A PRELIMINARY INVESTIGATION OF SUSTAINABILITY CHALLENGES WITHIN THE CONTEXT OF CULTURAL TOURISM IN AN ANCIENT WATER TOWN IN CHINA.

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ABSTRACT

Ancient water towns in China are important cultural landscapes because they illustrate the country's history, architecture, and social life. This is why they are such an important element of Chinese culture. For hundreds of years, people have worked to protect these historic aquatic habitats. Over the last several years, they have become more well-known as cultural tourist spots. This has drawn in enormous crowds and helped local businesses thrive. Because of the serious environmental problems that have come up because of this growth, the fragile balance between protecting cultural treasures and welcoming more and more people is in danger. This happens because this development has occurred. The aim of this study is to examine the impact of these issues on the sustainability and conservation of ancient water cities. These problems, in addition to the loss of cultural authenticity, include overpopulation, environmental deterioration, too much commercialisation, and the loss of cultural authenticity. The issues that have been found put both the ecological health of water towns and the cultural importance of these locations at risk. Water towns are very important to culture. Even said, tourism may bring new life, promote culture, and boost the economy of the areas it visits if it is done in the right manner. It has been determined that the preservation of old water towns requires concerted efforts to protect the environment, implement planning that does not damage historical sites, and actively include the local population. People who reside in the region are seen to be vital to the study process. This is because they are actively involved in the growth of tourism and are in charge of keeping cultural traditions alive. To protect the distinctive character and long-lasting strength of China's historic water towns, a balance must be struck between the rise of tourism and the execution of conservation initiatives. In this context, this article has focused on critical assessment of existing sustainability challenges faced in ancient water town in China.

Keywords: Sustainability Challenges, Ancient Water Town, Cultural Tourism, China.

INTRODUCTION

People know that the ancient water towns of China are some of the most important cultural and historical sites in the nation because they have kept their complex canals, stone bridges, traditional dwellings, and long-standing legacy traditions. These cities are sometimes called as "living museums." They not only improve culture and aesthetics, but they also provide huge chances for economic development by promoting cultural tourism. Over the last several

decades, these ancient water towns have become key tourist spots drawing people from all over the world. These tourists help local economies come back to life and pass on their love of culture in ancient water cities of China (Xia, 2024). The tourist industry in China has grown quite quickly, which has caused a lot of problems. A growing number of studies show that environmental damage, overpopulation, commercialisation, and the loss of authenticity in traditional activities are all happening at the same time. This is especially true when it comes to the establishing of old-fashioned rituals. These problems not only threaten the social and cultural fabric of the nearby villages, but they also threaten the area's historic landmarks. The challenge of balancing the needs of increasing tourism with protecting cultural assets is becoming more crucial, and so is finding a solution to the issue (Chen & Kong, 2021). The objective of this study is to acquire additional information regarding the sustainability challenges faced by historic water cities and the implications of these challenges for the long-term preservation of these towns in China. The primary aim of the article is to help the growing body of knowledge on responsible cultural tourism by pointing out present practices and making suggestions for future legislative changes that would better protect cultural objects and promote responsible tourism in the ancient water towns in China.

BACKGROUND OF THE STUDY

Most people know that China's historic water towns are famed for their gorgeous rivers, traditional buildings, and cultural practices that have been there for hundreds of years. These traditions have been passed down from one generation to the next. Each of these cities has a unique culture and way of life since they are located in different parts of the globe. The reason for this is because they are spread out all over the world. These villages, which are often called "living museums," are important cultural and economic resources that also show how history has continued. Calling the ancient water town as "living museums," may also contribute in promotion of cultural tourism activities in China. Cultural tourism has grown more and more important over the last several years as a way to promote and protect these historical sites (Yu et al., 2023). One of the biggest problems that has come up due of the growing number of tourists, and it might break the delicate balance between protecting the environment and growing tourism. This is one of the most significant problems that has come up lately. There are a lot of problems that are becoming more and more apparent, such as overcrowding, environmental damage, too much commercialisation, and the loss of cultural authenticity. Other problems include, but are not limited to, losing cultural authenticity. Even while the situation has some financial advantages, local communities frequently face problems that influence not just their daily lives but also the cultural traditions they have built. This is still true, even when the results are good for the economy. If people want new infrastructure and services that are geared at tourists, there is a possibility that these older locations' natural beauty and historical significance may be lost. The reason for this is that these new services and facilities are meant to attract visitors. Additionally, this is because the new services and infrastructure are meant for tourists to utilise (Yeh, 2023).

Given the challenges presented in this setting, it is imperative to identify a sustainable solution that reconciles the growth of tourism with the conservation of cultural heritage. To make sure that historic water towns will continue to exist without any problems, it is absolutely necessary to protect their cultural originality, architectural integrity, and environmental health. Tourism should not ruin the authenticity of historic sites. Instead, it should improve the quality of life for visitors as well as local communities by boosting the economy of the towns nearby and giving them more enjoyable experiences (Li, 2025). This study is being presented to provide a first examination of the sustainability difficulties confronting a historic water town in China. The goal of this project is to come up with ideas that will help keep cultural traditions alive while also making sure that the community is healthy and that visitors are accountable for their actions while they are there.

THE PURPOSE OF THE RESEARCH

The aim of this study, conducted within the context of cultural tourism, is to provide a basis for a comprehensive examination of the sustainability difficulties now confronting a Chinese old water town. The research is conducted from the viewpoint of cultural tourism. The problems that come with more tourists are putting the environment, the culture, and the community at jeopardy. This research aims to illuminate and examine many significant challenges that have emerged as a direct result of the growth of tourism. Some of these important problems include too much commercialisation, stress on the environment, and the possible loss of traditional ways of life. This study aims to provide a basis for further research and to offer guidance for potential activities to be undertaken to attend to sustainability challenges in the ancient water towns of China. To achieve this, it will concentrate on the need to find a balance between the expansion of the economy and the protection of cultural and environmental elements.

LITERATURE REVIEW

As the tourist industry as a whole grows across the globe, the cultural tourism business is one of the fastest-growing sub-industries. This is happening because of increasing number of visitors are coming to see things like historical sites, old towns, and cultural landscapes. This is the reason why there is prevalence of sustainability challenges in ancient water towns of China. One of China's traditional irrigation villages is an example of a place that caters to visitors that are interested in cultural tourism. The canals, stone bridges, wooden homes, and ancient customs that have been handed down from one generation to the next are some of the things that have made this community famous. They are not only places to buy; they are also cultural treasures that represent both the past and present. The cities in question are not only places to shop. Experts agree that cultural tourism might bring historic sites back to life, help local economies, and help people of different cultures understand each other better in the ancient water towns in China (Lin et al., 2022). A potential contradiction between tourism-driven growth and history-preservation-driven development. It also indicate that the significant increase in visitor numbers may exert strain on the biological environment. Polluting water, making trash,

and destroying fragile ecosystems in the neighbourhoods around ancient towns are all instances of situations that fit this description. These are all instances of situations that fit within this group. Another problem that has to be fixed is the possibility of too much commercialisation, which is another problem that needs to be addressed. Because these activities are meant to meet the demands of tourists, the commercialisation of native arts and cultural activities is at danger because of this. This danger might also make these activities less valuable. This means that the originality and cultural significance that drew tourists in the first place may be lessened as a result (Chen et al., 2021). There have been several times in academic circles when the need for sustainable frameworks for managing cultural tourism has been brought up. Most people feel that good governance, community involvement, and planning that takes heritage into account are the most essential things to think about while trying to lessen the bad impacts of a situation. Previous researcher has showed that including locals in the decision-making process about the outcomes of tourist activities enhances both the authenticity and the social sustainability of the experience. This incident highlights the importance of the role that residents play in preserving cultural traditions. Research, when compared to other historic sites, has shown that the adoption of techniques such as eco-friendly infrastructure, cultural education initiatives, and restrictions on visitor capacity results in more equitable outcomes (Fu et al., 2024).

Even though these finds have been made, there isn't much study on China's mediaeval water towns. There is a lack of study that examines the many sustainability challenges these towns have due to the increasing influx of visitors and technological advancements (Xia, 2024). This holds true specifically. This research adds to the existing body of knowledge by examining these subjects within a specific context. The objective of this study is to create a link between the theoretical discussions around sustainable cultural tourism and the real challenges encountered in the preservation of heritage within historic coastal towns. The goal of the investigation is to find a link between the two points of views on sustainability challenges faced in ancient water towns of China.

RESEARCH QUESTION

What is the influence of sustainability challenges in ancient water town in China?

METHODOLOGY

Research Design: The quantitative data analysis was conducted using SPSS version 25. The degree and direction of the statistical association were determined using the 95% confidence interval and odds ratio. The researchers established a statistically significant threshold of $p < 0.05$. In order to identify the most significant attributes of the data, a descriptive analysis was implemented. Quantitative methods are frequently employed to evaluate data collected through questionnaires, surveys, and polls, as well as data that has been supplemented by computational tools for statistical analysis.
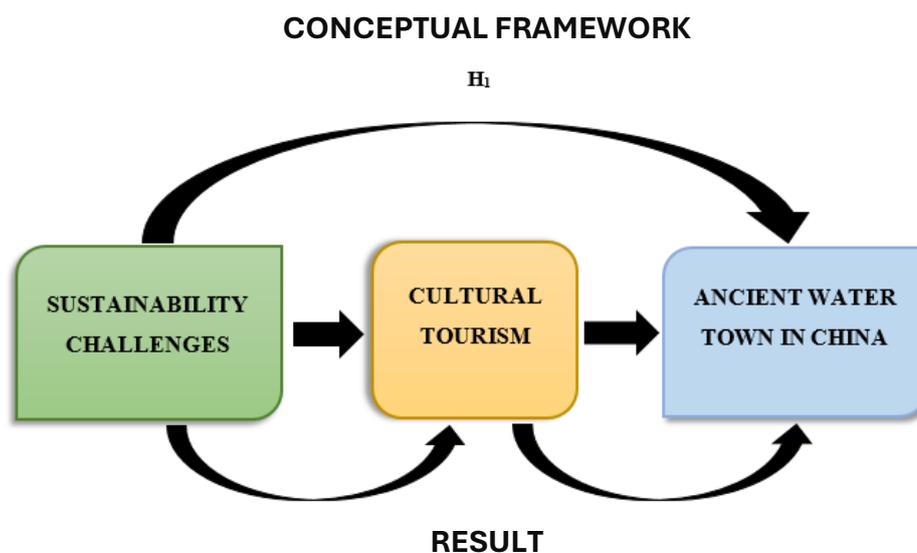
Sampling: In order to participate in the research, participants were required to complete questionnaires. Upon utilising the Rao-soft tool to identify a study population of 530 individuals, the researchers distributed 650 questionnaires. The researcher has received 634 questionnaires; by omitting 45 incomplete responses after the accumulation, the final sample size remained at 589 responses.

Data and Measurement: The primary method of data collection in the investigation was a questionnaire survey. Part A of the survey requested basic demographic information, while Part B employed a five-point Likert scale to collect responses regarding the attributes of online and offline channels. The secondary data was sourced from a variety of sources, including internet databases.

Statistical Software: This research has conducted statistical analysis with SPSS 25 and MS Excel.

Statistical Tools: In order to comprehend the data on a fundamental level, the researcher has implemented descriptive analysis. Utilising ANOVA, the researcher is required to analyse the data.

CONCEPTUAL FRAMEWORK

H_1

RESULT

Factor Analysis: Factor Analysis (FA) is frequently employed to verify the fundamental component structure of a set of measurement items. The scores of the observable variables may be theoretically influenced by factors that are not immediately apparent. The FA technique is one example of a model-driven methodology. Delineating the connections between observable phenomena, their fundamental causes, and measurement errors is the primary goal of this research. The Kaiser-Meyer-Olkin (KMO) Method may be employed to assess the appropriateness of data for factor analysis. The researcher evaluate whether the sample size is adequate to precisely represent the entire model and each individual variable within it. The statistical metrics evaluate the extent to which numerous variables may demonstrate shared variation. Data with a lower hierarchical level are frequently more advantageous in factor

analysis. KMO generates integers that fall within the range of 0 to 1. Sampling that is adequate is indicated by a KMO score between 0.8 and 1. If the KMO is less than 0.6, remedial measures are required as a result of inadequate sampling. Use the best judgement; writers frequently utilise 0.5 for this purpose, thereby establishing a range of 0.5 to 0.6. As the KMO value approaches 0, partial correlations account for a substantial portion of the aggregate correlations. Component analysis is significantly impeded by the presence of significant correlations. The subsequent approval criteria have been established by Kaiser:

The readings were unsatisfactory, with a range of 0.050 to 0.059. Below the industry standard between 0.60-0.69. The range of a mediocre grade is frequently 0.70 to 0.79. A value between 0.80 and 0.89 that represents quality marks. The range is significant, extending from 0.90 to 1.00.

Table 1. Kaiser-Meyer-Olkin (KMO) and Bartlett's Method.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.867
Bartlett's Test of Sphericity	Approx. Chi-Square	3252.968
	df	190
	Sig.	.000

This substantiates the accuracy of the assertions regarding the execution of a sample. The significance of the correlation matrices was evaluated by researchers using Bartlett's Test of Sphericity. The sample is considered adequate by the KMO measure when the result reaches 0.867. The p-value obtained from Bartlett's sphericity test is 0.00. Bartlett's sphericity test results suggest that the correlation matrix is statistically significant and deviates from an identity matrix.

INDEPENDENT VARIABLE

Sustainability Challenges: When development, tourism, and the preservation of history all happen at the same time in areas that are sensitive to culture and the environment, it may lead to a complicated set of problems known as sustainability challenges. These problems might hurt the ecology, the economy, and the preservation of history. People who are trying to protect history may run across these problems, which might be a problem. Pollution, bad waste management, and too much exploitation of natural resources are some environmental problems that are more common in older municipalities. All of these situations are examples of bad environmental conditions. They also affect society and culture as a whole, where the commercialisation or watering down of long-held traditions is a real concern because of the increase in tourists. They include making money off of long-held norms. Their growth makes the

areas of society and culture bigger. They cover the territories of many different civilisations and businesses. Due to the stress on their infrastructure, the higher number of people who visit during tourist seasons, and the need for more modern facilities, cultural heritage sites may be under even more stress than they already are (Yu et al., 2023).

DEPENDENT VARIABLE

Ancient Water Town in China: Ancient water villages in China are unique cultural landscapes that show the essence of China's old civilisation via the usage of stone bridges, wooden houses, and a network of canals that connect to each other. These communities are in and around China. It is important to enjoy the natural beauty of these Jiangnan cities, but it is also important to try to understand the community's intangible legacy, which includes the traditions, celebrations, and crafts that have been passed down through the years. These monuments are not only important parts of China's cultural identity and famous tourist spots, but they are also locations where people remember their culture and live their everyday lives. This is because they are at the place where the two meet. To protect ancient water towns, one need to do more than just keep their buildings in good shape. One also need to build community ties, encourage eco-friendly tourist activities, and keep cultural traditions alive. Because these communities provide both risks and possibilities, one need to look at other ways to reach sustainable development right now. This is because the communities in issue have already built their bases (Fei & Luo, 2024).

Relationship between sustainability challenges and ancient water town in China: There is an obvious and strong link between the water villages that used to be widespread in China and the problems the globe is currently facing when it comes to keeping the environment healthy. People all throughout the globe are dealing with these problems right now. How much choices are made with sustainability in mind is a big part of figuring out how well these historic sites can keep their cultural character while also meeting the demands of more and more tourists. The level of consideration for sustainability in decision-making is a crucial factor. If environmental issues like polluted water and a lot of waste affect the city's ecology and appearance, visitors may not want to visit as much (Tang et al., 2021). Also, if overcrowding and uncontrolled commercialisation don't cease, cultural identity will be lost, and unique gems will be turned into more common tourist items. If the issue isn't resolved, this may happen. In general, this will make the cultural encounter less real than it would have been otherwise. However, how well these problems are dealt with and how long they are kept up will have a big effect on the long-term health of ancient water cities. There are many different examples of sustainable management solutions, and each one may help lessen the harm that undesirable results cause. Setting a limit on the number of tourists, building infrastructure that is good for the environment, and getting the local people involved in making decisions are all examples of things that fall into this group (Guo & Li, 2024). If the stakeholders can understand and properly deal with the problems that come with sustainability, they can make sure that the economic benefits of tourism don't hurt the environment in the long run. This way, they can be sure that the ecosystem

won't be harmed. On the other hand, disregarding these issues might hasten up the loss of cultural traditions, the loss of historical accuracy, and the drop in the value of heritage. All of these results would be bad for the preservation of heritage. Each of these things will probably damage the preservation of cultural heritage items. It is possible that worries about sustainability may be perceived as both a chance and a threat when all of this information is taken into account. To make sure that ancient water towns will still be cultural centres for a long time to come, it is very important that one come up with a plan that will let us find a balance between the growing number of tourists and associated efforts to protect the environment. This is really important because one need to develop a way to make sure that this balance is reached for attending to sustainability challenges in ancient water towns of China (Islam & Wang, 2023).

On the basis of the above discussion, the researcher formulated the following hypothesis, which was analyse the relationship between sustainability challenges and ancient water town in China.

"H_{01}: There is no significant relationship between sustainability challenges and ancient water town in China."

"H_1: There is a significant relationship between sustainability challenges and ancient water town in China."

Table 2. H1 ANOVA Test.

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39588.620	375	5791.281	1115.423	.000
Within Groups	492.770	213	5.192		
Total	40081.390	588			

The results of this investigation are significant. At the 0.000 significance level (below the 0.05 alpha level), the F value of 1115.423 is deemed significant. This demonstrates that the null hypothesis is invalid and that the alternative hypothesis, *"H_1: There is a significant relationship between sustainability challenges and ancient water town in China"* is valid.

DISCUSSION

The results of this research make it quite evident that ancient Chinese water towns face a wide range of problems related to sustainability. Cultural tourism has put a burden on the social, cultural, and ecological systems of these cultural heritage sites. This is the circumstance that has come up, even if cultural tourism has had a good effect on the economy and made people throughout the globe more aware of these places. The fragile water-based ecosystems that are

common in these communities are under risk from pollution and the build-up of trash. Also, the over use of goods and services makes the native cultures in these areas less genuine. There have been a lot of worries about the potential trade-offs that may happen between the expansion of tourism and the quality of life for individuals who live nearby. These fears come from the stress that the infrastructure is under and the problems that tourists make in the lives of the people who live there. The research also shows how many different issues are connected, which shows how important it is to come up with solutions that look at the whole picture. To be strong for a long time, sustainable practices must involve society, protect cultural assets, and protect the environment. Residents are both the protectors of cultural traditions and the people who will benefit from the sustainable growth of tourism. This is why their involvement in the process is so important. So, to find answers to problems that have to do with sustainability, it is important to make policies that include the ideas of sustainable development in the design of tourism that takes heritage into account. When this is done, it will be feasible to make sure that old water towns may grow while still being important to their culture and history.

CONCLUSION

In conclusion, ancient Chinese water towns now face substantial sustainability challenges that will ultimately shape their future trajectory. Even yet, there are fears about how tourism is hurting the environment, making traffic worse, and losing cultural customs. Tourism has given the economy a chance to grow and culture a chance to grow, but there are also problems that come with these benefits. Even though tourism has made these chances available, the truth is that these issues are still happening. If these pressures are not managed properly, it is possible that ancient communities might lose their authenticity and ability to survive for a long time. The results show that in order to make policies that last, it is important to establish a balance between growing tourism and protecting cultural assets. This includes a number of different problems, such as hiring locals to help make decisions, using environmentally friendly methods, and managing the flow of visitors. To protect cultural identity while still taking use of the benefits of cultural tourism, it is important to look at sustainability from all angles. To protect old water towns, it is important to understand that historical preservation and sustainable tourism are not at odds with each other; they are both important for long-term cultural resilience. This is really important if one want to make sure that historic water towns stay the same while attending to the existing sustainability challenges of current times.

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