservation projects require an understanding of and analysis of building defect diagnoses. There is also the issue of testing and treating building material, choosing appropriate tools and the methods to conserve the building. All these pose great challenge to the conservator who oversees the conservation project;
- 3. Choice and sourcing of material. There is a problem in getting materials that could pass for replicates of the original material during conservation. Regardless of this, the challenges are not only to get the original materials but the contractor needs expertise in interpretation of the needs of the project. New material that is compatible with the original must be sought and tested for strength, texture, scale and form among others before finally being applied; and
- 4. Conservation guidelines for conservation works: Appropriate conservation guidelines usually serve as an important tool for the conservator and building contractors. Although National Heritage Act 2005 gives emphasis to the care of listed buildings and declaration of National Heritage, however these regulations are yet to be accompanied with guidelines and technical manual for conservation works.

From the study by Said *et al.* (2013), they enumerate the challenges that affect conservation of HB's and their immediate surroundings to being: intensive and uncontrolled development pressures; insufficient legislations and enforcement; changing lifestyles and consumption patterns of city dwellers; expectation of new tourists; public awareness; environmental degradation; non transparent local initiatives; poor provision of grants and technical advice; and insufficient law and enforcement.

Ch'ng *et al.* (2013) are also of the opinion that conservation of HB's in Malaysia is faced with challenges such as:

- 1. Low-investment incentives and capital gains which has resulted in low conservation efforts and subsequent dilapidation and neglect of HB's;
- 2. Absence of a workable conservation market; and
- 3. Low public support.

Sodangi *et al.* (2014) found that among the 16 best practice criteria for conserving HB's in Malaysia they studied, the most challenging are: approaches to conservation; attitude of stakeholders towards conservation; integration of corporate strategy to the objectives of conservation; prioritisation of conservation works; and monitoring of the conservation works.

These studies among others collectively not only confirm but also showcase the challenges to conservation of HB's in Malaysia. An inference to be drawn from all these factors hindering the

sustainable conservation of HB's in Malaysia is that they can be categorised to factors that are planning specific, implementation specific or those that are a combination of both. Planning specific hindrances here refer to adequacy and robustness of guidelines, stakeholder engagement (particularly to human capital development relative to awareness and skill acquisition) and perhaps resource sourcing. Those that are implementation specific refer to ethics on conservation practice, safeguarding authenticity and integrity. Similarly, these hindrances can be viewed from the perspective of policies, programmes and project levels of conservation. Ultimately, these hindrances have farfetched effect on the environmental, economic, social and cultural wellbeing of the buildings and their immediate environment.

5. THE WAY FORWARD

According to Harun (2011),for conservation of HB's to be successful, it must be supported by relevant stakeholders inclusive of building owner, professional and competent technical people, the academia and the community among others. Such success may however only be feasible when best practices to the whole conservation process of HB's are opted for and adopted. A process that will create a paradigm shift to the existing status-quo must be opted for. That which is sustainable.

Comparing the afore-presented target of Malaysia Tourism Transformation Plan on one hand and the challenges existing in the conservation of HB's in Malaysia on another, it may be convenient to state that there is need for immediate action to addressing such challenges. Similarly, considering the afore-presented enormous benefits reaped from the conservation of HB's on one hand and the challenges existing in the conservation of HB's in Malaysia on another, there is indeed a dire need to addressing these challenges. Combating these challenges efficiently however calls for conservation processes, principles and policies that will not only bring forth success in improving the challenges, but one that is sustainable. Although Abungu (2012) asserts that a commonly accepted definition of sustainable conservation must strive to strike a balance between economic, environmental, and social benefits. Malaysia must thus put in place a sustainable conservation programme that emphasises social and economic development in such a way as to avoid damaging the environment for future generations. After all, sustainable conservation may be said to be an enabler for a building that is rich in historical values to withstand the test of time from one generation to another.

6. CONCLUSIONS AND RECOMMENDATIONS

This review paper on one part showed the positive impact on the effort in conserving HB's in Malaysia and on the other, the challenges to conservation of HB's. It may be concluded that these challenges clearly depict problems in the conservation of HB's which ultimately show that there is a gap in the sustainable conservation of HB's in Malaysia. The researchers recommend that there is need for studies on world's best practices in the conservation of HB's that will fill such notable gaps. Furthermore, owners of HB's (public and private) must make continuous implementation of the results on such best practices a core priority thus making the conservation process sustainable.

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