ASPECTS OF THE ARCHITECTURAL AND URBAN HERITAGE, FROM DOCUMENTATION AND REGISTERS TO CONSERVATION FOR ADAPTIVE AND MODERN USE AT THE HISTORIC CORES OF SALT AND IRBID/JORDAN

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Abstract

This paper attempts to present, discuss the outcome of the main different studies and projects carried out at Salt and at Irbid historic cores and focuses on the executed urban heritage projects’ undertaken mainly by the Ministry of Tourism and Antiquities (MoTA) of Jordan in the last two decades. These projects invested in the reuse of traditional buildings, the refurbishments of urban spaces, traditional buildings facades and street pavements at the urban cores. It discusses their different aspects by starting; to assess the loss and degradation of the cultural heritage assets of the two cities, the fragmentation and lack of connectivity between the modern and historic cores, issues of sustainability of architectural and urban heritage projects; i.e. tourism planning and conservation and reuse projects at the historic cores in relation to cultural, physical factors and development needs. It also addresses the behaviour and characteristics of the urban regeneration process in those two historic cities, starting from their documentation to examining the different aspects of the currently adopted urban practices and policies and their impact on the existing urban heritage, depending on the specific identity of the respective historic cores. Finally, it aims to define the main constraints and challenges for the reuse of the existing heritage fabric including the local community quality of life, while building on sustainable heritage activities accommodating tourism opportunities. This will give, at least, some indications from which we can identify a use or combination of uses, and practical steps needed for successful heritage conservation actions in Jordan, in order to retain the cultural significance of the place.

Keywords: UrbanHeritage; Documentation; Integrated Conservation Approach; Tourism planning and conservation; Adaptive reuse, Collective memory; Modern use.

INTRODUCTION

In many cities of developing countries, like Jordan and almost everywhere, the existence of an older city core represents a unique historic link with the past. However, their social structure and economics due to their rapid growth and fast transformation, where land uses were rapidly misshaped and declined, thus, presents a genuine threat and intimidation to their natural and cultural resources.

Historic urban cores, in fact, of the second half and end of the nineteenth century with their traditional houses and open networks, as in the case of the many cities in Jordan such as in Irbid, As-Salt, Madaba and Kerak can be considered one of the most important evidence of the past
lifestyle. In the case of the urban historic Salt and Irbid core, the traditional houses are the most important evidence of the past lifestyle. In fact, they, as in many historic cores, can be seen as "the physical manifestation of the social and cultural traditions which have developed to give the modern city and society its meaning and character" (Steinberg, 1996, p. 465). Traditions that have evolved by the collective memory and their related traditional forms can and must be widely used and re-used in contemporary architectural and urban design projects, with proper community involvement. Hence, re-functioning or conversion of traditional buildings to contemporary uses is a tool for carrying the traditional environments into future, both physically and socially.

As in many cities in Jordan, these historic cores have an abandoned stock of built up heritage assets, which lies at its geographical centre, where the majority of these significant heritage buildings are still under the ownership of members of the local families, and remains untouched by the restoration efforts. The rapid urban growth has resulted in serious harmful effects on those two urban heritage fabrics. In addition, the majority of the residents of those old buildings have left and migrated to Amman, the Capital, following the trend of notable Jordanian families all over the country during the fifties and sixties of the twentieth century. Many of the buildings stand vacant while the families and communities living in are often too poor or ignorant to maintain the old stone houses.

Meanwhile the strategy of conservation of historic buildings for adaptive re-use appears to be the most effective approach for a self-financing and sustainable form of conservation, where protecting heritage buildings by having them obtain new or compatible functions, including accommodation, with authentic characteristics assists to save them and benefits the local economy, where conservation of urban heritage contributes to the quality of life of people. Cherchi (2015, p.269) argues that the reuse of abandoned buildings and comparatively open spaces "constitutes a significant opportunity for achieving more liveable and healthier cities through the regeneration of inner city areas". But in fact there are many challenges, obstacles and constraints to achieve this aim amongst them; private ownership constraint, people perception, private and public coordination enhancement mechanism concern, bridging the discourse of conservation and local benefits in addition to planning and building legislation and related protection tools and financial incentives concern. According to (Giani et al, 2015, p.45), however, the real challenge is "to be able to imagine uses which offer intellectually stimulating options, in the belief that the production and consumption of cultural goods, of art, could constitute business, could ensure adequate economic returns, changing and evolving the common commercial standards".

Actually, the issue for these historic cores is not so much about the criteria of significance, but the much more politically charged process of who decides what is important. Cherchi (2015, p.257) states that "the potentialities of the reutilization of forgotten urban spaces are remarkable: covered spaces offer new opportunities for regenerating a city, engaging in new relationships, building new squares, and activating new unexpected connections between the different parts of a city".

The success of conservation, however, still depends on the political will backed up by available funds. Heritage conservation should also allow for an economic viability while maintaining the cultural values. Meanwhile, integrated heritage conservation should be a core effective factor in policies and strategies of revitalizing old and historic areas, where efficient conservation policy takes into account public involvement, public and private initiatives, the planning process, cultural and economic needs and the maintenance of public openness during the decision-making process. Efficient conservation policy, however, according to many
successful heritage case studies, should take into account public involvement, public and private initiatives, the planning process, cultural and economic needs and the maintenance of public openness during the decision-making process. According to Deslagen (2009) “The image of the cities that has grown historically over the centuries cannot be put on ice during conservation”.

In fact, socio-cultural sustainable regeneration of historic urban environments must make places for local people, rather than preserve certain traditional forms as cultural symbols. Still, traditional forms that evolved from the collective memory and traditions can be widely re-used in architectural and urban regeneration, if coupled with community involvement.

The two cities of Salt and Irbid were chosen not for the sake of conducting a comparison of similarities or differences at the level of the urban fabric. Salt was the first city in Jordan to conduct studies, by 1990, for the protection of its architectural and urban heritage, dated to the end of the nineteenth century and early twentieth century. Although, with a limited implementation of the conducted studies, currently the folder for its inscription on the World Heritage List has been submitted to the World Heritage Centre. As for Irbid, the historic core and its extended modern fabric to the North of Jordan, serves more than 300 surrounding villages where Irbid also played a major role in the modern history of Jordan. Yet, the protection initiatives, the earliest by 2005, have been much delayed hence the protection of the core surrounding the mount of Irbid may present the last opportunity to preserve the identity of the city.

The methodological approach for this paper adopts a series of steps geared towards assessing protection actions on the ground as follows:

1- Review and assess the main findings for the proposed registers for the urban heritage at the historic cores of the two cities.
2- General assessment of the negative effects of the current urbanization practices and policies on Salt and Irbid cultural heritage significance.
3- Comparison between the main urban issues that affect both cores of Salt and Irbid, in order to understand the similarities and differences in terms of the obstacles and concerns facing the two cities.
4- Examine the projects of conservation conducted to date and mainly by the Ministry of Tourism and Antiquities at both cities.
   The examination shall address the following aspects in order to have an informed basis:
   - Can central government driven projects or local municipalities’ projects play the main catalyst in driving the protection of the Cultural Heritage Project at urban city cores?
   - Are participatory approaches or individual actions the main driver for the current protection endeavours?
   - Were the problems facing the protection of the historic cores addressed within a holistic or integrated manner?
5- Finally the paper attempts to present suggestions and recommendations towards sustainable conservation actions for the two historic cores, enhancing the everyday quality of life while accommodating development based on:
   - Reinstating the cultural identity of the core as a trigger for change.
   - Enhancing a safe pedestrian network to enhance the quality of life at the core and as a catalyst for change using pedestrian linkages
   - Improve social interaction by creating series of urban open spaces and interventions to promote common activities that could serve also tourists.

SALT CITY HISTORIC CORE AND ITS CULTURAL HERITAGE: ASSESSMENT OF THE URBAN HERITAGE FABRIC

Salt is located 30 km to the west of the capital Amman and it is the 4th largest city in Jordan, with a population of around 140,000 inhabitants. The old city lies on three hills Jada, Qala’ and
Saltel with the central city Plaza (Saha) at the meeting points of the valleys (Figure 1, a). Most of the urban heritage residents and mansions date back to the period between 1890 and end of the 1920’s. These were mainly built in soft yellow marl-lime stone by crafted local and migrating master builders, using local technologies and later introducing newly imported materials of metal I-sections and red tiles for roofing.

Figure 1 a. Salt topography model for its traditional setting at the valley and extending on the hills of the city. b. Abu Jaber mansion turned into Old Salt Historic Museum.

The main heritage buildings in Salt include the urban merchants’ and residents’ houses at the turn of the twentieth century, commercial linear markets, and religious buildings, in addition to the oldest modern high school of Jordan of 1925. More than 600 heritage houses such as Abu-Jaber mansion of 1890, turned into Salt historic museum (Figure 1, b), Al-Mo’asher and Al-Saket complexes amongst others are spread in the core, with a network of stairs that run all the way down from the hills to overcome the rigid topography of the city.

**Salt and the Development of the Architectural Register of the City**

The interest in protecting the architectural heritage of Salt goes back to the mid-eighties and was triggered by the initiatives of Salt Development Corporation (SDC), where a master Plan was developed in 1984 by Dar al Hadassah engineering firm which identified the importance of the traditional buildings of the city (Fakhoury, 1987). Table 1 presents a brief history of the main conservation and planning studies undertaken in the city within the last three decades.

<table>
<thead>
<tr>
<th>Year</th>
<th>Study/Project details</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>JICA : Basic Survey of the cultural Resources in Salt</td>
</tr>
<tr>
<td>2014</td>
<td>Ministry of Municipalities and Rural Affairs: Salt City Core Special Regulations</td>
</tr>
</tbody>
</table>
Major conservation and planning studies at Salt historic core

Following is a brief of the four major studies undertaken in Salt city core:

1-Royal Scientific Study (RSS): Salt- A Plan for Action

The study conducted by the Royal Scientific Study started in 1989 and ended in 1990. It was also commissioned by Salt Development Corporation (SDC) and was financed by USAID. It explicitly set the ground to developing a full register of the traditional buildings of the city at that time. The study indicated the buildings pre to 1950 as of heritage value and 657 buildings were listed. The study was conducted as a joint venture with an International Company. Three volumes were produced in English with a summary in Arabic. One of the deterrents to its implementation was the absence of a national umbrella and appropriate legislation to protect the architectural heritage after AD1700, in reference to the previous Antiquities Law of 1988, where presently the age specified as Antiquity is pre-1750. The building of the capacity of the municipality through the technical arm of Salt Development Corporation was recommended. At that time, no GIS was available for the city. The Action Plan was supported by three main plans: Implementation, Management and Financial plans. The implementation plan recommended to:

- Freeze building activities in the historic core for a designated span of time.
- Develop a revised Master Plan and include a protection zone for the urban fabric, a green buffer zone in addition to the conservation area (Figure 2).
- Develop building control measures for new buildings and for new internal adaptations for the designated heritage buildings.
- Adopt a plan for implementation for the core based on tourist projects development.

Figure 2: GIS for RSS study and the different protection Zones. (Fakhoury and Haddad, 2104, fig17, 15)
2. Basic Survey of the cultural Resources in Salt by JICA (2010)

This Survey was conducted by Japan International Corporation Agency (JICA) volunteers. A catalogue publication of 1019 resources using the GIS for registering the different built up heritage components of the city, where three levels of integrity 1, 2 and 3 were set for the surveyed resources (Figure 3).


The Salt Special Regulation-SSR project was developed by the joint venture of Dar al-Omran and Euronet Consulting and was financed by WB3. Evaluation forms were developed to establish the cultural significance of 120 traditional buildings where 20 selected buildings were fully surveyed and documented. Special Conservation Areas and Special Development Corridors were thus proposed as part of a proposed Master Plan; to include the heritage core, protected viewshed in addition to heritage corridors (Figure 4).

Figure 3: JICA integrity levels for the documented heritage buildings where blue indicates integrity 1, Green for level 2 and yellow for level 3 (Fakhoury and Haddad, 2014, fig 18, p16).

The results of this project were adopted, after an assessment by Cultural Technologies (CulTech) in 2014 and the Salt City Core Special Regulations (CCSR) were endorsed by Salt Greater Municipality and eventually by the Ministry of Municipalities and Rural Affairs and the Higher City Planning Council of Jordan by 2014.
By July 2015 the final SSR for the historic core was published and the SSR was requested to be affiliated with the Prime Ministry. By January 2016 the nomination file for inscription on the UNESCO World Heritage List for Salt Eclectic Architecture (1865-1925); Origins and Evolution of an architectural language in the Levant was prepared and submitted (Figure 5). The dossier included more than 22 buildings, out of which seven are completely or partially abandoned or vacant. In addition, a buffer zone for the nominated properties was suggested.
It is important to note that there is currently no official register of the traditional buildings of Salt which has been estimated to over 600 buildings by RSS study, while the 1019 resources documented by JICA included structures and wall remains. CulTech in 2014 availed a GIS of the RSS register for the first time which provides the opportunity to compare the documentation results of all relevant studies. Unfortunately, the municipality and Salt City Development Projects Unit did not build further on this GIS comparison achievement.

It is clear that with the nominated dossier, detailed regulations for buffer zones will need to be implemented. This is a challenge for the local municipality and an opportunity to set the pace for integrated conservation actions where the protection of the heritage resources could lead to the positive development and institutionalize a building register. In addition, it will set a plan for the reuse of the many the abandoned nominated edifices.

**Rehabilitation of Salt Historic Landmarks: Buildings and Spaces**

The enhancement of the facades of Al-Hammam Street was funded by USAID and was an early attempt in the early nineties followed by the conservation of the Toukan house into the archaeological museum of Salt by Tahan and Bushnaq Firm and implemented by Amer Al-Khatib.

The traditional small mosque of Al-Hammam Street was another project for renewal, supported by SDC, where an extension for a women prayer hall was added to the upper floor and following to that a new façade was built in front of the original façade. It is worth mentioning that the original façade still exists behind the later modern addition.

JICA as part of the Tourism Sector Development Project conducted also a project for the reuse of “Madafat Abu Jaber” into Historic Old Salt Museum, in addition to the establishments of the panoramic outlooks and refurbishment of Sahat Al-Ein (section closer to the congressional mosque), which followed by the year 2000 (Table 2). JICA project in Salt identified 4 panoramic outlooks (1200m²), paths and stairs (7km), in addition to open spaces (4 public Sahas/plazas, including Al-Ein Plaza) of 3850 m² to enhance the built-up environment. The total cost for implementation was JD 4,500,000 not including studies and management. The following table assesses the contribution of the project undertaken by JICA to Heritage tourism infrastructure and community benefits.

Table 2: Heritage tourism infrastructure developed by JICA and related community benefits. (After Fakhoury, 2010).

<table>
<thead>
<tr>
<th>Project</th>
<th>Contribution to Heritage Tourism</th>
<th>Major stakeholder</th>
<th>Year/Studies undertaken</th>
<th>Current users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt</td>
<td>Refurbishment of Panoramic look-outs/open spaces as physical network developed for tourism</td>
<td>MoTA</td>
<td>Studies 1999-2001</td>
<td>Assets used by the community and tourists</td>
</tr>
<tr>
<td></td>
<td>- The Historic Old Salt Museum (HOSM), also currently the Core Museum for the Salt Eco-museum (SEM)</td>
<td>MoTA</td>
<td>Studies 1999-2001 Implementation and the opening of Abu Jaber Historic museum were only by 2010</td>
<td>Assets are mainly used by visitors and tourists and can be used by the community.</td>
</tr>
</tbody>
</table>
Assessment of the new design for Al Ein plaza and the facelift for the surrounding heritage complex and Congressional mosque (WB3) project, 2007-2010: strengths and weaknesses

It is clear that the earlier projects attempted to address and conserve the grand or traditional landmark buildings of Salt by turning them into museums while the earlier attempts by the USAID Funded project of Al-Hammam Street tackled the enhancement of the commercial facades of the vibrant artery of Al- Hammam Street, with a rather coy interactive approach.

On the other hand, the later WB3 project built on a partnership between the Ministry of Tourism and Antiquities (MoTA) and the local municipalities, to develop the historic centres of five Jordanian cities including Salt, and demark it on the Jordanian Tourist Map.

The project for the core of Salt consisted of the removal of three modern administrative buildings that were erected in the sixties, document and clean-up of 3 traditional building complexes’ facades that defined the upper edge close to Sahat al-Ein, in addition to the facelift of the modern Congressional Mosque of Salt and extend and enhance it (Figure 6).

The JICA project led by MoTA targeted the visitors’ trail and the main city square while the World Bank Project WB3 of 2007-2010 administered by a local unit expanded the investment in redefining the main open space of the city core and surrounding heritage buildings’ facades.

The WB3 projects aimed to ‘beautify’ and ‘Sanitize’ the downtown core of Salt by the ’demolition of the modern administrative buildings of the late sixties and seventies (directorate of education, the governorate and police station and the old post office) that replaced the Ottoman Saraya of the nineteen century in the late sixties, its great mosque and As-Sukkar commercial bureau (Wakaleh) which were demolished to widen the streets. MoTA set the terms of reference then and proposed strengthening a link between the Saha and the three Heritage houses, just above it. However, the project had a limited understanding of the collective memory of the city centre.
The Documentation for the surrounding buildings was detailed and included written, graphic and photographic documentation, also a detailed description of the existing conditions for the detected deterioration was also noted. New techniques for cleaning the soft nature of the stone were applied in cleaning. However, the restriction of intervention on the Complexes’ external facades fell short from bringing further adaptive use for the complexes which still stand vacant.

The open public space was expanded to acquire a potential role as the ‘reinstated hub for the Salt centre urban life’, still the adopted approach of ‘Sanitizing’ the downtown core of Salt mainly remained as a beautification scheme. The urban space was designed based on a purely aesthetic priority divorced from the socio–economic needs of its inhabitants and had a limited understanding of the collective memory of the city core and its past. The oval design/ baroque approach of the proposed Saha did not also take into consideration the traditional urban texture of Salt City and it seems to be more alien than complimentary to the centre of the city (Figure 7a). Even, the archaeological findings under the present site were not also taken into consideration as a trace to enhance the historic memory of the city core (Figure 7b).

Some of the downtown workers (of the local community) held a strike on 2010 to stop the acquisition and demolition of the commercial buildings where their shops were located.

In fact, the only strength is in the reduction of traffic. But the weaknesses are many; the link between the Saha and the heritage Buildings could have been done without the need for completely demolishing all of the governmental buildings. As to the Mosque Enhancement scheme, the new facelift for the Mosque with added floors exaggerated the scale of the building. Its scale is not in harmony with the traditional buildings and fabric of Salt city (Figure 7c).

Figure 7a., Oval design for the Ein Plaza and facelift project of the congressional mosque (Source: Bitar Architects 2009) b. Archaeological excavations and findings under the present Plaza. (Source: Department of Antiquities) c. The out of scale congressional mosque d. A new water feature at Ein Plaza.
IRBID CITY HISTORIC CORE AND ITS CULTURAL HERITAGE: ASSESSMENT OF THE URBAN HERITAGE FABRIC

Irbid is located in the northern part of Jordan and is the capital of Irbid Governorate that has an area of 1,572 km², with a total of about 1.137 million inhabitants. In the past few decades, Irbid city witnessed excessive urban growth rates associated with the large increase in its population (Figure 8). Due to its unique geographic location, Irbid has become an important commercial and administrative centre in the North of Jordan; the city centre/core attracts all kinds of commercial activities serving the population of the larger city and nearby towns and more than 300 villages around it. The core provides also an urban space in which a multiplicity of social, economic and cultural practices operated at different levels.

Figure 8: Map illustrating rapid urban growth for Irbid city (Ababsa, 2014, fig. 39, p 405-406)
The historic core of Irbid including the Tal, shown in Figure 9, houses institutional buildings such as, the Saraya (1886) (formerly an Ottoman prison and command centre), which was turned into a Museum of Antiquities (Figure 9b), and other buildings established in the early to the middle of the twentieth century including religious buildings, educational facilities, City Hall, police headquarters, large parking lots, and unused open spaces (Figure 9 a, b).

Irbid city fabric and growth was formed at the end of the nineteenth century and the beginning of the twentieth century around one nucleus- the Tal. Interestingly, besides the existing archaeological site at the Tal, Irbid core is preserving 1920’s and 1930’s building styles of the region. The houses especially of those of the wealthy migrants from Damascus were special. Figure 10 illustrates the present distribution of heritage buildings in the study area with a total number of 85 buildings. The city constantly developed after 1930. Presently, the city centre attracts the new poor migrating families and the working foreign labour force. The middle-class families moved to the southern part of the city towards the area of the University of Yarmouk. Thus, the old neighbourhoods became a transitional node, for its different new inhabitants, of different mix and origins. Several old buildings were deserted or were torn down. In addition, the influx of Syrian refugees over the last five years has again affected seriously the city by the migrations of more than 300,000 refugees to Irbid.

Figure 9: General views of Tal Irbid; with part of the city ancient wall (a) The Saraya (1886) turned into a Museum for antiquities (b), General view of the Tal in the background within the modern city (c). (After Haddad and Fakhoury, 2016, fig.1 a,c,d)

The main heritage study was conducted as part of the project launched by the Ministry of Tourism and Antiquities of Jordan (2005-2006) and in conjunction with the Municipality of Greater Irbid. It proposes regenerating Irbid city centre and revitalizing selected heritage buildings within the urban core of the city that is heavily urbanized. The Ministry proposed project aims to provide special attention to significant locations within the study area. The project team for the study was formulated by Consolidated Consultants (CC), and the authors of this paper as the historians and urban heritage experts. The study also aimed at developing the key heritage buildings and related open spaces of the study area (Consolidated Consultants Reports 2005, 2006, Abujaber, 2009).

The area under study consists of the Tal of Irbid and the adjacent area, extending on an
approximate area of 500 dunums, forming the historic core (Figure 10). The built-up area occupies 44% of the total surface area of the study area. Major arterial roads and streets run along the edges of it. Al-Hashimi Street is the only arterial road penetrating the mid-section of the study area. The area south of Al-Hashimi Street contains a combination of heritage and traditional commercial activity. Those commercial facilities are easily accessible throughout the site, where most of the commercial activities are abundantly distributed along Al-Hashimi Street and within the commercial district to the South of the Tal.

The field study included data collection, on-site evaluation of physical and structural components, and a detailed photo survey of the relevant components in the urban environment. The well-documented photo survey of the main street elevations and places of interest facilitated a better understanding of the identified patterns and their locations (see Figure 19). A social profile for the area under study was developed together with surveys to identify the needs of the local community.

The main cultural significant elements of the urban fabric and formation of Irbid historic core are identified in the Tal as the city’s main Landmark in addition to the fabric of the suqs and residential quarters. The Tal dominates the skyline of the city (Figure 9c) where Al Saraya, built in 1886, was turned it into an archaeological museum by the Department of Antiquities during the late twentieth century.

The Old neighbourhoods (al-Harat) were formed from three main neighbourhoods (Harat) (Figure 10b). The neighbourhood reflected the social fabric of the city and contains numerous urban heritage buildings such as al-Nabulsi house a well preserved example of the Damascene courtyard house typology (turned into a cultural centre) (Figure 11a, b), Al-Sharairi house, a traditional courtyard house category (turned into a political museum) (Figure 11 c, d), and many large town houses and buildings constructed to accommodate the main families of Irbid, leading the economic power of the city, such as the prominent example of Joumah family house, a mixed-use (commercial-residential) townhouse (Figure 11e).

Two suqs existed in Irbid; the main one is called Suq Irbid al Qadim (old) and the other Suq al-Khamis (Thursday) (see Figure 10). In addition to four significant religious buildings which dominated the visual characteristic and physical kinetic axis of the city. The old city fabric was dense with a meandering pedestrian network.

![Figure 10: a. Heritage buildings distribution in the study area with a total number of 85 buildings marked in orange, b. the three neighbourhoods of Irbid (Harat al Qasbah) in relation with the Tal in 1876 (After Haddad and Fakhoury, 2016, fig.4).](image-url)
Irbid Municipality for the purposes of restoration and reuse and financed by MoTA. Two of those buildings were former residences. The Nabulsi house (Figure 11a, b) represents the dominant residential heritage building typology that became common during the 1920's at the historic core and was selected for its location significance, its aesthetics, and building typology. The house was turned to include a museum of residential heritage on the lower level. The museum features the traditional urban lifestyle of the Irbidi society. The upper level of Nabulsi house houses a community development project. The project proposed for local women the opportunity to produce pieces of traditional embroidery for sale to tourists visiting the lower level.

Meanwhile, Al-Sharairi house (Figure 11 b, c) dates back to the 1900 – 1920's era and was home to a famous local Irbidi iconic military commander during the Great Arab Revolution, and later a famous politician at the early years of nation building (Ali-Khulqi Al-Sharairi. The house was turned into a museum of local political history. The third building; Juma'a building of three floors dates back to the 1930's located on Al-Hashimi street and is easily accessible. It is a mixed-use (commercial/residential) townhouse structure, where the Juma’a family lived in the second and third floors while the street level shops were used for trade in spices and aromatic herbs. In addition, the upper two residential levels were used as an inn for a period of time (Figure 11d), and will be invested as an inn.

Figure 11: (a) Al-Nabulsi house and Jum’a square before intervention (2009). (b) Al-Nabulsi house and Fo’ara square after intervention (2014) (After Haddad and Fakhoury, 2016, fig. 6 d, e). (c) Al-Sharairi house before the intervention. (d) Al-Sharairi house turned into a museum of local political history (2014). (e) Jum’a mixed-use building townhouse.

Following to the above study and in 2010, a master plan was developed for Greater Irbid by Amman Institute and Planning Alliance but has not been approved yet. Protecting heritage areas including natural and cultural heritage, for current and future generations, was one of the planning and development principles identified as a result of the public forums and informed by the vision and community aspirations (Irbid Growth Strategy, 2009).
GENERAL ASSESSMENT OF THE NEGATIVE EFFECTS OF CURRENT URBANIZATION PRACTICES AND POLICIES ON SALT AND IRBID CULTURAL HERITAGE SIGNIFICANCE

The following presents a brief discussion and evaluation of the existing conditions of the current urban context and urban formations, based on a rapid assessment of the different studies undertaken in the two cities and scholarly observations by the authors of this paper, that were involved in different activities or studies concerning both cities during the last two decades.

This includes the general assessment of the current conditions of heritage buildings, the land use practices, and other planning and management aspects, including threats and deterioration aspects as also the development needs facing the two historic cores.

Like other cities in Jordan, Salt and Irbid historic cores have a stock of built-up heritage assets that lie at its physical centre (Figure 10a, 3), where the majority of these key heritage buildings are still under the ownership of local members of families and remain untouched by restoration efforts. However, the majority of the residents of these old buildings do not continue to live in them. The remaining families and communities living in are often too poor or ignorant to maintain these heritage stone houses.

The adopted urban practices and policies, including their impact on the existing urban heritage, were reviewed to understand the urban process in those two cities. Indeed, the land use changes at the core enable us to examine the rapidly developing centre and its connection with the conservation process.

In Irbid, 41% of buildings in the core site has commercial uses, 17% are residential, and 19% are of mixed use (residential and commercial) (Consolidated Consultants Reports 2005, 2006, Abu Jaber, 2009). The concentration of the different types of uses divides the site into three districts: commercial, residential, and cultural.

In Salt, the majority of the approved land use is residential and a commercial linear land use indicated in light blue occupies no more than 15% of the core, while the mixed commercial use and public use occupies very small percentages (Figure 12a).

Another concern was to evaluate if the recovery of abandoned buildings could present a good practice, not only in terms of their sustainability but also for the role that public landmark centralities can play in the social revitalization and urban regeneration. In Irbid, from the eighty-five heritage buildings and houses that were evaluated according to their exterior and interior architectural characteristics and their location on the site (shown in Figure 10), only a handful of
key heritage buildings were reused by mainly formal initiatives, including the museum at the Saraya.

In Salt, the other landmark investment was in the adaptive reuse of mainly two landmark heritage buildings into two museums, during the last three decades and the preservation of religious buildings of the English hospital of the CMS (Christian Missionary Society) and Catholic Church in addition to the small mosque. Very few private family initiatives, as in the reuse of Mouasher house, as part of the adaptive reuse of landmark residential buildings for Madafas (family house used for guests), have been undertaken by the current or previous owners of such key buildings.

The condition assessment of the historic core monuments can be determined mostly along with their present function and use. It was observed that heritage building conditions range from well-maintained to derelict. In Irbid, 75% are considered in moderate condition and above while 25% fall within the derelict or abandoned classification.

In Salt, it is hard to specify the general condition of more than 650 buildings but in the most recent study of CulTech-2014 out of the 49 buildings surveyed 18.5% were in good condition, 66.7% in medium condition while 14.8 % were in bad or derelict condition (Figure 13). In Salt, the good condition of buildings in the CulTech study area is related also to the resident being the owner.

However, the buildings which have no further utilization tended to decay rapidly, while the buildings which are still in use have a better chance of being maintained. Clearly, the buildings which have a new function through "adaptive re-use" are also better maintained.

![Figure 13: condition assessment of 49 buildings within the CulTech study area (Fakhoury and Haddad, 2014, fig.1, p.20).](image-url)
From the conducted survey and reviewing the current organizational plans for the two cores, several main constraints and challenges for the existing heritage fabric, for the local community quality of life and or a tourism destination were defined, as follows:

1- **The severe and rapid urban change of the two historic cores (1950-2000) is very noticeable in Irbid and As-Salt.**

   a. By the year 2000, the core in Irbid is greatly occupied by modern out of scale structures dispersed or replacing the heritage buildings (Figure 14). The improper and rapid urban development process encouraged the construction of many new large commercial and residential buildings at the historic Irbid core. Hence, the Tal of Irbid lost its place identity that once promoted the visual image of the city. In fact, the rapid urban development processes also encouraged the construction of many new commercial buildings at the historic Irbid city core, which caused traffic problems, such as in parking wide trucks on narrow streets for loading and offloading goods for the new commercial activities.

   The negative results of the inner city slum pockets also spread throughout the core of Irbid due to the permission for multi-storey buildings along the periphery of street blocks. The newer commercial sprawl extended along the main commercial arteries creating urban pockets of threatened derelict urban vernacular buildings and remains behind the new development.

   ![Figure 14: Two aerial photos illustrate the rapid urban growth in a comparison between 1953 and 2000 for the shaded area of Irbid historic core. (After Haddad and Fakhoury, 2016, fig. 2).](image1)

   ![Figure 15: An example of a heritage building in Irbid being removed and turned into a parking lot. (After Haddad and Fakhoury, 2016, fig. 10 b).](image2)

   The newer higher buildings caused fragmentation to adjacent heritage structures due to scale variations and partial or complete blocking off street view and public open spaces and obstructed physical and visual connectivity as also walkability, and pedestrian
accessibility that once existed. Thus it has contributed to the isolation of such heritage pockets behind modern multi-storey façades. Some of those new multi-storey buildings are even constructed in place of heritage buildings after being removed (Figure 15). An example from Irbid historic core is the old market area, where the remaining abandoned buildings of this market are located within an urban pocket between the Al-Hashimi Street and the Farmers’ market (Figure 16). Usually, these places are inaccessible, separated from the city core by high walls. Poverty in slum pockets reflected in the lack of maintenance of traditional buildings and public services also require urgent concern.

Figure 16: Examples of the spread of derelict and abandoned heritage buildings in inner-block locations of Irbid core. (After Haddad and Fakhoury, 2016, fig. 11 b, d).

Figure 17: a. Modern buildings dominated the city centre of Salt replacing the landmarks of the Ein Plaza of the beginning of the twentieth century up to a few years ago. b, the Ein Plaza of the beginning of the twentieth century. c. Ein Plaza of 1984, mostly demolished but for the heritage building of Abu Jaber.
b. However, in the heart of As-Salt, modern white blocks mushroomed along the main Ein Plaza and replaced the Ottoman Saraya and old congressional mosque with new governmental buildings and a new mosque during the late sixties and early seventies of the last century to ease car traffic (Figure 17). This replacement extended through the commercial arteries along the valleys. Still, the new multi-storey commercial strips could not suffocate the traditional fabric because the grand mansions of the early twentieth century which rose up to three and four floors, in addition, the mountainous topography could still showcase the abandoned traditional ensembles of the different mountain slopes towering above the new commercial buildings of the valley. In spite of this, the new commercial strips at the foot of the hills greatly affected the main Ein Plaza and commercial arteries of the flat areas at Al-Maydan and Deir Street. These created a heavily urbanized mix of mainly commercial with minor residential uses, in addition to abandoned heritage locations, which are currently challenging to sustain (Figure 18).

c. Many heritage residential buildings are neglected or abandoned in both cores, as evident in the different field surveys. In addition, façades fronting on streets and pathways in the commercial districts of Irbid are heavily covered by shop signs and advertisements of different size and colour varieties that perceiving the form and aesthetics of those buildings is difficult (Figure 20). New restrictions on façade shop signs and advertisements alleviated some of those problems in certain commercial arteries in Salt, but the problem is still evident in other parts of the city core.

Figure 18. New developments hiding partially vacant or used heritage complexes, but can still be visually seen because of the topography at As-Salt.
One of most intractable problems in the historic cores concerns the connection between the traditional and modern physical forms and treatments. Modern developments disregarded the heritage value and contributed to fragment heritage assets in the urban core. Structures of enormous height and mass introduced in recent decades are grossly out of scale amidst one and two-storey historic buildings with narrow streets, at Irbid. The introduction of multi-storey buildings in most cases destroys the human scale. Another critical problem is, in the large majority of these traditional buildings are poorly maintained and invariably with illegal, top-floor extensions, as reflected in Salt and Irbid city (Figure 18, 19).

2- The poor planning for heritage protection and related urban policies; In the two cities approved Master (landuse) plans did not consider the heritage cores and buildings, thus resulted in the destruction of the image and authenticity of main parts of the historic area.

During the last decades, many heritage buildings were removed in Irbid (Figure 15 & 16) meanwhile, many of the isolated heritage buildings are still threatened while they became fully encircled by modern urban structures. This also reduces the connectivity between them and decreases their significance as landmarks as they become very hard to view and reach, thus they became abandoned. Figure 16 illustrates examples of the isolation concern, where the heritage building becomes buried within the urban area of mixed-use at Irbid.

On the other hand, the implemented urban laws and policies do not take into consideration the traditional uses and the particularity of these heritage buildings. Lack of effective protection measures can still encourage people to remove some of the existing heritage buildings or parts of them and to replace them with modern multi-storey buildings (Figure 16). This issue represents a real challenge for enhancing the urban heritage environment and protects the traditional buildings at Irbid city historic core, which still needs urgent action.

While the protection of heritage buildings in Salt is hoped to be achieved by the recent declaration of the core of Salt as an area with Special Regulations, that is still to be implemented.
3- Lack of public awareness activities to rebuild the sense of belonging and empower the romantic nostalgia to lead the conservation and reuse of Irbid & Salt traditional buildings;

Actually, no clear action was undertaken, until the present CC Irbid project and study of 2005, was tendered by the Ministry with the cooperation of the local municipality and several consultations were undertaken. No awareness activity or city consultation was conducted earlier to encourage the public to restore and reuse their existing urban heritage with compatible activities such as for a (Madafa) except for a singular case of Madafet Arrar in Irbid, where the family of a national poet undertook this project. The lack of understanding and appreciation of the historic value of the collective cores’ memory is a critical issue. It explains why the owners overlook the need of carrying out a proper and regular maintenance works for their properties (Figure 16). Though, the question remains, ‘How can these traditional buildings affect the Irbidi and Salt contemporary society and people who inhabit those dwellings?

As for Salt, the number of heritage and planning studies is large with strong support and back up from Salt Development Corporation (SDC) and leaders of the society, which in reality only mean more of an elitist awareness, divorced from the popular masses. This limited public awareness about the cultural significance of this heritage and greater demand on land for commercial investment, supported by increased land prices, had resulted in either destroying many of the existing heritage buildings in Salt or isolating them from the existing urban tissue and identifying them as ruins (kharabeh) (Figure 17,18).

Recently MoTA undertook several initiatives with JICA in Salt to raise local community awareness and training as part of the ‘Salt Eco-Museum’ for Abu–Jaber residence -Historic Old Salt Museum- and Salt Trails “The Japanese grant is currently used to train tour guides and residents on how to receive tourists and promote their city’s sites and local products. With this programme, many women living here can host groups during their tour around the city and make them lunch,” (Goussous, 2016). The momentum of this training is still not evident in the city since the number of tourists to Salt do not exceed 3300 visitors a year, based on the number of tourists that visited the Historic Old Salt Museum (MoTA, 2012)

Eventually, this participation could not empower the inhabitants of the two cities to stop the destruction of some of the main landmarks of both cities where the authenticity of parts of the historic areas was and can still be clearly affected.

4- The insufficient services and systems managing the pedestrian movement in the historic core cause a risky traffic-pedestrian interaction;

In Irbid, this is noticeable at the Al-Hashimi Street, the major arterial road, (Figure 21b) connecting the different commercial activities with its surroundings.

The centre of Salt also suffers from congestion and dense traffic during the day. Congestion nodes spread along al Maydan Street connecting with Al-Deir and Hammam Street where also the lack of enough parking and triple car street parking practices lead to serious traffic congestion (Fakhoury and Haddad, p 36) (Figure 21a).

In addition, lack of traffic management is another issue clearly unaddressed, by the traffic police and local municipalities at both city centres. Several traffic rapid assessments, researches and public meetings have indicated that double & triple parking for example at al-Maydan Street of Salt is not ticketed by the local police. A questionnaire in Irbid reflected that the lack of public services such as car parking spaces impacts the attractiveness of the downtown during the day (Tarrad, p.4279)
a. congestion nodes and high-density traffic at main arteries of the historic core of Salt  b. congestion and unsafe interactions with traffic in Irbid.

DISCUSSION AND RESULTS

The rapid assessment and observations for the two cores were identified and the most important indicators were selected and summarized. The main urban issues affecting both historic cores of Salt and Irbid are illustrated in the following table. Generally, we can observe that there are common problems in both cores. Meanwhile, the scale of the phenomena is different since the spread of traditional buildings in the cores varies (Salt has more than 650 buildings and Irbid has less than one hundred). The central governmental investment in Salt is larger, but the stresses related to population numbers in Irbid core is greater (refer to Table 3).

Table 3 Urban phenomenon and constraints at the core of Salt and Irbid cities

<table>
<thead>
<tr>
<th>Urban phenomenon at the core</th>
<th>Salt</th>
<th>Irbid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership and tenants impact</td>
<td>Original building owners mainly migrated to Amman, several waves of resettlement took place and lately the foreign labour force working in Amman is attracted to live in part of the traditional old neighbourhoods.</td>
<td>Some of the original building owners migrated to Amman, or to outside the old quarters, where several waves of resettlement took place and lately Syrian migrants are attracted to live in the old neighbourhoods.</td>
</tr>
<tr>
<td>Urban sprawl due population increase</td>
<td>The population increase was not severe after the establishment of Jordan. A good percentage of the residential buildings at the core are vacant while the traditional commercial streets continue to be used at the core.</td>
<td>Continuous population growth, currently the third largest city in population in Jordan. This had a great impact on the heritage fabric although some heritage buildings still stand vacant while the commercial uses thrive.</td>
</tr>
<tr>
<td>Traditional fabric and new urban policies; - Mixed landuse strip development -Vacant buildings</td>
<td>-The traditional urban fabric of the city was clearly more developed, before the establishment of modern Jordan. -More than 650 heritage resource is documented. -The topography showcases the remaining traditional ensembles on the different mountain slopes, hence the new commercial strips and buildings did not suffocate the traditional fabric visually completely but greatly affected the main Saha and commercial arteries of the valleys.</td>
<td>-The villages’ ensemble around Irbid later formed together with Irbid’s urban fabric of suqs &amp; main neighbourhoods the traditional fabric of the present city. -More than 85 heritage resource is documented. -Presently the traditional structures are mainly surrounded by strips of mixed use or modern commercial buildings, creating derelict unattended pockets of traditional</td>
</tr>
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</table>
The key question is if, through preservation and adaptive reuse of the two historic cores we can create a civic landmark and a cultural and social meeting place, capable of strengthening the civic characteristics and at the same time enabling dynamic relationships in the lives of the two cities’ citizens. In fact, living in the two cores is presently stressed and what is needed is a direct intervention in the physical structure of the two historic cores to convince people- and especially decision makers - that there is a serious attempt to stem the decline of the urban fabric and reinstate the two cores for ‘people instead’.

A more progressive approach to developing a sustainable heritage conservation action plan for the two historic cores needs to rethink the role and intentions of conservation and restoration, and the importance of housing in the conservation action plan process. Meanwhile, incorporating public participation into integrated conservation and planning policy should be beneficial to all parties (Yung and Chan, 2011).

Otherwise, the two urban historic cores will continue to grow, as will the related financial, social and other problems. Under these circumstances, conservation can be relegated to a low development priority. In general, there is also an incredible shortage of funds for the upkeep and maintenance of the government owned, registered heritage buildings, according to the municipality. Hence, much of the conservation work in the historic cores is anticipated to be undertaken by the private sector in partnership with the public sector.

The urban heritage strategy needs to deal with the gentrification process and the population’s attitude to its cultural heritage assets and address the demands of the local community about the economic value of the historic assets in addition to discussing openly benefits for the local community. Several initiatives in engaging the public in Salt have been undertaken but the
challenge of protecting up to 600 resources eight times the number of resources at Irbid, and a large number of studies necessitate institutionalizing the effort and planning campaigns of awareness, as part of any ongoing conservation initiative.

To improve the quality of life in the urbanized derelict quarters and create new places of shared interests for inhabitants and visitors. The trails and network of open spaces and derelict abandoned buildings in many inner block locations have the potential and the possibilities of creating neighbourhood playgrounds, public parks, and open spaces or enclosures.

While it is clear that several private initiatives invested in the reuse of heritage buildings for tourism activities in other cities of Jordan, such as in Madaba and Fuheis traditional cores and earlier in Taibet Zaman of Wadi Musa, that is not evident in Salt or Irbid. In the nineties of last century, a visitor and craft centre opened as Salt Zaman and closed by the mid-nineties and only recently a private kitchen opened in parts of a traditional building in Salt to accommodate visitors. Until today no proper full-time restaurant or entertainment place exist in the city core, but for al-Amad traditional authentic barbecue shop, representing the legacy of the last century. As for Irbid, the universities’ city, no private investment in tourism has been associated with the traditional buildings and the related open spaces.

Hence, enhancing the pedestrian network at Irbid core can benefit not only the local community quality of everyday life but also its visitors. This also means that the road infrastructure, pedestrian services, and safety, may need major rehabilitation. Luckily, certain trails and intersections at Salt have already the potential to elevate the heritage and aesthetic experience of the locals and tourists. However, there is a core existing infrastructure of museums in both cities. This can support the potential visitor’s attraction.

Still, it is only by infusing the historic core with its full role as a place of living, of socio-economic and cultural creation, and shared enjoyment and memory, and by means of compatible activities that we can enhance the historic cores of both cities. Attracting the youth and university students to live back in the core and arouse their interests to contribute further to the local cultural identity could thus restore the cores’ collective memory and authenticity.

The main concerns, obstacles and challenges to the implementation of any conservation strategy are:

1- Private ownership of monuments constraint; most of the heritage buildings are privately owned monuments with multiple owners. Therefore, a dialogue with the local community in the city and residents outside the city about the benefits of conservation or investments in tourism facilities should be given higher priorities.

2- People’s perception about conservation and local benefits. There is a need for pilot projects to encourage heritage building owners to invest in similar uses and attract the middle-class families including the youth to come back and live or engage with the city core. Adopting and encouraging small to medium investment projects and not only think of any "Urban mega phenomena of investment" as the stone corner for success is crucial. Concurrently, incentive programs need to be put in place, to increase the sense of belonging and encourage the building owners at the two cities to contribute to their city through investing in new public-private partnerships, upgrading of their heritage properties, and initiating community development projects. There is a need to demonstrate a practical mechanism to increase local participation in heritage conservation, such as financial incentives (tax exempts), small loans to house owner and tenants for maintenance of their houses, with very little interest.

3- Physical and landscaping- environment challenge; conserving the urban/cultural & natural heritage landscape of the two cores require declaring entire sites as regulated heritage districts. A balance between the needs for urban renewal and protecting the landscape morphology of the old cities’ cores should be respected within its environmental and natural significance. The study of Shafa Balqa 2030- published in 2012- recommended that the city of Salt be developed as a
tourist destination by protecting not only the cultural heritage core but also the natural valley system as well as its surrounding cultivated lands, but no relevant plan has been approved to date.

Salt has moved towards declaring the city centre an area with special regulations with planning restrictions on certain areas for visual protection of the setting, but not in relation to protecting the natural assets of the valley and its cultivated lands. Moreover, in the absence of a declared register for the traditional buildings, marked on the land-use plans, and with no detailed master plans with proposed building regulations for heights and densities per plot, no progress has been or could be achieved during the last few years. On the other hand, Irbid historic core and surroundings have no protection and special regulations status for its historic core and its related heritage assets of surrounding natural and agricultural lands.

Strategic planning for future urban growth necessitates using tools such as a GIS system to develop comprehensive land use plans and create applicable buffer zones (Al-kheder et al., 2009) in order to protect the heritage core of the city while linking it with its surrounding environment. Such plans should include not only all the heritage buildings, stairs, open spaces but the valleys, water springs, trees and natural assets.

4- Accessibility/mobility enhancement challenge; Regarding the traffic problems at the historic cores, there is an urgent need for enforcing measures to reroute the traffic to reduce the pressure on the historic parts of the two cities. Actually, from previous practice, actions for altering some streets to pedestrian-only streets are not enough. Large volumes of pedestrians are forced to use narrow congested sidewalks of heavily trafficked streets during the day to travel between the pedestrian routes in the different neighbourhoods. It is obvious that discontinuity of the pedestrian flow would hamper also the touristic experience.

Towards Conservation Action Plans And Programmes

A conservation plan can enable people living and working in the historic area to preserve their traditional buildings and spaces while creating an urban environment that is in tune with today's requirements (Smith, 1988). Buildings would be restored over a long period of time, according to the needs and means of the residents. Currently, there is practically no access to low-income finance or credit, so rehabilitation and even maintenance would remain beyond the means of most of the people in Salt and Irbid.

There are two main aspects, often considered to be contradictory, that direct the framework of an action plan for the historic cores; those of economy and culture. Consequently, the conservation strategy should be formulated as an alternative to the much more common pattern of development versus heritage; and potential with identity as an alternative to potential versus identity (Mohit and Kammeier, 1996). Ultimately it is only with this more democratic, participatory process that a more meaningful and sustainable conservation and restoration programme for the two historic cores can succeed and be developed.

Hence the priority objectives of a sustainable rehabilitation for the core should aim towards Improving residents' quality of life. Valorisation of cultural & natural heritage. Improving social cohesion and Promotion of economic vitality and environmental efficiency. (Rehabimed, 2008):

In summary, the recommended action plan can generally be classified into quantified actions affecting the physical territory and sectorial policies to be carried out (social, environmental and economic actions) at the service of an objective, which is to achieve the desired scenario. Figure 22 illustrates the specific actions leading to drafting the rehabilitation/conservation action plan based on Rehabimed framework.

- Actions for modification of the structure and fabric of the core area can include:
Different forms of protection, Specification of compatible functions and uses, Developments of infrastructures and services, Mobility and accessibility plans, and Linking with bordering areas.

- Projects of intervention on architecture and open spaces can include:
  Rehabilitation projects of existing buildings, guidelines for the insertion of new architecture and projects for the linkage of public open spaces.
- The economic, social and environmental policies need also to be addressed to sustain the protection of the heritage; i.e tax exempts for owners restoring their buildings, training centres, greening policies...etc. In addition, the economic regeneration of the core needs to be addressed where tourism opportunities can be one of these cornerstones.

Valorization of the cultural and natural heritage is also about allocating the place identity for the two historic cores. One needs to start from the collective memory of each historic core in its most modest form, including even the preservation of trees and natural greenery.

However, the task for architects, planners and municipal administrators is not only to preserve prominent elements, especially the façades of the traditional built environments and adapt them to conform with the more positive aspects of modern life, but also preserving the integrity and values and collective memory of the community itself, while upgrading the elements to comply with modern life standards and expectations.

Figure 22: Drafting of the Rehabilitation Action plan (Rehabimed, 2008, p. 37)
Although several studies and projects assessed the heritage buildings in As-Salt, mapping of the collective memory was not a major concern for planners in the rehabilitation of the Ein Plaza. Even the remaining seeping water of the spring (Ein) from which the plaza took its name has not been recovered and was pushed back by pouring concrete when the congressional Mosque underwent a facelift recently by 2010. On the other hand, the elderly men of Salt were accommodated in the upgrade of the plaza by JICA and the elderlies can still play Manqala, a traditional board game, at the main plaza at the historic core of Salt.

Hence, actions for the modification of the structure of the present cores should include as a priority:

1. **Reinstating the traditional and cultural identity of each traditional neighbourhood of the two cores by:**
   - Encourage the use of the abandoned buildings, even for compatible temporary activities instead of being nodes for waste collection.
   - Reinstate the traditional residential use of the different neighbourhoods (Al-Khader in Salt and Al-Mamluk at Irbid for example).
   - Provide new attractions such as refurbishment of neighbourhood plazas and provide public services and inject appropriate activities at night. For example, Irbid Fo’ara Square (Figure 11a, b) provides an introductory open space to the residential cluster and ensures easy pedestrian accessibility and flow. Small open spaces in neighbourhoods can also be turned into small gardens as proposed for Al-Khader at Salt (Figure 21).
   - More strict regulations on demolishing buildings, which must not be done unless it is the last resort. Where replacement of buildings is necessary, it is essential that replacement or infill buildings are of appropriate scale; otherwise, the units will lose their identity even if the street lines remain unchanged (Whitehand et al, 2011).

2. **The introduction of a safe pedestrian network.** Altering the existing street network to enhance pedestrian connectivity and introduce new pedestrian paths as proposed at the historic core of Irbid including the available open spaces (Figure 23) and in the new development plan for the Oukbat bin Nafee area at Salt (Figure 24) is crucial.

There are real obstacles and problems in accessing the heritage sites with the current road system which contributes significantly to the isolation problem they are suffering. The major issue affecting continuity is the heavy traffic along the main streets at the two cores. In addition, enhancing security measures is required; such as in using surveillance cameras feeding into the closest police kiosks. **Figure 23a** proposes a safe pedestrian network between the Northern and Southern part of the core of Irbid with an underpass at al-Hashimi Street, a solution to heavy traffic while linking the Tal with the rest of the enhanced pedestrian network of the heritage city core. Activation of the role of the different traditional suqs while also enhancing the residential neighbourhood of the western Mamluk mosque can enhance the pedestrian network (Figure 23b).
The project of developing the Oukbat bin Nafee area at Salt also proposes allocating underground parking space and strengthen a safe pedestrian access to the core in addition to maintaining a green lung in memory of the cultivated lands of Salt while activating the water recharge of the valley (Wadi As-Salt) within a comprehensive vision for reinstating the role of the Wadi of Salt as an integral element of the city development (Figure 24). Currently provision for parking and allocating an open space is being implemented in the city but without a comprehensive vision for reinstating the role of the valley, in relation to the cultural assets of the city and its collective memory.
While ‘Projects of intervention on architecture and open space’ could include:

1. Setting an outreach technical office to disseminate the criteria and information for the rehabilitation of the traditional stone buildings to residents, before signing with any contractor. Although technical information cards have been developed to direct the building owners to common conservation and maintenance for their buildings, as part of CulTech project, the municipality, and related authorities still did not to date, distribute the information cards to the relevant owners or users to guide them on maintenance procedures.

2. Introducing simple natural landscaping elements at some neglected open spaces with good views can contribute to the open spaces to serve both the local community and visitors-tourists. Creating neighbourhood playgrounds, public parks, and open spaces or enclosures, such as proposed for Al Khader/Rummanat neighbourhood in Salt. (see Figure 25).

Figure 25: Left over spaces to be developed as green spaces between the residential heritage buildings of Al Khader neighbourhood of Salt. (Fakhoury and Haddad, 2014, fig 25, p 48)

**SUMMARY AND CONCLUDING REMARKS**

The analysis of the data of the two cores presented in the previous sections proposes specific recommendations, towards an integrated urban conservation action in order to maintain the historic urban fabric as a whole. For that, we should strengthen the need for considering the urban heritage in a holistic manner. Those two core areas have unique cultural features.
Therefore, exclusion of such urban heritage would lead to the loss of integrity and urban degradation. However, to enhance the overall urban system in those two study areas by balancing between the need for preservation of the existing heritage and sufficient planning for the modern urban fabric is urgently needed. A sustainable urban heritage conservation and tourism action plan should be integrated into the master plan of both cities.

The urban heritage should be considered as a basis for urban planning and development projects at the historic cores of Salt and Irbid, so as not to be ignored and neglected further, as has been done. The action plans for such development projects and their timeline must be clear and shared between all stakeholders. This while conservation of the urban heritage must contribute to the quality of life of people, the recovery of the abandoned buildings in the two historic cores can trigger the beginning of new regenerative programs, contributing to the sense of belonging and identity for the communities at Salt and Irbid historic cores. It actually, can play a genuine role to an emerging pattern of interactions between modern and urban heritage sites, with its rich traditional buildings and historic landscapes. However, care should be given to the open gathering spaces; for example, the design for the new Saha in Salt must be revised from the perspective of urban heritage to be more integrated into the urban fabric of the Salt city.

In Salt and Irbid, the key issue is related to the existing urban policies, and the absence of a comprehensive master plan to organize the various land use activities, vis a vis their heritage properties. This is actually causing an excessive negative urbanization process at different places, where some significant heritage buildings and units can still be replaced with modern inappropriate scaled structures, and thus, the units lose their identity, authenticity, and collective memory. There is an urgent need to avoid further fragmentation caused by modern structures.

In terms of monuments, moving the property of selected key houses to the ownership of municipalities was a good move to stop the misuse and risks affecting the exterior and interior of these key landmark complexes when they were turned into museums addressing and interpreting the collective memories or local history. It is stressed that these need to be seen as part of conservation action areas or even tourism programmes so that their sustainability and revival will be most feasible while they are integrated into new creative concepts of use. This should be coupled with tax incentives to encourage owners to restore their residences and encourage new partnerships with local non-governmental organizations, amongst others to strengthen the local initiatives for the creative reuse of these assets and strengthen their sense of ownership.

Lack of planning, research, and public awareness about the cultural significance also caused major drawbacks in Salt and Irbid historic cores. Minimum and reversible intervention, however, must be done under supervision to ensure that compatible materials are to be used and no harm to the integrity and authenticity has been undertaken. Meanwhile, engineering contractors responsible for the rehabilitation of heritage buildings must be certified according to the quality of their previous work and experience (training on restoration’s techniques).

Conserving the original zoning in the heritage blocks can help avoid residential gentrification, which in part keeps heritage buildings within a block inhabited and protected. Actually, the present land use and adopted policies are lacking the vision of urban integrated conservation to achieve sustainable interactions with the existing heritage. Enforcing by-laws and regulations that deal with scale, height, and setbacks of new buildings should avoid further negative effects on residential heritage buildings and related assets. The lack of active public participation nor the available applicable legal, financial and technical mechanisms, suggest the urgent need for a conservation action plan with sufficient technical and training programmes within the conservation context to retain the remaining significance of the historic buildings erected mainly in the golden age of the two cities (1900’s to 1930’s) and further contribute to a future identity.
The local community, thus, must be treated as a major stakeholder of the development project. However, more specific regulations must be carried out to protect heritage buildings from any intervention made by owners. Community development can be further reinforced through upgrading traditional urban spaces within the different neighbourhoods and creating community open spaces. Any conservation strategy should create certain tools to engage the public and attract the middle-class families to come back to the historic cores to solve the current urbanization problems at the two study areas. Ultimately, a balance needs to be struck between the "conservation loom" and local community involvement, while consideration of the collective memory can contribute to the sustainable urban conservation, and can highlight the social features of this sustainability.

To enhance the existing urban system, there is an urgent need to develop an integrated urban conservation plan in relation to a comprehensive master plan and to identify the specific land uses and prevent negative mixed-use activities at the heritage area.

In spite of some differences between the urbanization phenomenon at the two heritage cores, at Salt and Irbid, mainly in relation to the number, spread and density of heritage buildings and scale of the historic core, the number of population, the role of the municipality and central government, etc., still we can confirm that the challenges are similar. This supports the hypothesis that a sound strategy for the sustainable conservation of traditional cores at Jordanian cities is urgently needed for a sustainable conservation of the Jordanian historic city cores. In conclusion, the two historic cores provide an excellent opportunity to embark on a bold conservation strategy that can put these city cores on the map of innovative city planning in the 21st century. The collective memory will become an agent for linking generations through which it is possible to give further importance to the place where the events are unfolded for the past, present and future inhabitants of those two historic cores.

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