SUSTAINABLE HERITAGE VILLAGES' DEVELOPMENT IN SAUDI ARABIA: PUBLIC PERCEPTION AND SURVEY ANALYSIS

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Abstract— This paper describes a study designed to assess the public's perception of sustainable heritage villages with many historical facilities in a developing economy. The case study city used is Albaha city in the southern region of Saudi Arabia. The research determines and identifies factors that influence the development of heritage villages in Saudi Arabia, focusing on the impact of heritage and historical facilities and tourism to the local economy, the current conditions of heritage villages, and the public's perception of heritage and tourism in Saudi Arabia. Hence, a public survey analysis was the main research method applied for the study. Survey Monkey tool was employed to distribute and administer the study, to obtain a high number of responses and to analyze the results efficiently; data was then collated and analyze by Microsoft Excel. A large number of respondents completed the survey (over 500 respondents). The key factors identified concerning the development of heritage villages in Saudi Arabia were the lack of public awareness of the under exploitation of historical facilities, and the current poor conditions of heritage village in Saudi Arabia. These findings present an opportunity to guide the development of heritage sites to increase the economic income from tourism.

Keywords— Sustainable heritage; heritage developments; public perception; historical facilities

I. INTRODUCTION

Saudi Arabia has a hot and arid climate in its northerly region, which is located in the middle of the desert, a hot and humid climate along the west coast by the Red sea and the east coast by the Arabian Gulf, and a hot and arid mountainous region to the southwest (Fig 1.1). The Albaha region has a relatively unspoilt natural environment, compared with the other regions in Saudi Arabia, which makes it an attractive destination.



Fig 1.1 Three climatic regions in Saudi Arabia

In addition, heritage villages are located across Saudi Arabia, each with unique conditions due to the local climatic conditions, social structure, and culture. The historical heritage facilities vary in terms of their developmental potential, and their role in sustainable development. The potential of heritage sites in terms of sustainable development are not only economical in prospect, but in some cases also evoke social cultural variables and environmental responsibilities [1].

Researchers in various countries have undertaken many previous studies of sustainable buildings. In particular, a study using online surveys was conducted by Iwaro and Mwasha [2], who presented and analyzed energy policy in 60 developing countries, including Saudi Arabia. Their study highlighted current progress in establishing energy regulations for buildings, and recommended socio-technical solutions to overcome existing cultural barriers to energy saving [2]. Any urban design and architectural style will undoubtedly reflect environmental responsibilities and social needs, structures and traditions. Many studies have been performed to assess urban heritage sites across the world and in Saudi Arabia.

II. METHODOLOGY

In order to diagnose the factors influencing heritage villages and historical facilities in the Kingdom of Saudi Arabia, the following overarching research questions were posed:

RQ1. What are the conditions of existing heritage villages and historical facilities in Albaha – KSA?

RQ2. What are the factors influencing the development of heritage villages and tourism in Albaha –KSA?

In the study described, to answer the above questions, a quantitative methodology was used to provide comprehensive information relating to the building design, site characteristics, socio-cultural aspects, and public perceptions, based on data collected from people of different ages, educational levels, and locations, as detailed below. Surveys are the most popular approach used in order to collect data [3], as

mentioned by Huang [3], and to estimate key variables. Thus, a survey questionnaire was designed, piloted, and distributed to members of the public throughout Saudi Arabia. An online questionnaire distribution technique was used in this study, as this method is quicker than delivering a manual printed survey [4, 5], and is also less costly [3]. The Snowball sampling technique [6] was used to facilitate the large scale distribution of questionnaires throughout Saudi Arabia. To access participants across all regions of the country, the survey was hosted with SurveyMonkey (www.surveymonkey.com) [7]. This technique is employed by the distribution of a questionnaire by an author to participants, who then forward the study to others, who also forward it to attain a high participation rate. The snowball sampling enabled the authors to penetrate a high number of anonymous participants, while still recruiting and identifying informants with specific knowledge [8]. The surveys were issued in Saudi Arabia and sent to potential participants by the main author using email and social networks, and, in turn, those participants forwarded the study to others as described in the snowball approach [9].

III. RESULT AND ANALYSIS

Following the distribution of the questionnaire via SurveyMonkey, a key benefit perceived was the huge number of respondents. The number of responds was exceeded 500 to have realistic and fair results. The survey included both gender different ages different educational level across Saudi Arabia (see fig 3.1). The results of the survey will focus on the heritage villages and historical facilities and the analysis will be structured to transferee image about the current conditions of heritage villages in Albaha.

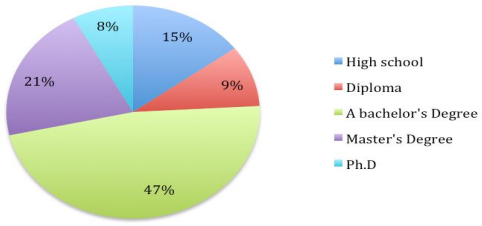


Fig 3.1 education level

Most of the respondents assessed Albaha as a good destination for tourist visits. Many factors have been identified those influence on tourism in general and conditions of historical facilities in Albaha. these factors are related into the conditions, planning, poor transportation, transportation lack of public transportation and absent of local social activities. Most of responds were not visit Albaha for tourism purposes due to most of them have their personal and social reasons. Figure 3.2 presents the purposes of visiting Albaha. However, the current condition of the villages there might prevent visitors from visiting Albaha.

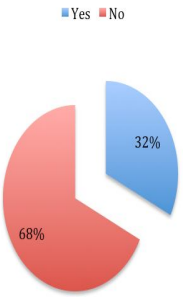


Fig 3.2 visiting Albaha for historical purposes

3.1 The Conditions of the Heritage villages

Albaha region is located in the south west of Saudi Arabia, giving it a hot, arid climate. Albaha region was chosen as representative of the mountainous regions of Saudi Arabia; despite being colder than other regions of the Kingdom, this region is still hot and arid in comparison with many other countries. The table 1.1 below illustrates the typical weather conditions of this region **[10]**.

Table 1.1 typical weather conditions in Albaha

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Temperature	28.3	28.5	31.8	34	37	37	38	37	37.6	32	28.6	29
Min Temperature	2.4	3	9	16	16	19	21	20	19.6	13	11	3
Relative humidity	66	41	28	37	38	28	23	23	28	33	55	44

The current conditions of the heritage villages in Albaha can be classified as needing development, if they are to meet the requirements of tourists and the demands for buildings to be environmentally sustainable. Heritage villages play a major role in tourism and economical income in the region, and yet the majority of survey respondents considered the conditions and suitability of the heritage villages to serve tourists to Albaha as poor to fair.

Fig 3.3 below illustrates the perceived accessibility and suitability of heritage villages in Albaha.

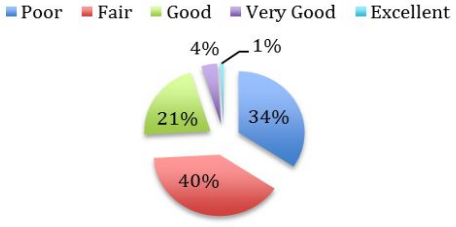


Fig 3.3 Accessibility and suitability of heritage villages for visitors

Utilising the figure above, serious steps must be taken to develop the existing heritage villages in Albaha; these could be overseen by the Ministry of municipality and the Saudi commission for tourism and national heritage in Saudi Arabia.

3.2 Historical facilities

Albaha city has many heritage villages, and most sites of interest include castles. These castles reflect local culture and traditions. The social structure in Saudi Arabia has unique historical traditions, which are reflected in various ways by urban design and traditional architecture. They majority of these buildings can be considered sustainable, as they were constructed using local resources. The conditions of the castles available for tourists to visit in Albaha are displayed in figure 3.4 below.

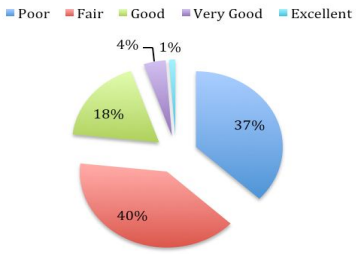


Fig 3.4 conditions of the castles

The survey posed many questions to determine the heritage of the Albaha area; thus, castles were highlighted. As seen in the figure 3.2 above, most of respondents assessed the condition and suitability of castles for visitors as poor to fair. Castle facilities and heritage villages are considered together by the Saudi Commission for Tourism and National Heritage in Saudi Arabia, which develops traditional sites for tourism.

IV. DISCUSSION

While Saudi Arabia's principal income is derived from natural resources such as gas, fossil fuels and minerals, cultural resources that recall the nation's traditions, heritage, and historical facilities are economic growth areas. Tourism can be an important source of income [11, 12]. Heritage in Saudi Arabia potentially offers a sustainable source of income through tourism, which if invested cleverly and sustainability can preserve the culture and heritage while also rehabilitating the villages themselves.

Multiple studies have addressed the influence of heritage in tourism, as well as the associated economic income. Cuccia et al [13] explored the influence of cultural heritage in fostering the tourism industry. The social structure can also be a useful element and/or barrier to the development of heritage and historical facilities. Many studies have been conducted that illustrate how social structures and culture play a significant role in heritage development, directly influencing other income resources, including the aforementioned tourism.

V. LIMITATION

The authors faced some limitations in this study due to a shortage in the database of similar official studies of energy demand in individual domestic buildings in Saudi Arabia. However, the main limitation of this survey relates to its reliance on computer-based participants (i.e. those with access to Internet). In 2013, 5.6% of Saudi Arabians had no access to the Internet [25]. Therefore, the study involved educated people in Saudi Arabia, who in 2013 comprised 94.4% of the population, according to the central Department of Statistics and Information [25]. In terms of Internet access in Saudi Arabia, use by young people is more frequent than by older people [26]. A survey was carried out by Simsim (2011) [26], to determine the level of Internet service diffusion within Saudi society. He found that 11.1% of Saudis do not use email service, whilst 15.6% of the public do not use any Internet service [26]. Of these, a small percentage do not have access to Internet facilities due to Internet illiteracy [26]. According to the Ministry of Electricity in Saudi Arabia [27], some villages in suburban areas across Saudi Arabia are not covered by the national electricity grid, relying on local energy sources; thus, the people in these villages have no Internet access and were not included in the study. Nevertheless, despite these limitations the study reached the majority of towns and cities across Saudi Arabia.

CONCLUSION AND RECOMMENDATIONS

The survey analysis conducted for the described study concluded that Albaha has many heritage villages across the region, which could usefully serve conservation efforts grow tourism and associated financial income and meet sustainable environmental requirements. The study also investigated the public's perception of the sustainable and historical facilities in Albaha highlighting factors influencing heritage village in the region. These factors can be considered by the Saudi Commission for Tourism and National Heritage in Saudi Arabia, serving to develop historical facilities and respect environmental responsibilities. Many recommendations have also suggested developments to heritage villages in Albaha as follows:

- Heritage villages must be developed and rehabilitated to grow tourism in Albaha;
- Restoration of castles and historical facilities must be taken into account by the Saudi Commission for Tourism and National Heritage in Saudi Arabia;

- Local societies in Albaha must take a major role in rehabilitating the heritage village in the region; and
- Investors must participate in rehabilitating the heritage and historical facilities in Albaha.

ACKNOWLEDGMENT

This research is a part of a project entitled Sustainable planning of developments, to rehabilitate heritage villages in AlBaha region: Sustainable Architectural and Urban Design". This project was funded by the Deanship of Scientific Research, Albaha University, KSA (Grant No. 1437/03). This assistance of the deanship is gradually acknowledged.

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