

Sustainable Urban Conservation in Heritage Area- Case of Koya City

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ABSTRACT

This study is a plan to investigate the sustainability in the heritage area of Koya city. Koya city still suffers from a continuous neglect of the urban heritage area. Thus, the quality of the heritage area dropped to reach a similar level to some of the least developed countries.

This issue needs to be addressed in optimizing the sustainability in the heritage area. To understand the holistic approach to urban conservation and sustainable development and to answer the main research aim, which is how the sustainable conservation performance in the heritage area of koya city, relevant qualitative and quantitative data for the research study has been collected via different ways. In this paper current literature has been reviewed to set up a conceptual framework in the research. Four heritage quarters have been provided for evaluating and assessing sustainable quality of the heritage area. Furthermore, the issue has been discussed with some people from various walks of life through interviews. The outcomes of the study have demonstrated that sustainability has a crucial role in achieving social, economy, environmental development in the urban conservation.

KEY WORDS: Urban Conservation, Urban Heritage, Sustainability, Sustainable Development, Social Sustainability, Economic development, Buffer Zone.

1. INTRODUCTION

Recently, the mainstream of the urban sustainability debate has grown and positioned in the central importance to the international contemporary debate on future developments of the cities, with the absence of the term of urban heritage (Federica Appendino, 2018). The heritage area could play an essential role of sustainable cities (UNESCO, (2014). Due to the rapid growing urbanization, the density of resource consumption, the air pollution, and climate change has increased. Thus, cities are the key contributor to climate change, as urban activities are major sources of greenhouse gas emissions which are responsible for 70 % of global greenhouse gas emissions, 60 % of global energy consumption and 70 % of global waste (UN-Habitat, 2013). With the emerging of this incident, historic cities faced a great problem. These phenomena form a great challenge for the historic cities, while sustainability ambitions and strategies must operate to achieve urban heritage preservation (Federica Appendino, 2017). Therefore, sustainability is the only thing, which could reduce down the harm of the heritage areas. Whereas the historic urban area play a vital role in the figuration of local identity as place of memory, tradition, social values and as magnets for economic and creativity activities (Bandarin, F. & Van Ores, R. 2012). In terms of connection between the past and the future through the expression of the present, the sustainability integrates with the concept of urban conservation.

Therefore, in order not to neglect our history and to get a convenient principle for future development it is necessary to preserve our deteriorating heritage area. Although, globalization, uncontrolled urbanization, over population growth and technological advancement are the constraints which make the attempt challenging. Thus, conservation with sustainable manner should be taken in consideration in all development planning protocols. Koya city is in a strategic location which is among three governorates; (Figure 1). It could be a good place to attract tourists and the focal point to social interaction in the heritage area. The neglect of the urban heritage in Koya city can be collected in some factors; the rapid urbanization and the city growth especially after opening Koya University in the city; lack of a special policy from the government for the heritage area; and lack of the people awareness of the value of the heritage area. For these reasons and to promote sustainable performance in the city, the researchers focus on the sustainable urban conservation development in the heritage area.



Figure 1: Map presenting the strategic location of Koya city among three governorates Erbil, Sulaimaniya and Kirkuk.

Source: <https://www.windy.com/?850h,36.077,44.646,13,p:off>

The problems and obstruct of the research

- Lack of heritage database
- Lack of heritage documentation from any organization whether government or private.
- Difficulty to reach some places in the heritage area because of the deterioration.
- Lack of a previous research on the heritage area.

Geographical location of Koya city

Koya is situated in the north eastern part of Iraqi Kurdistan region, it is strategically located in the middle of Kurdistan and connects with three big cities Erbil, Sulaimanya and Kirkuk(Zakaria et al, 2013), (Figure2).Geographically the city lies between latitude 36.18° and 35.47° North and longitude 44.57°and 44.15° East of Kurdistan region. The city is depended administratively on Erbil city. It is built on the hills of the eastern part of Erbil city. It is 75 km from Erbil, the Capital of Kurdistan region(Saed, 2006).Shaqlawaw is located in the north of koya, Kirkuk in the south, Sulaimanya in the east and Erbil in the western part. The total area of Koya city is about 2050 square kilometers and the elevation of this city is nearly between 625 to 700 meters above sea level. It is built on the hills and surrounded by mountains on two sides;Haibat Sultan Mountain is located in the eastern part of Koya which has an altitude of 1092 meters andBawage Mountain in the North which has an altitude of 1260 meters above sea level (Omar, 2009). According to the Kurdistan census board the population of Koya in 2010 is53, 450 people.

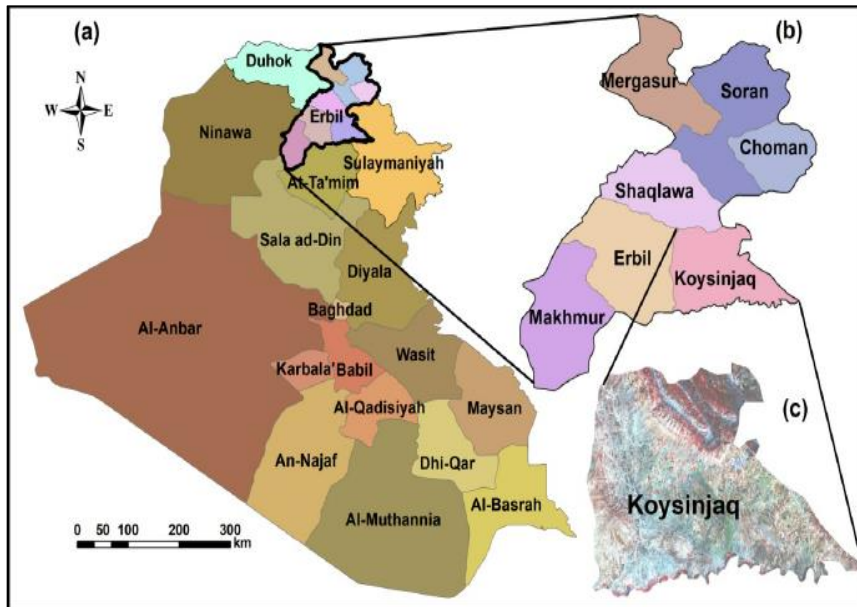


Figure 2: Map Demonstrating the Geographical Location of Koya City.
Source: draw by author by using (GIS) Program

Historical Development of Koya city

Generally, Koya city was developed by eight stages which the first stage started from 1950 and continued to exist; (Figure3). After the first stage, the city grew speedily because of the distributing plots from the government to the residences from the outskirts of the city. Although the distributed lands were random and without any plan from the 2nd, 3rd and 4th stages, the streets and alleys were more regular as compared to the first stage (protekproje, 2011).

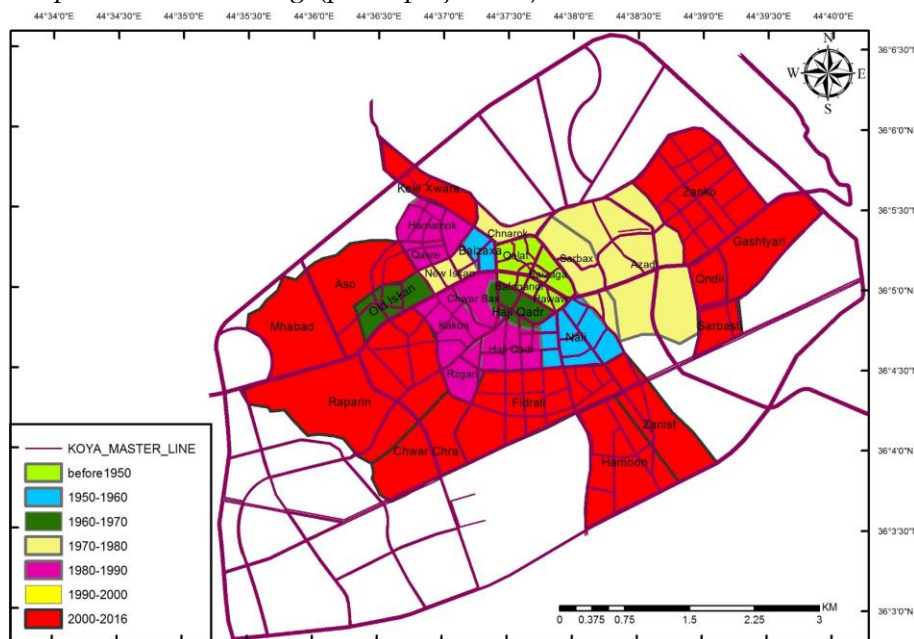


Figure 3: Map presenting the Historical Development of Koya City.
Source: draw by author by using (GIS) Program

Literature review

Urban heritage conservation and sustainable development:

In this part, the critical discussions of heritage in urban conservation sustainable development have been demonstrated.

1. Vision of creating heritage:

Heritage has the power to create our nation in helping us to define our cultural identity and the features of the nature of our lifetime.

According to The National Heritage Council of South Africa (NHC) the heritage concept is defined as "Heritage is what is preserved from the past as the living collective memory of a people not only to inform the present about the past but also to equip successive generations to fashion their future (Lucille Davie, 2013).

In each country historic towns or urban districts are different according to their economic, socio-cultural, and urban system. Historic relics and historic architecture connect intangible cultural and social values with the physical fabrics. Therefore, 'landmark buildings are turned into 'heritage' of cultural and social significance with a creative strategy of city marketing in order to promote city pride among the citizens as well as to the world" (ArifYasinChohan and Pang Wai Ki 2005).

2. Concept of Urban Heritage Conservation:

In the late nineteenth century in Europe, the awareness of the value of historic urban has developed due to the loss of defense structure in the expansion cities. The conservation context is become broader and more complex. It moved from protecting single building to area conservation or district regeneration. (Bhatta, KishanDatta, 2008) As mentioned above historic architecture is linking up the physical fabrics with the intangible cultural and social values within the community. Furthermore,(Bhatta, KishanDatta, 2008) argued that conservation of physical fabric, ensuring continuity of the socio-cultural system and contribution to sustainable development are very much at the core of urban conservation. (TanjaLerotic, 2011)illustrates thatthe process of urban heritage conservation intends to possess the identity of urban and preserving values of the past. There can be an obvious distinction between preservation and conservation of urban areas. Preservation is concerned with fortification of entity buildings and it allows a limited modification, while conservation considers to the all conservation areas and deals with the management of the changes. (Peter J. Lakha, 1994) illustrates that conservation, as a mediator of urban renewal, has to correspond to an important subject in the regeneration of parts of our towns and cities. In this intelligence, the process of urban conservation and regeneration can be seen as mutually boosting. (Nathaniel Lichfield, 1988) in his book argued that the aim of the urban conservation is a "restrain in the rate of change in the urban system which embraces the regional systems within which it functions, with a view to achieving a better balance between conservation and development than would otherwise prevail".

3. Sustainable urban development:

Sustainable development is a complex notion that dates back more than thirty years ago (Dale A. & Hill S.B. 2001). The study collected many author's arguments on sustainable development. "Sustainable development as a development that meets the needs of the present without compromising the ability of future generations to meet their own needs" as defined by the Brundtland Commission and multilaterally agreed by the UN Conference on Environment and Development – Rio 1992 (UNESCO, 2015).Essentially, sustainable development is based on three principles, environmental, social and economic. These are considered the basic needs for the human daily life. To emphasize that, the 2002 World Summit on Sustainable Development (Johannesburg, South Africa) introduced the notion of the three pillars of sustainable development, that is the environmental, the social and the economic, and is considered as

“interdependent and mutually reinforcing”(UNESCO, 2015). Nevertheless, during the URBAN21 Conference (Berlin, July 2000) the following definition was developed to define sustainable urban development: "Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden on the future generation 'cited in (ArifYasinChohan and Pang Wai Ki, 2005). In addition, the heritage conservation contribute to improve quality of the life through reducing waste production; reducing consumption of fossil energy resources and saving embodied energy in rehabilitating heritage buildings. To confirm that(UNESCO, 2014) states that “cultural heritage plays a crucial role in the creation of a sustainable city as a vital non-renewable resource of cities, a catalyst for social cohesion, as an identity and creativity element, as an economic attractor for tourism revenues and as a mitigation factor for climate change.” Despite of sustainability based on the three pillars environmental, social and economical dimensions, (Federica Appendino, 2017) mentioned that culture was introduced as the fourth pillar of sustainable development during the Johannesburg Earth Summit of 2002.

4. Dimensions of sustainable development:

United Nations General Assembly adopted a landmark resolution to achieve sustainable development at the global level by 2030, which was titled: “Transforming our world: the 2030 Agenda for Sustainable Development.” The document includes 17 Sustainable Development goals”. The one is to 'Make cities and human settlements inclusive, safe, resilient and sustainable (Imon, S. S. (2016) cited in Goal 11, p. 21).” The stated highlights the importance of the three pillars of sustainable development, which holds environmental, social and economic development with enhancing peace and security.

4.1 Environmental Sustainable Development

The World Heritage Convention enhances sustainable development, in particular environmental sustainability, through preserving and valuing places of outstanding natural heritage value, comprising exceptional biodiversity, geo-diversity or other exceptional natural features that are necessary for human well being (UNESCO, 2015). As well as the interaction of the environment with both cultural and natural properties responsible to mitigate disaster risks and to adapt to climate change through participated traditional knowledge, strengthened social cohesion and ecosystem services.

4.2 Social Sustainable Development:

As a rule, the social dimension involves the relationship between family and community and a sense of identity. Two main dimensions of social sustainability are argued through exploring the relationship between social sustainability and urban form: “equitable access and the sustainability of the community itself.” Reinforce equity, reduce social inequalities and respects the value of culture of local communities have the potential to contribute social sustainable development. In spite of the fact that enhancing quality of life, well being, ability and providing opportunities should be taken into account in communities which might be the heart of the implementation of the social development.

4.3 Economic Development:

Traditional skills and knowledge could crucially contribute in reviving local economy that selected by their cultural and economic values in the heritage conservation. “World Heritage properties, as cultural and natural heritage in general, offer great potential to alleviate poverty and enhance sustainable livelihoods of local communities, including those of marginalized populations”(UNESCO, 2015). Through rehabilitating and conserving the deteriorated heritage area, the urban conservation has a power role in enhancing local economy for the local residents, particularly by attracting visitors and tourists. In the view the World Heritage States Parties “Developing educational and capacity-building programmes based on innovation and local entrepreneurship, aimed in particular at small/medium/micro scale levels, to promote sustainable economic benefits for local communities” (UNESCO, 2015).

5. Urban Conservation and Sustainable Community Development:

(Bhatta, KishanDatta cited in Cook and Ng, 2001) stated that “people need to feel sense of belonging and commitment to the well-being of their communities so that these are sustainable in the long term.” They further defined: “a sustainable community could be described as one which has an enduring integration of the social, economic and physical characteristics of our total environment”. In the historic towns, integrating conservation with the sustainable tourism is the major factor to foster sustainable community development. Nevertheless, by conserving urban heritage, sustaining the identity of the place, keeping a deep sense of connection to the past, the present and the future generation and the strength of social cohesion are essential for sustainable community development.

Case Study

The study area is within the historical part of Koya city: Baizagha, Qalat and BafriQandi. They are the first stage of developing Koya city. The main road Haji Qader intersect with the three quarters and is divided into two parts Baizagha and Qalat on one side, BafriQandi and a part of Baizagha on the other, (Figure4). There is a traditional market and Qaisary bazaar in the middle of the fourth quarter that is the core of the city. The governmental and religious buildings are in the peripheries of the fourth quarter, but the predominant buildings are residential. Some parts of Baizagha have steep slopes which led to Sar-Razan River toward the north-east of the city; (Figure5)

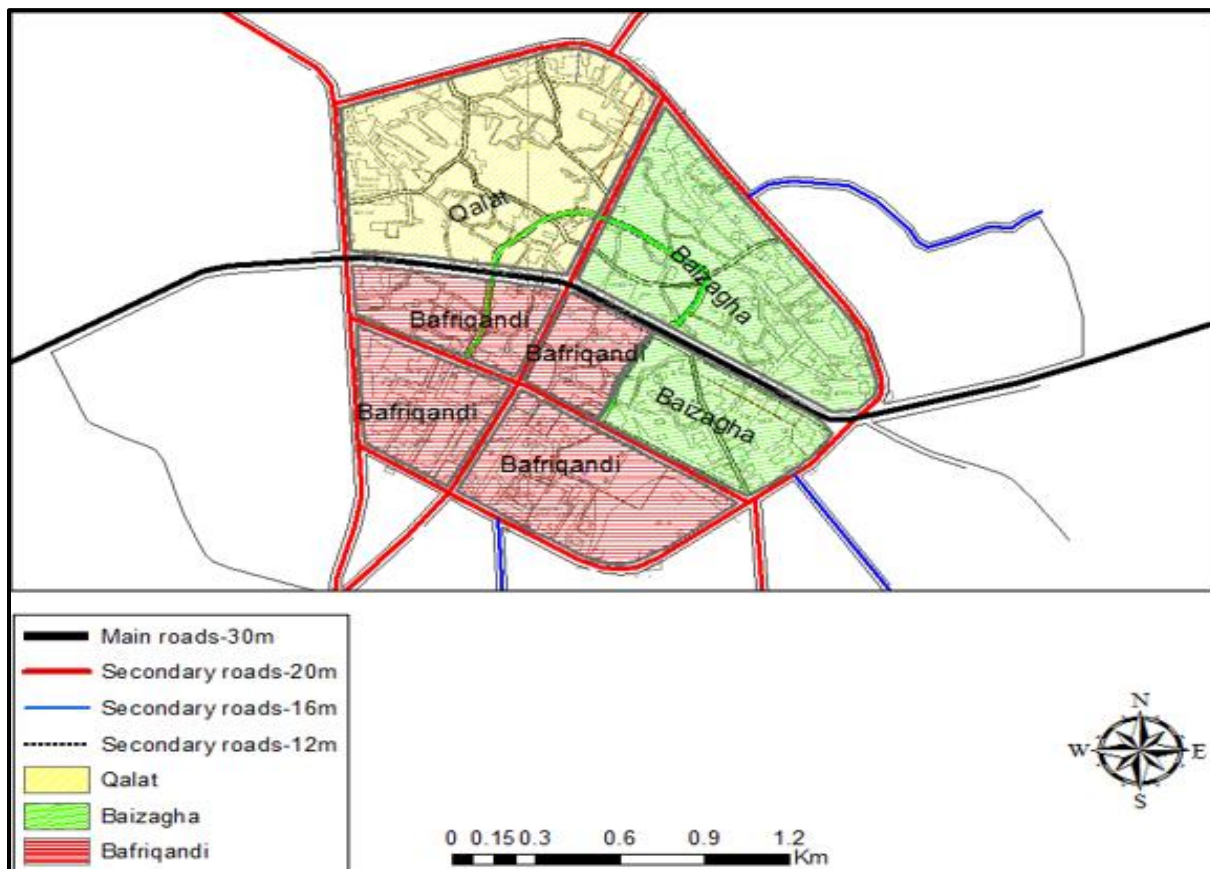


Figure 4: Map presenting the case study and the intersecting districts by the main road Haji Qadr.

Source: draw by author by using (GIS) program

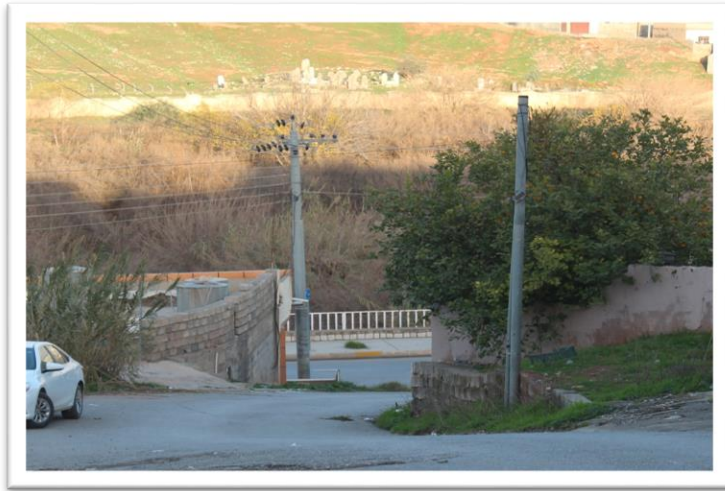


Figure 5: shows the steep slope from the Baizagha district to Sar-Razanriver.
Source: author (2019).

Methodology:

In academic research, the methodology is an important part to describe the key methods that utilize in the conducting study. There are two types of research methodology; qualitative and quantitative method.

1. Quantitative:

The research will use quantitative method in modeling maps and producing sites by using software GIS programme 10.4.

This method deals with the numerical data and result computation form and then analyses it by using scientific approach. It "emphasizes the measurement and analysis of causal relationship between variables, not processes"(Denzin and Lincoln, 1994; 4).

2. Qualitative:

This method focuses on collecting information and knowledge via using different ways; interview, observation, focus group, case studies, personal experience and different resources (Denzin and Lincoln, 1994). Therefore, in this paper, most data will be collected by using different ways of qualitative data.

- To support the idea of the research, the most important data gathered in literature resources through using internet web-based resources and library resources such as websites, books and journal article.
- To evaluate, assess and analyses the heritage area in the city in terms of conservation, deterioration and sustainability, four case studies have been chosen.
- Basic data and photographs are collected through the authors' experience.
- To develop and support the research, interview has been done to collect the most fundamental data.

Solutions and Finding

The main issues of deterioration of historical places in koya city

a. Urban Renewal

Urban renewal is often part of the gentrification process (Murcko, 1996). In this process the old part of the city will be run-down or demolished to build new buildings to persuade and interest the wealthier and investors irrespective of the old buildings. Furthermore, the low price of the lands in heritage area as compared to the new areas in koya city is another issue that encourages people to build-up in the old area instead of paying more to buy the plots in the new quarters, (Figure6).



Figure 6: shows the constructing modern house in the heritage area.

Source: author (2019)

b. Lack of Heritage Inventory and Regular Maintenance

Although the Koya city has many monuments and historic buildings but so far there is no intention to take responsibility for inventorying them. Moreover, the construction permission of buildings from the municipality are not based on the special regulation and policy in the historic area and the buffer zone to protect the valuable buildings in terms of the height of the surrounding buildings, materials and forms of the buildings. Thus, due to weakness of the organization, lack of financial support, irregular maintenance and inappropriate inventory, Koya city will lose many valuable buildings and monuments.

c. Change in community life style

The modern facility and contemporary lifestyle in most of the life aspects have changed the tendency of people in the way of thinking in their lifestyle from traditional occupation to trade, commerce and services (Bhatta and KishanDatta, 2008). The ownership of most of heritage property in Koya city belong to those families who left the city more than 40 years ago, in order to obtain a better life and services in terms of education, commerce, and public services in mega cities such as Baghdad, Erbil and Sulaymaniyah. Mostly, they settled down in Erbil because it is closer to Koya as compared to the other governorates. Life style changing is not limited and not just devastating the urban heritage but also had a huge impact on socio-cultural activities and traditional skills that have been destroyed. There are many celebrations and crafts work have been disappeared with migration the residences to the different parts of the region.

d. Migration and its impact on the historic core

People migrate from the core of the historic area to the new areas to get better opportunities. (Jayana, 2007) discussed that “the migration is due to different push factors in historic core such as inadequacy of space, proper division, uncomfortable old houses, lack of financial source to renovate the buildings etc, and pull factor such as better economic opportunities and more infrastructure facilities at the new area”. Thus, the migration people from the core of historic areas are led to abandon the heritage area instead of renovating them, which caused more deterioration in urban heritage of Koya, (Figure7). Furthermore, the displaced people from the unsafe parts of Iraq to Koya city because of the ISIS and war in their places, a great number of them inhabited in the historic area because of the low price of the rent in those places. Evidently, the traditional houses do not have enough space to fulfill the residents' requirements, therefore, in requisite they built-up a new part in or next to the house. Then, sometimes they might destroy some part from the original construction and reconstruct according to their requirements, (Figure8).

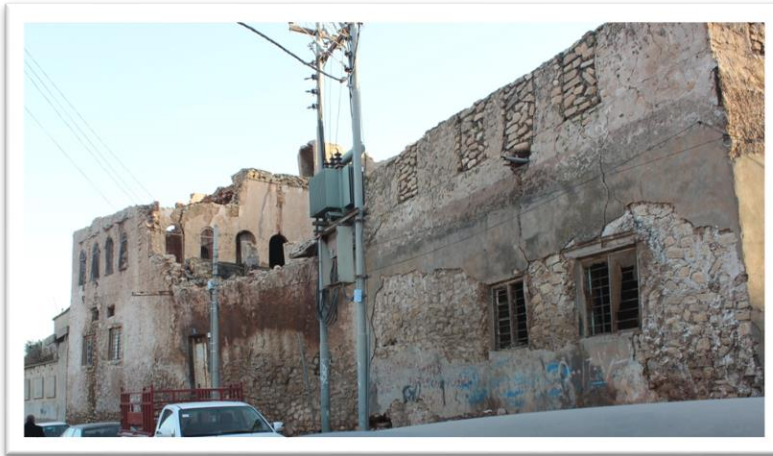


Figure 7: shows the deterioration of historic area because of its abandonment.
Source: author (2019)



Figure 8: shows the new-constructing adding to the old part of the building.
Source: author (2019)

e. Lack of private and public participation

(Bhatta and KishanDatta, 2008) stated that “public participation is considered an important factor for urban heritage conservation and sustainable development.” Unfortunately, neither the municipality nor the people took responsibility of conserving the heritage area. The municipality could conserve the historic area through imposing the policy on the heritage area during the construction and renovation buildings and buffer zone. Moreover, the government should have put efforts to educate people and stimulate their awareness on conserving historic area and the value of it, to attract tourists which are an important income source for the residences. Hence, the property owners might be encouraged to renovate their properties and reuse them as a historic tourism and entertainment places.

f. Lack of tourism development

The extraordinary resource of the tourism places from the natural of Koya city, the two mountains Haibat Sultan in the north-east, Bawagi in the north and the Hamamok dam in the north of the city. They are wonderful places which have astonishing view to attract tourists to the city, (Figure9). Upgrading these natural resources will be great for the tourism development and revive the historic areas; with increasing number of the visitors to Koya, and it will push the government and private agencies to think about promoting the heritage buildings to make another income source and introduce the customs and traditions of the city to the tourists.

g. Growth restriction of Koya by two mountains

Haibat Sultan and Bawagi mountains determined Koya city from two sides, northeast and north, (Figure9). This limitation growth of these two sides left fewer options for the city growth and constructing buildings in the suburban part of the city. In addition, part of the residents was obliged to staying the core of the city by destroying the heritage building and reconstruct the modern houses in the historic area. As a result the originality of the heritage area will be erased and lose value forever, (Figure5)



Figure 9: shows the limitation growth of Koya city by the two mountains, Haibat-Sultan highlighted in red & Bawagi highlighted in Yellow.

Source: Google map (2019).

Achieving Sustainable Urban Conservation Development in Koya City

Urban conservation does not have end point but it is to be a process without ending and must continue to protect the heritage possessions and provide an environment for the present and future generations of Koya. Heritage resources of the city must be integrated in an inclusive conservation and development plan, for retaining the significance of the urban conservation the responsibility of the neighborhoods are important. Furthermore, conserving must not be limited just in buildings but it should be integrated in a broader framework of social, economic, environmental and touristic. As a result, it could be realize the sustainable urban conservation in Koyacity in the following features:

- Raising awareness through the educational institutions about the significance of the heritage conservation.
- Preparing adaptive policies which respect the urban heritage conservation rather than deteriorate it.
- The process of urban heritage conservation must be managed and integrated rather than done in piecemeal.
- Encouraging and supporting the well-known and wealthy families to participate financially and morality in reviving their ancestor property to conserve their reputation.
- Responsibility of governmental participation especially ministry of municipality and tourism for promoting the tourism sector is an important point to revive the heritage area.
- The urban heritage conservation is for the sake and interest of the public rather than the individual.

Conclusions:

Through a comprehensive review of the literature about the integration of heritage area conservation and the sustainable development, the research has revealed the important role of the conservation heritage to improve the quality of life through introducing sustainability. It has demonstrated that heritage has a powerful role to create our nation and define our cultural identity through preserving the past and connecting it to the future as the living memory at the present time. The study has proven that lack of

inventory and irregular maintenance in the historic area had damaged the identity of the heritage area of Koyacity. Moreover, it has shown that culture is the fourth pillar of the sustainable development. Additionally, evaluating and analyzing the four-heritage area have confirmed that lifestyle changing has impacted the socio-cultural activities which are one of the main issues to deteriorate the historic area. Furthermore, providing environmental development is one important pillar of conserving sustainable development in heritage area. Case studies have assured that demolishing old buildings and erecting new ones in the area could increase climate change through increasing waste production and fossil energy resources. The evaluating and assessing of the heritage area have demonstrated that improving economic development is important to create sustainable development in the area. Therefore, encouraging wealthy people and ownership of the heritage area to conserve and preserve the historical building and reviving the area for being a tourism place can attract visitors and tourists, which enhance local economy and promote sustainable communities. Enhancing relationship between the families and social cohesion of the area by providing opportunities, enhancing abilities through participated in traditional knowledge and activities that help to achieve social sustainability.

Recommendation

Unfortunately, Koya has been neglected from the local government in terms of public services and construction due to the huge financial cost and technical process of the revitalization of historic part of Koya city. The alternative way to revitalize Koya city is by local community organizations and donor agencies for the manage heritage resources. Simultaneously, the municipality can get benefit from local employees by training them in a course on renovating the heritage areas. Furthermore, collecting the taxes from the local and external businesses activity and entry fees from the tourists will be a good financial support for conserving urban heritage.

Political commitment is another way for proceeding this project successfully, especially those are representative of people in the municipality council thus educate them about the importance of the conserving heritage will be a good encouragement to make people more aware about how to respect the historic districts. Moreover, sharing the awareness about preserving and respecting the heritage through the social media, school education, community meetings, distribution of brochures and local community organization can present information about the policies and development control, so the residence will follow the laws which regulate the urban heritage conservation. Courseware tutorial about the traditional skills and knowledge for the local people will promote the local economy for the local residences.

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