e-ISSN 2182-1453

Adaptive Reuse in **Cultural Heritage** Building

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Abstract | Adaptive reuse can be considered as a form of strategy to be employed for the conservation of cultural heritage, and consequently its utilization and reuse, which may lead to economic and social benefits, especially in the tourism sector. Furthermore, such a strategy will contribute to the sustenance of these monuments as they become functional. The purpose of this study is to determine the principles that are vital to integrating sustainability into adaptive reuse of historical buildings for the purpose of conservation/preservation of cultural heritage with implications for tourism. The study method is based on case study approach in Famagusta, North Cyprus. The overall framework of the study is in adherence with the International Cultural Tourism Charter entitled Managing Tourism at Places of Heritage Significance (1999). The findings revealed that the reuse of heritage buildings is contributing to their sustainability with positive economic and cultural ramifications. The tourism sector is the main beneficiary of this process.

Keywords | Adaptive reuse, sustainability, cultural heritage, tourism, North Cyprus

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1. Introduction

During the ages, historical buildings as cultural heritage assets are exposed to being demolished. Today the development of building sustainability will reduce the effect of human activities related to ecological issues (Langston et al., 2007). Sustainability has defined that reuse of building can keep negative environmental impacts away by conservation or preservation and also protect culture and traditions to promote the local community's economy (Powter & Ross, 2016). Long-term conservation is needed to enhance cultural and natural resources.

To achieve the social, economic and environmental targets in heritage conservation it is necessary to manage human reaction with the environment (Powter & Ross, 2016). The sustainability in architecture is illustrated in three ways: using the resource economically – 3R, including reduction-reuse-recycle; also to be able to analyze sustainability and its effect which is called its life cycle; and finally to consider the relationship between human and environment that it is defined as a human-integrated design. Conservation can be reached through adaptive reuse, which leads to sustainability in tourism. There is a stress on conservation of cultural heritage and local communities' tradition by sustainable tourism. Reuse in heritage building offers economic, environmental and socio-cultural sustainability. This study attempts to indicate the extent of sustainability development in the project of heritage building adaptive reuse, one of the advantages of which is to enhance tourism sustainability.

This study stresses the concept of the heritage building that should be considered in the scope of sustainable planning. As stated by Yeldiz (2012), cultural heritage is representative of historical and architectural assets which belong to the past. It should be preserved for the next generations. This is the reason why the historical assets should be valued through the concept of sustainability.

The aim of this study is to afford information on reused historical buildings considering sustainable design and preservation.

The objective of this study is to determine the principal ways in which concepts of sustainability can be integrated into adaptive reuse of the historical building so as to enhance the tourism industry through preserving the cultural heritage. The aim is also to find the limitation and challenges of adaptive reuse in historical buildings. Despite some unsolved debates in particular on the various dimensions of sustainability, adaptive reuse will be the cause of remaking the life of the building; also keeping them from demolition and offering benefit in economic and social cases and saving energy (Yung, 2012). The question "What are the main sustainability dimensions?" is as yet unsolved (Rashid et al, 2015). This study contributes to the body of literature in heritage principals and sustainability design. This article evaluates the conservation of historical buildings through reuse in Famagusta, north Cyprus.

Research problem

There are many buildings with historical characteristics in the world. It has been noticed that old buildings have been affected by the following interventions or negligence:

1- As a result of economic progress and emerging innovation, there is a conservation crisis of traditional buildings in most countries. During the activity of urbanization, many of these buildings were rebuilt with a new design. However, many governments are not concern about them for reasons of economic growth and political procurement.

2- Due to a lack of proper preservation and management, historical buildings are going to ruin on many occasions. Many of these

buildings are in serious danger from both natural causes and vandalism. Moreover, a lack of expert knowledge is another reason for extra damage by regional protection activities (Lee et al., 2014). Moreover, there is no perpetual preservation and restoration that cultural heritage needs. Buildings are unprotected from environmental influences and numerous dangers of physical and natural events. (Abe & Murata, 2014).

This study attempts to identify the influence of conservation of historical building on tourism marketing. It will help tourism marketers to find ways to attract tourists and also it will help to plan the method of conserving to achieve sustainability of cultural heritage destinations.

2. Literature review

Sustainability is identified as increasing the fulfillment of today's necessities, while considering the next generation's necessities (Yaldiz, 2013). The concept of building sustainability was raised to reduce the result of degenerative human activities and decrease harm (Lua, 2016). Enhancement of cultural and natural resources along with long term conservation is considered as sustainability in the tourism culture area. Cultural sustainability in architecture is described as the responsibility of each generation. They should try to transfer cultural values from the past to the next generations, and it should be done via interacting with others and adding new ones (Cebeci, 2002). It is crucial to pay more attention to the conservation of historical buildings including restoration and adaptive reuse in order to revitalize heritage and culture (Henehan & Woodson, 2004). Adaptive reuse is known as a strategy that integrates the social, economic, and environmental performance of a building (Langston et al, 2008). Some factors such as building type, architecture, marketing approach, regulatory environment and financing are important characteristics of a successful renovation or adaptive reuse project. (Longston et al., 2008). James et al. (2014) in their research in George Town claimed that the lack of aesthetic value in buildings has been ignored by the conservation rule. To prevent any damage or harm in historical buildings, conservation guidelines have a main role, in which practitioners should not ignore the safety of historical buildings through restoration and adaption for reuse (Henehen & Lonson, 2004). Damage can threaten older buildings (Municipal, 1994). They can be created by natural, social or economic issues (Mydin, 2014). From the perspective of history, it is preferable to keep the former glory of old buildings. Adaptive reuse can help to maintain the worthiness of heritage buildings while preparing job opportunities for modern needs (Worthing, 2008). The possibilities of changing the function are limitless; a commercial building can be changed to a residential function and a residential function can be changed to a religious function such as a church or mosque.

Monumental buildings are to be saved from destruction, because they bring many environmental benefits and reuse is a useful tool for reaching this target. The best way to achieve sustainability is to change monumental buildings to a new function, while keeping in consideration the characteristics of the era that they were built in. In some conditions, it is not possible to save the function of monumental buildings due to cultural, social and physical conditions. In this vein, the only way to save them is via human usage with the aim of conservation and the reuse tool. So, a new function should be deemed as a tool for stability of the cultural body of buildings (Yaldiz, 2003).

As a part of cultural heritage, these buildings play a main role in economic and socio-cultural sustainability.

Socio-cultural sustainability: The reuse of historical buildings through re-functioning can be treated as a part of historical structure that is rela-

ted to retaining cultural sustainability (Kurumaz, 2006). In this regard, cultural sustainability can be seen as an extent of change in society while accepting the necessities of that period and maintaining its essence and identity (Assemann, 2001).

Economic sustainability: The survival of historical buildings can be retained via new functions. On one hand, positive economic input on the basis of energy, material and manpower can be formed by the reuse of historical buildings. On the other hand, tourism as an example of new economic sustainable dynamics can be produced by the reuse of heritage buildings. These buildings have precious value seen through contribution of tourism, so they can be cause of an enhancement of economic revitalization in their area. Environmental sustainability: reduction, reuse and recycling are selected as a new approach for saving the resources that would be components of sustainability (Yaldiz, 2009).

Cultural heritage management and Tourism

> "It is impossible to discuss tourism planning without mentioning cultural heritage management. Most countries encourage the preservation of heritage as an asset for all the community. It can be used to evoke a sense of continuity of culture, enrichment of people's lives, as a link with the past and to allow society to make sense of the present. Understanding cultural heritage can be fundamental to the lives of present and future generations. It is an increasingly recognised goal for the curatorship of such assets that conservation aims to 'retain the meaning of places by keeping their cultural significance and interpreting them to people' ICOMOS, 1998a,p.3).However, cultural heritage management is a recent phenomenon mainly of the last 20 years), which has tended in many countries to concentrate on the heritage 'resource' or asset as the central element in the management process. The public interpretation of cultural significance carried out for some places does not always accord much importance to the needs of the visitor and the local community"(Hall and McArthur, 1993).

3. Methodology

Many professions including architecture use a case study approach. Written and visual documentation, interviews and projects are limited to the primary body of knowledge in this approach. The present study was carried out with a case study approach. Three heritage buildings located in Famagusta were investigated. This study is based on in-depth analysis and consists of interviews with five responsible, archive research-awards or special recognition for projects, copies of reports on projects and longitudinal studies of the place over time. Reuse was carried out on the investigated buildings; Checks were carried out to ascertain if the Charter instructions correspond to the buildings' elements. In addition, data was collected from a literary review consisting of book references, proceedings papers, journals and interviews. Observation by using pictures was done and all the changes made in the case study were analyzed.

4. Case studies

4.1. Famagusta

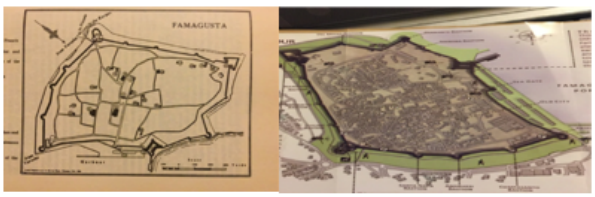
This is the third city of Cyprus – sample of a rich cultural heritage of the Eastern Mediterranean – was founded between 285 and 247 B.C. by the

Egyptian king. Around 647 A.D., after Arabs invaded and ruined many cities, the inhabitants fled to Gazimagusa and it transformed from a village into a city. It was situated on the south-eastern sea shore with a good harbor that made it a trading city in the Lusignan period (1192-1489). In order to protect it from enemies and pirates, fortifications were constructed after the 3rd crusade. It was surrounded by a stone wall. About the year 1300, after the Lusignan, King Henry II offered Famagusta as a shelter for refugees from Syria and Palestine. It seems to have sprung up as a medieval fortress city. In 1372, Genoa dominates on port. After its occupation, Nicolas Martoni described it in 1394 as a city that has finer walls than he has seen in any town, with many high towers all around. The city underwent many changes to be a strong fortress of the Venetians from the year 1400. The Venetians (1489-1571) made a vast development on the walls to defend against cannon technology of the Ottomans, to whom it fell in 1571. The wall overlooked the sea and the land. There are two main gates to the sea and land. They were the two major entrances of walled city (Jeffery, 1918, p. 101-105-110; Gennis, 1936, p. 80-89-104).

The Sea Gate was built by the Venetian captains of Famagusta in 1496, and is still in a fine state of preservation. The sea gate is preserved with the lion of Venice and the date and name of founder on the facade. The citadel and the Othello tower play the role of protector between the sea and the port. Two stone lions, of uncertain period, are close to the land entrance. (Gennis, 1936, p. 96).

Source: Gunnis, R., 1936 *and taken by Shari 2016*
Figure 1 | Sea gate of Famagusta

The ravelin bastion/Land Gate is the oldest part of the city after citadel. The bastion, which was planned with a ravelin in the main entrance, is dated 1544. The bastion was damaged by the Turkish invaders, and can be seen to have a height of 30 feet in the original gateway. The ravelin, which was converted to a tower gate and fortification of the walled city, was the first Lusignan tower. Due to there being only two entrances, it was necessary to protect the Land Gate, although bridges crossing the moat, new bridge and land gate, which are still used, were constructed following the siege. The Martinengo bastion, which was named for a Venetian commander, protected the land side of the city. The Martinengo bastion, an example of art renaissance military architecture, was created by a Venetian architect. Because the corner of the city defense was not strong, the Venetians constructed the Martinengo bastion. It is designed in an arrow shape to provide a large bulk of stone toward the exterior and also provide parallel canon fire down the moat in both directions (Gennis, 1936, p. 90).



Source: Jeffery, G.F.S.A., 1918.
Figure 2 | map of Famagusta

During the Lusignan period in the 14th century, the citadel was built to protect the harbor. It is located at the north-east corner of the city and is of early medieval origin. The Venetians changed it for artillery in 1492. Two towers protected the harbor: the tower at the end of the reef of rocks completely disappeared and the tower on the land side was rebuilt. The value of the harbor was in this fact that it was the only port of a secure kind on the island. The sea gate connected the arsenal to the harbor.

Source Google search and Shari 2016
Figure 3 | Othello castle old and new

Now the citadel includes the wall fortifications, connecting wall and four towers. Two structures, one inside the other. The fortifications were constructed around the Lusignan fortification from the 14th century, the outer one being Venetian from 1492. Above the entrance of the first bastion, there is a marble winged lion of Venice with the name of the Venetian captain who remodeled the tower and who had the upper floor removed in 1492.

There is a story that Leonardo Da Vinci, on his visit to Famagusta, advised the Venetians on its design. The main building that remains in the citadel is a great hall which is 92 feet by 25 feet. The apartment above it dates back to the Lusignan period in the 14th century. The tower and corridors of the citadel lead to artillery chambers. There are some Ottoman and Spanish iron balls and canons in the county yard. The walls and bastions of Famagusta survived from the Venetian period. The round tower is the water gate, which was originally a Venetian arsenal named after Cunbulat, a Turkish commander. The citadel is also called the Othello castle. Shakespeare mentioned a sea port in Cyprus in his tragedy and he makes Othello a Moor. The tower always was apt to scenes of tragedy. Othello was the image of the governor of Cyprus – Christopher Moor – 1506-1508. The main defensive position of the Othello tower and citadel play the role of protector for Famagusta between the sea and the port. (Jeffery, 1918 P 144; Gennis, 1936, p. 90).

Othello Tower before restoration

Source: UNDP site

Figure 4 | Map of Othello Castle

Source: UNDP site

Figure 5 | Otello Tower before restoration

4.2. Canbulat museum

Canbulat bin kasim El-Kurdi a Turkish commander who was supposed to have fallen during Ottoman action to conquer Famagusta. His grave is underneath the Canbulat bastion which was famous as an arsenal tower during the Venetian period. The story goes that Canbulat showed himself significantly at the siege of Nicosia. He had duties in the siege of Famagusta as the army's right wing along Iskender pasa and Dervis pasa on 18th September, 1570. The Venetians placed a Catherine wheel with knives at the entrance of the arsenal bastion to deter the Ottoman soldiers. Cunbulat jumped on the wheel with his horse so that the Ottoman forces could pass through the castle gate. According to myth, he continued fighting while holding his severed head in his hand. The name of the city changed to Magusa after its capture. In addition, the arsenal bastion's name changed to Canbulat bastion. (Bgiskan, 2009, pp. 428-9).

Canbulat before reuse and during works

Source: Tourism administration of Lefkosa
Figure 6 | Cunbulat museum during restoration

Saint Barnabas Church & Monastery

This is a monastery and icon museum that is situated close to the tomb of Saint Barnabas. This historical site includes a church that is an icon museum at present, the monastery, which has an archaeological collection, and a chapel housing the remains of an Apostle is situated at the western edge of the Salamis acropolis. According to historical sources he was a native of Salamis from a Jewish family. He was sent to Jerusalem to study by his parents. He was present at Christ's miracle at the Pool of Bethesda. He admitted it and joined the Seventy as a devotee of the Lord. Then he returned to Cyprus to spread Christianity in the company of St. Paul and St. Mark. He was stoned to death after he was imprisoned by the Synagogue. St. Mark buried his body secretly on the west side of the city in a cave. Later, a huge persecution against Christian was carried out, and the burial place was unknown for 432 years. It was revealed miraculously by bishop Anthemios in a dream in the reign of the Byzantine Emperor Zeno (474-491). The archbishop Anthemios ordered the grave to be opened. He found the body with a copy of the bible of St Mathew with Barnabas's handwriting on his chest. He presented the remains to Zeno in order to Zeon's command. The Archbishop returned to Cyprus and constructed a church and monastery on the place where the body was found and also attached a hospice for pilgrims (478 A.D.) It appears to have Byzantine methods of construction, being dominated by a dome, arches and vaulting. In decoration, a mutilated classic detail was used. In comparison with modern buildings of Byzantine, only two-thirds remain. This present structure was ordered by the Archbishop Philotheos in 1756 (Jeffery, 1918). After leaving three brothers who were in the service of the church and monastery in 1976, the place was preserved and opened to visitors (department of antiquities and museum).

St. Barnabas church before reuse and during works

Source: Tourism administration of Lefkosa

Figure 7 | Saint Barnabas museum during reuse

4.3. Projects of restoration and reuse of historical sites

The technical committee on cultural heritage was established following the agreement made between Greek and Turkish Cypriots with the support of the United Nations on 21st March, 2008. It is devoted to protection, promotion and recognition of cultural heritage on the island. It is made up of a advisory board of archaeologists, art historians, architects and town planners of Greek and Turkish Cypriot communities under the responsibility of two leaders. The mandate of the committee is the preservation of the cultural heritage of Cyprus.

"The built cultural heritage is a reflection of the human spirit. It is also establishing a link between the tangible and the intangible heritage. With this in mind, as members of the technical committee on cultural heritage, we are aware that our work is not just about stones and buildings. But also, and more importantly, about the values they carry from the past and the role they can play in the future. The island of Cyprus is at the crossroads of different civilizations and the rich and diverse cultural heritage of the island has stood witness to this past."

Three types of projects will be executed by the committee. Small project activities (SPA), medium-size projects and mega projects. The latter focus on large scale monuments with great historical and social value such as the Othello Tower. The medium size and mega projects are executed with the key support of the United Nations Development Program partnership for the future (UNDP-PFF). Since 2012 till the present day, 6.7 million euros of European union funds have been allocated to priorities of the technical committee on cultural heritage for the preservation of cultural heritage in Cyprus.

Restoration of the Othello Tower

One of the priority involvement projects of the committee was the Othello tower. According to UNDP action, in order to support cultural heritage monuments of great importance for Cyprus with EU funds, a study on this project including "Survey, Investigations, Assessment and Project Design" was done in 2012. The definitions that focus on the set of maintaining activities are the core elements of this process:

> "**Conservation: all actions or processes that are aimed at safeguarding the elements of an historic place as to retain**

its heritage value and extend its physical life. This may involve *Preservation, Rehabilitation, Restoration*, **or a combination of these actions or processes.**

Preservation: the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an *historic place*, **or of an individual component, while protecting its** *heritage value*.

Rehabilitation: the action or process of making possible a continuing or compatible contemporary use of an historic place, or an individual component, while protecting its *heritage value* **(www.historicplaces.ca).**

Restoration: the action or process of accurately revealing, recovering or representing the state of an *historic place*, **or of an individual component, as it appeared at a particular period in its history, while protecting its** *heritage value*."**(source: www.historicplaces.ca)**

Firstly, the aim of the study was to find the critical problems, research and understand the monument and then construct the design with the purpose of:

- stabilizing the monument;
- protecting the elements that are at most risk while observing internationally recognized conservation standards;
- creating a safe environment for the community and visitors;
- accommodating disabled persons with an access path and toilet facilities.

The project is funded by the European Union and implemented by the UNDP in partnership with the Technical Committee on Cultural Heritage.

The first phase of restoration was carried out, including:

I. Structural consolidation

This process was done to conserve the walls, arches and vaults of Othello. Consolidating this structure was important to preserve the authentic material position and workmanship of the original builders. New stones replaced original stones that had lost 80% or more of their material. The new stones were the same type, size and color as the original stones. Some area had been entirely lost, and in these areas they used different techniques to distinguish original workmanship from new with the same type of stone. Critical work was carried out on the arches, walls and individual stones in Othello that were near to collapse because they could put the surrounding buildings at risk. It was more important that the visitors should be safe from the danger of falling. So first of all they needed to identify and stabilize these features before starting the other works.

Source: UNDP site

Figure 8 | External north wall after works and the external south wall after stabilization

II. Great hall

There were many vaults and arches with loose stones. The walls and roof above and the surrounding stone were supported by each stone of the arch and valute. So to stabilize the arches and vaults it was necessary to carefully inspect every stone and secure them to the surrounding stones.

Source: Taken by Shari, 2016

Figure 9 | Great hall

III. Anchoring of the base-relief lions

The stone lion above the entrance represented the power of the Venetian it belonged to hundreds of years ago. Thus, it was important to inspect every stone of these sculptures.

Source: Taken by Shari, 2016

Figure 10 | Stone lion above the entrance

Plant removal in areas of consolidation and removal of existing concrete floor

The concrete floor that was installed in the middle of the 20th century was much less porous than the adjacent stone walls. Water became trapped below these concrete floors and was forced into the surrounding walls slowly, dissolving the stone. Therefore the process of removing the concrete floor was done by hand and the original stone floors were recovered.

V. Courtyard and Fosse-Control and removal of water

One of the most destructive elements for stones is water. If the water is not controlled it can enter the walls via capillary action. The drainage was improved by recovering the Venetian channel system, a new roof covering and new underground drainage were installed. Also, an evaporation percolation pit was installed because of water accumulation in the moat.

Source: taken by Shari, 2016

Figure 11 | Country yard and Fosse-control

Work was carried out in particular on walls, arches and other unstable sections. Collapses had occurred in some areas over the years and these needed to be strengthened. The solution for one of the most damaging causes of deterioration for the Tower/Citadel, was to construct a system of pipes as a proper drainage system to remove the water. Compatible materials were used for new roof layers to avoid rainwater infiltration in the future. In the entrance, information for visitors was provided and also sanitary facilities for persons with disabilities.

In the next step, the monument was re-opened to the community and visitors, while explaining its history, values and the conservation process with information panels to be installed.

The project started in May 2014 and was completed by 2015. It was reopened on 2 July 2015. An opening ceremony was held. This is a collaborative work and effort between United Nations Development Program – Partnership for the Future Office, the Technical Committee for Cultural Heritage of Cyprus and local and international architects, engineers, conservators and researchers (UNDP website).

The Ceremony In The Othello Castle

Source: UNDP site

Figure 12 | Ceremony in Othello Castel

Canbulat After Reuse

The arsenal bastion whose name was changed to Canbulat bastion was initially opened to visitors on 1st August, 1968 as an archaeological museum and Canbulat pasa shine. It was necessary to reorganize the museum after a long time. It was reopened with new organization on March 8th, 2008. The restoration project was undertaken by The Department of Antiquities and Museums in August 1991. The building was restored in 1968 and the front section was turned into an ethnographic and archaeological museum.

Source: Taken by Shari, 2016

Figure 13 | Canbulat museum after reuse

Saint Barnabas after reuse

The restoration project was undertaken by The Department of Antiquities and Museums in August 1991. After three brothers' priests who de-

dicated themselves to the church in 1976 moved out, it was protected and preserved in its original form. It also was opened to visitors, displaying various icons, wall paintings and other items in the church in the monastery area. In 1991, after restoration done by the Department of Antiquities and Museums, the restored church was turned into a more comprehensive icon museum with new icon in 1992. The monastery rooms at the entrance have been assigned as the administrative section and the other rooms have been re-arranged into an archaeological museum. The inner yard ws re-arranged and has been paved with stone. Renovation was carried out on tombs including building steps in 1953. A festival on a saint's day on 11 June was held until 1974. It was stopped for 30 years and then restarted in 2005.

Source: Taken by Shari, 2016

Figure 14 | Saint Barnabas museum after reuse

A guide to show visitors round is present for free on most days. This paper considers the building to have great potential for tourism use through preservation and conservation and adaptive reuse. It is obvious that the heritage assets have an ideal high potential to become a tourist attraction as a tourism product.

According to Best and Kellner, when nations try to appeal to international tourists with consumption of their unique history and cultural heritage, there has been a link between tourism and national identity (Debs 2011). In the case of these monuments, the assumption is that conservation can tighten and develop this coherence. It is also noteworthy that cultural heritage is a critical factor for enhancing economic aspects. The great potential of museum and heritage sites as a tourism product can be brought about through adaptive reuse. Page and Hall (2003; 320-21) stated that heritage authorities in some historical sites imply adaptive reuse in order to regenerate buildings for new uses in a way that keeps their heritage value and encourage investors, and that such places could be converted to a place to enhance tourism marketing (Du Cros et al, 2005). The rate of visitor numbers after restoration and reuse of the mentioned case study buildings are provided below:

Directorate of Antiquities and Museum Department, control and check

Table 1 | Saint Barnabas museum after reuse

Area and museum		1 Othello castle	2 Canbul at museum and tomb	3 St. Barnabas archaeology and icon museum
Opening date for visiting		1974	01.08.1968 2008	20.12.1976 29.05.1991
national	museum	-	-	-
church		-	-	-
icon		-	-	1
ethnography		-	1	-
Stone work		-	-	-
archaeology		-	1	1
Fine arts		-	-	-
caravansary		-	-	-
castle		1	-	-
ruins		-	-	-
Cultural art center		-	-	-
tower		-	-	-
museum		-	-	-
total		1	2	2

Source: Tourism administration

Table 2 | Saint Barnabas museum after reuse

Area and museum	Othello castle	Canbulat museum	St.Barnabas museum
Money paid K.K.T.C	166	441	9916
Money paidí T.C	672	1403	4524
Money paid other countries	1181	329	15321
Students and soldiers	0	275	1367
Free visitors	0	1260	2696
Guests	0	465	0
Total visitors	2019	4173	33824
Total group visitors by	0	0	0

Source: Tourism administration

Table 3 | Saint Barnabas museum after reuse

Area and museum	Othello castle	Canbulat museum	St.Barnabas museum
Money paid	38	354	1206
Money paid	675	1146	11289
Money paid	2790	438	8574
Students and	893	326	4937
Free visitors	31	1544	5167
guests	0	0	0
Total visito	4427	3808	31173
Total group	0	0	0

Source: Tourism administration

5. Conclusions, implications and limitations

The Othello castle project was undertaken by a technical committee on cultural heritage to do the process of restoration and reconstruction. Observation resulted in some parts of castle undergoing major changes by restoration while keeping the original material. Although consolidation and preservation are not complete, it is attracting many more people to visit. The purpose of the project was to save the heritage building and to prevent its destruction and demolition. Throughout the renovation process, the site was used for cultural and traditional activities and exhibiting works of art, and it is appropriate for theater and concerts. From observation, it can be noted that it has no potential for changing its function and is unsuitable for adaptive reuse. It should be simply a place to visit. It is a unique defensive building with a very high social value. Evidence of this site's development appears to be creating social interest and people feel proud of it. The restoration was positive in that much more benefit was brought to it and to people living around the castle due to its tourist appeal and its direct effect on enhancing the local community economy. It has great econo-

mic value and benefits. Physically, it is too difficult to accommodate more visitors without removing some cultural value. Before restoration, the tourism value of this asset was poor that it was not deemed a tourism product. Furthermore, encouraging traditional craft shops and local industries will generate more income for the local community and provide more jobs for young people. Consequently, this will enhance and develop the area's infrastructure and attract more government attention to the site. Infrastructures for accessing the site are poor and, it is also recommended that interview should be carried out with administration staff to collect data about the time before the restoration and the background of the building in further studies. The sample size is limited to one castle in terms of historical buildings, so more castles should be investigated.

Canbulat museum gives details of the Ottoman conquest of Famagusta and the Canbulat shrine. It was undertaken by the government – Department of Antiquities and Museums – with a view to reuse under government funding. Moreover, the result of observation was that there are no facilities for tourism such as toilets or air conditioning. The possibility of installing a new physical system is very limited because it is a very old building, nor can it tolerate many visitors as it is not very safer due to its age and thus is not suitable for people to enter. Its potential design is just as an architectural museum. Just one entrance and a long hall can be seen and so it created little social interest. The lack of a harmonious relationship is significant due to the building belonging to the Venetian period and the museum's exhibits are on the Turkish conquest. People don't feel proud of it or that they belong to it. It is relevant to Turkish people and will be valuable for Turkish tourists. According to an antiquities employee, the range of visitors to Canbulat before reuse was very limited and the greatest number of visitors is Turkish after reuse as is shown in tables two and three.

The St. Barnabas renovation project was also undertaken with government funds. There was no participation of people as it was done by the department of antiquities. It was not a big project but it has potential for adaptive reuse. Architecturally it was not changed and it keeps its historical form. As can be seen, the site location is far from tourist flow. It is not a living site and community. The restoration of the monastery converted it into a museum that makes it into a center of tourist attraction, with economic returns being much more than before reuse. Although it doesn't have to any religious use, just as a museum, it is in better condition than being empty. The building had the physical potential to introduce new systems such as air conditioning and/or toilets. The museum building was the rooms of the monastery and by making a hole and removing the walls with nothing being added to it, the same beautiful building was kept. A lack of public transportation, weak infrastructure, difficult access, general physical remoteness and poor tourism facilities, are the major factors for its losing the ability to retain visitors. There is no local benefit as the surrounding area is unpeopled. Based on a regulation, no shops are allowed to be built. As can be observed, the site has less tourism potential in terms of physical value but scores high in tourism potential in terms of cultural value. It seems that tourism management has never been as a portion of their master plan or vision. The sample size is limited to the museum so more heritage buildings should be investigated in the future.

According to antiquities architects, funding is a great challenge as there are not enough funds to reuse historical buildings. As regards these buildings, attempt to interpret and increase the understanding of people are very slow. There is no program for promoting their value in various cultures. Tourism policy and tourist experience programs are poor, as is made clear in the literature. These buildings develop historical sustainability as a statement in socio-cultural meaning. On the other hand, they will also be the source

of economic input through the process of reuse. Reuse had a significant impact on the participation of people in the process and traditional skills were enhanced.

As a result of the adaptive reuse of the site, these buildings created job vacancies. Rent prices of shops and houses increased in the area of the site (Licciardi, G. & Amirtahmasebi, 2012), and so reuse has had a direct effect on enhancing the local community economy.

There are some recommendations that can be suggested in view of the results. Due to the important situation of these buildings, traditional craft shops and local industries can be encouraged and will generate more income for the local community and provide more jobs for young people. These sites are considered "heritage assets", so the government and international organizations can make a promotional campaign for the site and announce the economic value of the asset in order to encourage economists and businessmen to invest in the area. Consequently, this will enhance and develop the area's infrastructure and attract more government attention to the sites. Also, it is recommended that interviews should be done with administration staff to collect data about previous restorations and the background of buildings in further studies. The sample size is limited to one castle and two museums, so more heritage buildings should be investigated in future studies. Cultural assets can be deemed a tourism feature that performs as the product. Although all these sites scored high physically and culturally, they encountered depletion. If the assets are not able to draw tourists and retain them, there will be a problem with function, so some modification is recommended. The study showed that if commodification of a cultural product is neglected, the authorities should find a vision for it in order to enhance the economy via tourism. Furthermore, new marketing strategies should be found to attract tourists to the Canbulat and signs should also be erected on the paths and in the center of the city. This study hindered by limited resources and available documentation, access to the site was difficult and there was a lack of knowledge about the tourism program designed for the sites. This research only studied the effect of renovation and reuse considering tourism on Famagusta historical buildings; it could be done in the other cities of north Cyprus or comparison could be made between two countries, especially Asian countries, in future studies. Cross training would be recommended to prevent the risk of bias. Tourism training management should place an emphasis on cultural heritage and cultural heritage principals should be emphasized for tourism industry employees. (McKercher & Pamela, 2006)

Some results were drawn corresponding to the International cultural tourism charter entitled Managing Tourism at Places of Heritage Significance (1999). The charter consists of 6 principals:

Principal 1: interpretation – Protection programs should facilitate understanding of heritage significance for the host and the local community, which did not appear in any of the sites. Principle 2: Sustainability – this should be considered in long-term protection – the positive outcome of project-present and authenticity-architecture style. This was done by UNDP and Technical committees and government. Principal 3: The visitor experience will be worthwhile in some way and visitors will feel like welcome guests. Principal 4: The host community should be encouraged to get involved. Principal 5: Benefit the host – it should provide equal distribution of economic benefits. Principal 6: Natural and cultural heritage should be enhanced – this should be considered in local crafts – authenticity should be protected by avoiding excessive numbers of the visitor at any one time. Principals 3, 4, 5 and 6 were not executed, only evidence of consideration for local crafts in the city walls.

Acknowledgment

The authors would like to thank, CerenKurum and OzgeSanioglo the architects of antiquities department of Famagusta and Lefkosa for helping and giving fruitful information and also to the antiquities department of Lefkosa, which provided the photos showing the sites before the restoration and reuse of the above-mentioned buildings.

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